

**INFORMATION AND COMMUNICATION TECHNOLOGY USAGE IN
DEVELOPMENT OF MICROFINANCE INSTITUTIONS SERVICES IN
PERI-URBAN AREAS TANZANIA: A CASE OF ILALA MUNICIPALITY
IN DAR-ES-SALAAM CITY**

By

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HD/B.498/T.08

A Dissertation Submitted in Partial Fulfillment of the requirements for the Degree
of Master of Business Administration (Finance) of the Open University Tanzania
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CERTIFICATION

The undersigned certifies that he has read and hereby recommend for acceptance by the Open University a dissertation titled: *“Information and Communication Technology usage in development of Microfinance Institutions Services in peri-urban Areas in Tanzania: A Case of Ilala Municipality, Dar-es-Salaam Region”* in partial fulfillment of the requirements for the Degree of Master of Business Administration (FINANCE) of the Open University of Tanzania.

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DECLARATION

I, Tomaides R. Mwela, do hereby declare that this dissertation is my original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

.....

Signature

.....

Date

DEDICATION

This work is dedicated to my beloved parents Mr. (Late) Omutware Timothy Mwera and Suzane Kokulengya Ntare who grounded me in academic arena. I hope the accomplishment of this work repays some of the enormous debt I owe you both, for your tolerance, love and support.

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ABSTRACT

Information and Communication Technologies (ICTs) has been found to promote the dual objective of microfinance sustainability and outreach to the poor people. ICTs enable interactive communication and it promotes greater inclusion of individuals within networks and overcoming the barriers of physical distance and social standing. This research aimed at determining the impact of ICT usage in development of MFIs in loan services. MFIs are working tremendously to the empowerment, poverty reduction and improvement of living standards for the poor people in peri urban areas. In this research study; questionnaires used to gather and MFIs. The data collected from the survey was analyzed quantitatively and qualitatively. The analysis indicate that based on findings from this research there is need professional skills development in MFIs and to test the level of computer technology acceptance in microfinance business. In this research, the investigation has shown the extent to which MFIs use ICT to deliver business services and train staff and focus on ICT literacy, business applications, and planning. The study discovered that MFIs face mainly challenges in performing its duties regarding ICT usage which are lack of adequate facilities, bad perceptions of stakeholders, and usage of ICT in microfinance business is still low. Also ICT faced with high operating costs to provide financial services to the poor people and SMEs. The studies recommended that the ICT usage in development of MFIs is now being considered as one of the most important and an effective mechanism for poverty alleviation. It disseminate precious information on ways to improve the health, education, legal rights, sanitation and other living standards, which are of relevant concerns for the poor.

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LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
BDS	Business Development Services
CBOs	Community Based Organization
CSOs	Civil Society Organization
DEA	Data Envelopments Analysis
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IT	Information Technology
KI	Key Informative
LAN	Local Area Network
MBA	Masters of Business Administration
MDAs	Ministries, Departments and Agencies
MFIs	Micro Finance Institutions
NGO	Non Governmental Organization
NMB	National Microfinance Bank
OUT	Open University of Tanzania
PCs	Personal Computers
SELF	Small Entrepreneurs Loan Facility
SMEs	Small and Medium Enterprises
SSPS	Statistical Package for Social Sciences
TASAF	Tanzania Social Action Aid
UN	United Nations

WAN	Wide Area Network
WEO	Ward Executive Officer

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the problem

Information and Communication Technology (ICT) refers to technologies that provide access information through telecommunication. It focuses primarily on communication technologies, including internet, wireless networks, mobile phones and other communication tools. Information and Communication Technology are key factors in socio-economic development, Access to relevant information and knowledge improves efficiency and productivity; enhances social services delivery; increases access to market opportunities. For these reasons, ICT usage and tools for advanced technology is included and has been considered such vital that in most developing countries including Tanzania, it has been incorporated in the poverty alleviation and other socio-economic development strategies.

The ICT usage in development of several microfinance institutions have succeeded in reaching the poorest of the poor, and have devised new ground-breaking strategies with time for the fulfillment of their vision. ICTs have created a “global village”, in which people can communicate with others all over the world as if they were living next door. It as well includes the various services and applications associated with the above ICT equipment and software, in activities such as video conferencing and distance learning.

While the use of information and communication technologies remains concentrated largely in the developed world, ICT diffusion is beginning to reach developing countries, including poor ICTs (Survey Report,2004).ICTs are assigned such importance in the development context addresses several pressing questions surrounding ICTs. How do ICTs affect economic development in low-income countries, how do they affect poor people in these countries and in rural areas in particular, what policies and programs facilitate their potential to enhance development and the inclusion of poor constituents. ICT infrastructure offers economies of scale that stimulate network building and enable interactive communication unhindered by distance, volume, medium, or time. It promotes greater inclusion of individuals within networks and increases the diversity of participants by overcoming the barriers of physical distance and social change of human activities.

Research tries to conceptualize how the driving forces behind ICT adoption translate into economic and social benefits. Some researchers, however, hold much more skeptical views of the benefits of ICTs for development. They argue that access to ICTs application depends on education, income, and wealth and that public and social development. Limited education, inappropriate language skills, or lack of resources could prevent disadvantaged segments of the population from accessing ICTs, ultimately exacerbating information gaps and increasing income inequality between and within countries. The income gap could be further widened if ICT use raises the demand for skilled labor and by its introduction into manufacturing and service industries reduces the demand for unskilled labor, at least in the short term.

It is often argued that developing countries have other, more pressing investment priorities, such as food, safe water, education, and public health, and that devoting limited resources to ICTs must be justified on the basis of its opportunity costs relative to other development agendas. The variety of views about ICTs reveals that their role in development is unclear, especially without convincing evidence of their impact and little research has been conducted on the direct and indirect links between ICTs and poverty reduction.

Research shows that ICTs cannot be developed without strong institutions that can facilitate private investment. The government is facilitating rapid ICT progress with the help of nongovernmental organizations (NGOs) and the private sector. Collectively, small and medium-sized enterprises (MFIs) are perceived as an engine of growth in developing countries, but they face a formidable task surviving and competing in a global market. As one of the driving forces of globalization, ICTs may deliver unprecedented opportunities.

1.2 Statement of the problem

Information and communication technology usage in development of microfinance institutions services in peri-urban areas Tanzania has been a problem in the delivering of public services to peri-urban areas. In Tanzania different sectors, have been dominated by this illicit behavior to the extent that it hinders public service accessibility, difficulty to implement various projects and delivery to the peri-urban areas. This has been due to lack of accountability, utilities services in the village and poor infrastructure in peri urban areas, thus MFIs on loan delivery services to rural

and urban areas in Tanzania is impaired by some impingements issue that it cannot deliver the expected outputs effectively. This is because about 70 per cent of the urban areas is unplanned and only 25 per cent is planned. A substantial number of populations of the growing peri-urban areas, population fail to obtain their daily needs, (Kironde, 2009)

Microfinance institutions emerged in the last decade mainly to offer financial services to low income people especially in peri-urban areas of Tanzania. Many MFIs use ICT internally to support their business operations and externally to deliver financial services to clients. From literature review, the researcher discovered that no comprehensive research has been carried to find out the level at which these institutions use ICT for business service delivery and training. The effectiveness of ICT management in microfinance institutions remains unknown as ICT implementation in the functional areas such as procurement and commerce is still minimal or lacking and enough research has not been done on how ICT is utilized in business and commerce.

There has been complaints raised related to ICT usage in performance of MFIs in loan service in peri-urban areas and Ilala municipality in particular despite the existing barriers of ICT usage efforts nationwide. Reports have shown the effectiveness of ICT usage in MFIs remains unknown in peri-urban areas. Although there are a number of studies that have been done on technical and administrative aspects of ICT usage, however, these studies have not revealed the reason behind the rampant MFIs delivery services in peri-urban areas. In addition to that, despite the

existence of the ICT usage departments/units in the MFIs and elsewhere, there are still reports on several occasions of wrongly allocation of loan, frauds and thefts in financial services, mishandling and misappropriation of loan services in rural and urban areas to the people. This situation motivated the study at hand to seek to measure the challenges facing ICT usage in MFIs.. In so doing, the study intended to take Ilala Municipality to be the platform for the study and therefore, sought to explicitly analyze MFIs delivery services in Ilala Municipality.

1.3. General Objective

The general objective of the study was to determine the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania

1.3.1 Specific Objectives

The study was guided by three mainly specific objectives; namely

- (a) To evaluate the mechanism used by MFIs in ICTs usage
- (b) To assess the performance of current ICTs usage in MFIs; and
- (c) To determine the challenges which face ICT usage in MFIs?

1.3 .2 Research Questions

In order to meet the objectives of this study, answers to the following research questions were sought.

- a) What is the mechanism used to evaluate the MFIs in ICTs usage?
- b) How is the performance of ICT usage assessed in MFIs?

c) What is the challenges face ICT usage in determining the MFIs services?

1.4 Significance of the study

The significance of the study lies on knowledge contribution, policy contribution, managerial contribution as well as personal benefits. On the side of knowledge contribution, the study basically could improve awareness of the challenges facing ICTs usage in their applications in MFIs. Thus, ICTs discipline could get more exposed in its weakness and challenges and how to tackle them for effective ICTs usage in MFIs. This could further act as a cornerstone of future research.

With respect to policy implication, the findings of this study are significant to policy makers since the study has revealed the real and actual condition of ICTs usage in MFIs. In fact the proposed measures to rectify or review the current policy may be put into use. If this takes place, there would be improvement of the mechanism that might provide solutions to challenges. For instance, ICT usage in development of MFIs in unplanned rural and urban areas is among of the objectives inherent with this target; therefore data from this study will provide policy recommendations for sustainable MFIs projects.

With regard to managerial contribution, the study findings would be important to managers of ICTs departments as it portrays the major challenges facing their organizations. Also, ICTs organization could improve their effectiveness and efficiency by implementing best practices and improving relationships with management. The management of ICTs departments could also use the study

findings to help to detect weakness of their internal and external controls within the organizations. Based on that, other firms whether government or private based might perform the best business practice and services.

The study findings will enable local level of ICTs usage and MFIs to understand the main problems and challenges facing people in their respective localities in ICTs usage. The most important of ICTs is drives the global economy and it is applicable in virtually all sectors, but most four particular areas seem to have great potential related to poverty alleviations, which are education, agriculture, health and government.

Finally, the study has significance to the research by having exposed by undertaking investigation in this fertile area of research. The experience obtained has acted as capacity building platform that could provide future impact in terms of carrier development and provide database for learning purposes in various institutions.

1.5 Limitation of the study

This study was based on a case approach. It was conducted in one organization which is Ilala Municipal Council. It was done so due to the convenience and opportunity to learn as recommended by Kothari (2004) as well as Stake (1998). Despite the fact that the sample size taken was adequate methodologically, it is acknowledged a larger sample than the one used in this study would have produced richer and perhaps more interesting findings.

1.5.1 Shortage of time and funds were the major limitations

Shortage of funds affected the researcher for failure to employ research assistants and therefore, consequently I have to spend more time in the field from early in the morning to late evening collecting data alone for the entire huge sample size. In the process of the collecting the data used in the study, three main problems were raised. These include lack of co-operation from some respondents, limited time for interviews and non availability of up to date people disaggregate data on ICTs usage in peri urban areas in Tanzania. Each of these problems will be elaborated hereunder as follows:

- a) Since this study aimed at examining the main Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania and challenges of people's lack of ICT usage in peri urban areas. Women were provides good co-operation rather than men. Men were not active in responding as they thought it did not having an advantages and target them. To address this problem, more time was spent to motivate men to participate in the study. In addition, some few women seemed to be reluctant to participate in the study as they lacked confidence. The reason behind was that they are still bound to traditional beliefs, customs and norms that women cannot talk about economic resources and their development as they are regarded as intruders in their husbands' families. In such situations, such women were persuaded and motivated to participate in the study. After winning their confidence and

consent, such women were guided on how to respond to various aspects included in the questionnaire. The questions were written in Kiswahili and later were translated in English during the writing of this dissertation.

- b) During field surveys, it was difficult to obtain up to date people disaggregated data on each of the three specific objectives. As a coping strategy information was not sought from secondary source of data. Nevertheless, it was not easy to access up to date data on issues such as ICT usage in MFIs in Chanika and Pugu wards Ilala municipality Dar-es-Salaam.
- c) Most respondents were fully occupied with their daily domestic activities. In view of this, most respondents were not willing to spare time from their busy schedules to respond to the research questions during working hours especially in Chanika and Pugu Ward. To address this problem, most interviews were held in the evening after working hours.

To overcome the above all mentioned constraints, some measures were taken. To deal with the problems of unavailability of various respondents especially the key informants of this study, the researcher tried to get information from various literatures regarding to their responsibilities within their institutions. To rid of the problem of time and bureaucratic system the following efforts were made; time observation as given by respondents, frequently visiting to the office of the respondents and taking their contact by asking them if they were ready for interview.

1.7 Chapter Summary

In this initial chapter, an attempt has been made to define the rationale for the study in assessing the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania. It has knowledgeable that, at the country level, efforts have been put in place to deliver the loan services to outreach or peri-urban areas through MFIs but there has been no concern raised with regard to the dynamics of the respective dwellers in sustaining residing in the particular peri urban areas. The chapter also points out that Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania still persist and rampant regardless of the various strategies which have been taken by the government. The next chapter is basically basing on reviewing various literature which includes; journals, papers, magazine and articles just to mention the few. In addition the theoretical framework and conceptual framework that guide the study are discussed in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The previous chapter explains the background of Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in the context of Africa continent and Tanzania in particular. This chapter

presents various literature reviewed. The main objective is to show what has been written on issues associated to the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban at different levels including global, regional and national level. The discussion Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania revealed that, despite the existence of ICT usage strategies, policies, efforts, authorities and legal frameworks commissioned by the government of Tanzania in cooperation with financial institutions, international organizations and the private sector still, the complaints of MFIs on loan services deliver in peri-urban areas.

The following chapter will entail the theoretical framework and the definitions of the key concepts that will guide the study. In addition the chapter reviews different scholars' views, research papers and books in order to examine how they address the ICT usage problem in performance of MFIs on loan services in comparable situation.

This study was guided by IT hierarchy services needed by IT-enabled business. This IT hierarchy theory was chosen for investigation of ICT usage in microfinance institutions because it examined IT management, (Kashyap.S.2009) based service delivery, and platform of information technology in an organization. The main driver of components of ICT usage hierarchy are the applications infrastructure which is a software program that resides on a computer for the purpose of translating electronic input into meaningful form. Applications management includes purchasing software, developing proprietary applications, modifying applications, providing installation and technical support, and other tasks related to ensuring that applications are meeting the needs of the organization. ICT that facilitates digital communication both within the organization and with the outside world is relevant here. It includes the management of hardware and software to facilitate communication via computer, telephone, facsimile, pagers, mobile phones, and other communication and messaging services. It includes the cabling and any other communication linkages required to create an effective communications network, in addition to the necessary hardware and applications to meet the needs of the organization.

2.2 Definition of Terms

2.2.1. Data management

This refers to the way the organization structures and handles its information resources. Data may be sourced from internal or external databases. Data management includes data collection, database design, sorting and reporting information, creating links to external databases, assuring data compatibility, and other activities surrounding the effective management of electronic information.

2.2.2. IT management

Information technology management includes many of the professional and strategic activities of the information technology group including negotiation, IS planning, project management, and other tasks. IS project management is defined as the coordination and control of all of the activities required to complete an information systems project.

2.2.3. Securities

To protect data, equipment, and processing time, organizations restrict access to certain data and protect data and applications from manipulation and contamination.

2.2.4. Recovery

Refers to the need for a plan to maintain computer operations and information should a disaster occur.

2.2.5. Architecture and standards

Information technology architecture is a set of policies and rules that govern the use of information technology and plot a migration path to the way business will be done in the future. In most firms it provides technical guidelines rather than rules for decision-making. Architecture has to cope with both business uncertainty and technological change, making it one of the most difficult tasks for a firm. A good architecture evolves over time and is documented and accessible to all managers in the firm. Each architecture decision needs a sound business base to encourage voluntary agreement and compliance across the business.

2.2.6. Peri-urban areas

The term peri-urban is used frequently in the literature and policy discussions, yet definitions are largely situational and case specific, Kironde, (2006). Many authors make no attempt to define what peri-urban means or to cite a source for term, yet they use peri-urban as a substantive category or phenomena in their work. According to Fazal (2013), peri-urban refers to a social, economic, and environmental space where three systems normally agricultural, urban and the natural environment are in constant interaction. On the other hand, Astrade, (2007) define peri-urban areas as an interface between the urban and rural areas. It is also called the transition zone or interaction zone, where urban and rural activities are juxtaposed, and landscape features are subject to rapid modifications. In the context of this study, peri-urban

areas refer to wider areas surrounding urban center including both planned and unplanned areas.

2.3 Empirical Review

In this section, there is presentation of some available empirical findings with respect to the study. The section provides success stories in MFIs as well as situations which face some challenges. Most of the challenges mentioned refer to situation of lack of legal provisions to support MFIs functions in rural and urban areas. Other situations are caused by lack of infrastructures, national cables, and education of ICT application, strategic planning, and insufficient funds into various projects not being implemented effectively to community areas.

The research is aimed at finding out the impact of ICT usage in development of microfinance organization in loan services. MFIs are faced with challenges in providing loan services. Some of these challenges include processing delivery of large loan applications accurately on time, efficient loan portfolio tracking and outreach. The constructed conceptual framework is based on the literature review that, ICT usage in an organization leads to increase overall performance. The framework presents the relationship of ICT usage in provision of loan services which are loan delivery, monitoring and outreach services and their impact on the performance of MFIs. The performance explores the needs, problems and opportunities as a basis for defining the goals, priorities and judging the significance of outcomes. In this study, the conceptual framework assumed a direct interdependence between good performance, delivery, monitoring and outreach services.

It was assumed that proper ICT infrastructure and good administration, an improved education and economic growth can directly influence people in rural areas for ICT usage. There is a need to have good institutional arrangement and policies and laws that will ensure proper ICT usage management, administration and distribution in the

entire community. Determining out if usage in ICT has impact on organizations performance has been a major concern for information systems to researchers. A study has done explaining the relationship between ICT usage and MFIs. ICT usage has the potential to improve the organizations development and allow it to have more competitive forces (Porter & Miller, 1985).

In this study, theories were employed due to the fact that it provides the ability of making connections, identifying issues and offering reasonable explanations pertaining on people in relation to ICT usages in MFIs. Indices of performance are described as capacity, response time, throughput, overhead, percentage, software time measures, reliability measures, system utilization measures, raw speed and availability.

Harris and Karts (1991) conducted the study on organization performance relative to intensity of integration and coordination of activities through ICT investment. It was established that, firms with improved organization performance show increase of premium growth, decreased operation cost and overall service delivery improvement. According to Gounares, S.P., Pnigarakis, G.G., & Chatzpanagiotou, K.C., (2007), the purpose of ICT is to gather, analyze, evaluate, organize and distribute timely, relevant and accurate information for organization decision makers which makes the organization to measuring the effectiveness of marketing and planning . The theoretical literature of the research is based on the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in an organization.

2.4 Literature Review

Users formulate a positive attitude towards the technology when they perceive that technology to be useful and easy to use. When users perceive a specific technology as useful, they will believe in a positive use-performance relationship to the users and the technology. Since effort is a finite resource, a user is likely to accept an application when perceives it as easier to use than another one. Further any use of

technology in an organization is likely to have an impact on the improvement if such technology in use is designed to fit with task to be performed by fields and individuals within that organization. The users will use tools and technology that will enable them complete their assigned task efficiently, and with greatest net benefit.

Each new technology demands adoption by individuals in the organization potential adopters of a technology progress over time through stages till they achieve full diffusion process. Diffusion takes place over time with innovations going through a slow, gradual growth period, followed by dramatic and rapid growth, and then a gradual stabilization and finally a decline. It implies that rate at which a person adopts a certain technology increases with time as that technology is exposed to that person. The same applies to organizations' adoption of a certain technological innovation. Also according to Meagher (2008) democratic governance will improve the state capacity through delivering of public services to the people. Where the state capacity involves the process by which the state develops ability to perform actions, solve problems and set and achieve various objectives including poverty reduction through MFIs in the delivering of public services.

The literature reviewed is focused on sub themes as follows

2.4.1 Managing Information

Technology makes it possible for MFIs to collect more information with high accuracy. It enables institutions to process and store that information more quickly, more neatly and more reliably than with manual systems. It also facilitates the ease and speed of information flow, significantly improving communication both within the institution and externally. As a result, more people can have better, faster access to more relevant information. The enhanced ability to collect, organize and analyze information helps institutions to better understand their customers, their costs, and their options. They use this information to: make better decisions about strategy, objectives and priorities; monitor and test performance; learn from the methodologies and techniques being applied by the institution; and make timely adjustments.

2.4.2 Improving Outreach

The efficiencies gained through better information management and the redesign of products and services frees up resources for MFIs to use elsewhere. They can pass the efficiency benefits onto clients through lower prices, which would make their services more affordable to poorer customers. They can open new offices or access points to reach a larger number of customers or geographic regions. Alternatively, they can use the freed up resources to develop new products or new delivery mechanisms that enable the institution to serve people or places that it could not serve before. Indeed, in addition to freeing up resources, information technology can be part of an MFI's outreach solution. Whereas the cost of delivering financial services in peri urban areas may have previously been prohibitive, ICT may make it affordable. It can do this in four ways:

- a) by increasing staff productivity: Improved information systems, credit scoring, battery operated hand-held computers and other technologies can make it possible for individual employees to serve more customers and for managers to either supervise more staff or improve the quality of supervision and support provided to existing staff. As a result, the institution can achieve greater economies of scale and do so more quickly than before.

- b) By reducing transaction costs: Technologies such as wireless devices, electronic payment systems, and credit scoring can enable MFIs to complete transactions at a lower cost than before, thus making it possible for retail outlets or remote units to break-even faster.

- c) By removing physical asset barriers to growth: With technology, MFIs can create alternative delivery channels or delivery mechanisms that make it possible to reach clients without necessarily having to rely on brick and mortar infrastructure, i.e. on buildings and offices. This physical infrastructure is costly to acquire and maintain, and the significant investment required to create each individual access point

typically restricts growth. Although capital investments are also required for IT infrastructure, those investments tend to be intense during initial design and installation, with much lower costs for adding individual access points. This facilitates growth and, again, greater economies of scale.

d) By increasing the range of access point options: MFIs can choose from a growing number of options for reaching their customers, including ATMs, retail agents equipped with POS devices, Internet kiosks, etc. They can select the option or multiple options that can provide the best outreach for their particular needs at the lowest cost. MFIs can also choose whether to rent someone else's infrastructure or to build and own their own. By borrowing and building on the resources of others, their growth is less limited by their own internal human resource capacity and fixed asset budget. Together, the improved efficiency, lower costs, and higher productivity will enable MFIs to grow faster, further and deeper than was possible without IT.

2.4.3 Facilitating Integration

Technology can help find practical solutions to making partnerships work. On the one hand, it can help solve the technical problems of connecting different individuals and institutions, system compatibility, security, meeting regulatory requirements, and designing applications that enable the sharing of relevant, timely information. On the other hand, it can make the idea of integration more attractive. The proper application of mainstream IT solutions can increase confidence in a partner's ability to share information, lend credibility to the quality of data that will be shared, convey an image of organization, sophistication or a "cutting edge" approach to operations, and generate confidence in the partner's ability to manage risk. Both sides of the coin are important in enabling MFIs, and the microfinance industry in general, to forge the kind of partnerships that allow the design, delivery and financing of solutions which meet MFI objectives and facilitate the economic development of individuals, communities, and nations.

2.4.4 Microfinance technologies

A wide range of technologies are available to help microfinance providers improve efficiency, track operations more accurately, increase transparency and reach new customers. Yet the majority of the microfinance institutions struggle to select the right technologies and get the most from their investments. The technologies which are used in microfinance are as follows:

a) Information systems (IS) technology which helps microfinance institutions (MFIs) to track, analyze, and report on their operations. Small MFIs may manage with manual ledgers or spreadsheets, but most MFIs eventually need custom-built or commercially available IS software to track financial transactions and create reports for management, donors, and regulators. IS technology can also include handheld computers that record client information, scoring techniques that analyze data to predict customer behavior, and connectivity technologies that transmit data among staff and branches, such as broadband or wireless data connection via satellite.

b) Delivery technologies are the large MFIs and banks sometimes use non-traditional delivery technologies, such as automated teller machines (ATMs), point-of-sale (POS) networks (devices in retail outlets which use debit/credit cards to facilitate electronic payments and transactions), and mobile phone banking. These technologies allow customers to make payments, transfers, cash withdrawals, and cash deposits outside branch offices. Although new delivery technologies have the potential to reduce the cost of serving the poor, in many countries they have not yet proven as cost-effective as more conventional operations.

The technology can benefit microfinance service providers in more informed decisions which an information system that produces timely, accurate data enables managers to continually evaluate performance, better predict cash needs, and anticipate and respond to crises rapidly. Increased flexibility as transmits data instantaneously throughout its branch network using dial-up and VSAT connections, which are faster and cheaper than physically transferring data, and allows customers to bank at any branch.

Also, lower operating costs reduced loan origination costs by streamlining its loan approval process with a scorecard to predict client repayment behavior. Better reporting for the developed an Information System allowed managers to produce reliable, standardized reports which follow accounting industry and national standards.

Furthermore, technology can benefit microfinance service providers is to increased deposits by placing easy to use ATMs in well trafficked areas, which gave its clients the ability to save more often, and in smaller amounts, when they had cash available. It Improves customer convenience for instance the CRDB (T) LTD is experimenting with POS devices that enable clients to use their bank cards to withdraw cash at local retail outlets, instead of waiting in line at the branch. Also, more rural customers for instance the National Microfinance Bank's (Tanzania) low minimum balance, easy-to-use "electronic Plan" accounts can be opened at manned ATMs in rural and urban areas where it would be too expensive to open branches.

2.5 Conceptual Framework

This is a social relations framework which suggests that the improved standards of living are results of equal opportunities to people in resource management and utilization. It considers that if people (men and women) participate equally in the entire activities of MFIs services their standard of living will be improved. The research is aimed at finding out the impact of ICT usage on performance of microfinance organization in loan services. MFIs are faced with challenges in providing loan services. Some of these challenges include processing delivery of large loan applications accurately on time, efficient loan portfolio tracking and outreach. The constructed conceptual framework is based on the literature review

that, ICT usage in an organization leads to increase overall performance. The framework presents the relationship of ICT usage in performance of MFIs services for improving the standard of living.

The performance explores the needs, problems and opportunities as a basis for defining the goals, priorities and judging the significance of outcomes. In this study, the conceptual framework assumed a direct interdependence between the performance, delivery, monitoring and outreach services. ICT managements and administration, an improved education and economic status can directly influence people in rural and urban areas for ICT usage. There is a need to have good institutional arrangement and policies that will ensure proper ICT usage management, administration and distribution in the entire community.

The aim of this framework is to show how ICT usage on performance of MFIs service works to peri urban areas, by using group lending methodology for reducing poverty and how it affects the standard of living (income, saving etc.) of the poor people in peri urban areas. So on the light of my research objective; I have developed my research question, which is: What is the performance in the impact of ICT usage as well as effects on MFIs in loan delivery service in the rural and urban areas.

Because my main goal is not only to find out the mechanism of microfinance in peri urban areas, but also to find out that how this mechanism helps poor people to improve their living standards such as income, savings etc. Also, the most important aspects of microfinance is savings mobilization, which is discussed in the theory part. Besides these, microfinance methodology, solidarity, human development and liquidity are also discussed in the theoretical framework.

Examine the most important and an effective mechanism for poverty alleviation. These are also effective mechanisms through which to disseminate precious information on ways to improve the health, education, legal rights, sanitation and other living standards, which are of relevant concerns for the poor. MFIs came up

and have succeeded in reaching the poorest of the poor, and have new planning and strategies with time for the fulfillment of their vision. These included the provision of collateral free loans to poor people, especially in rural areas, in which loans are repayable in frequent installments which reduced the risk of default.

The Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas is now being considered as one of the most important and an effective mechanism for poverty alleviation. From the analysis of data, I found that ICT usage in MFIs has the positive impact on the standard of living of the poor people and on their life style. It has not only helped the poor people to come over the poverty line, but has also helped them to empower themselves.

2.7 Theoretical Framework

Determining out if investments in ICT has impact on organizations performance has been a major concern for information systems for researchers. Studies have been done explaining the relationship between ICT usage and the MFIs. ICT usage has the potential to improve the organizations' performance and allow it to have more competitive forces (Porter & Miller, 1985). Babbie, (2010), defines a theory as a systematic explanation for the observations that relate to a particular aspect of life. Theory helps to compare what is logically expected with what is actually observed.

In this study, theories were employed due to the fact that it provides the ability of making connections, identifying issues and offering reasonable explanations pertaining on people in relation to Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas. According to Gargallo (2007) conducted the study on organization development relative to intensity of integration and coordination of activities through ICT investment. It was established that, firms with improved organization performance show increase of premium growth, decreased operation cost and overall service delivery improvement.

According to Gounares, (2007), the purpose of ICT is to gather, analyze, evaluate, organize and distribute timely, relevant and accurate information for organization decision makers. The theoretical literature of the research is based on the importance of ICT Usage on performance of MFIs in an organization. Theoretical literature review in this study was guided by two theories namely, Technology Acceptance Model (TAM) and Technology Adoption and Diffusion of Innovations Theory (TADIT), which have bearing on this study. These are among of the relevant theories used to examine, analyze and interpret ICT usage issues' in relation to people who are living Chanika and Pugu wards to Ilala Municipality. An attempted has been made to discuss the history, origin, major strength and weakness of each of these theories in relation to the study.

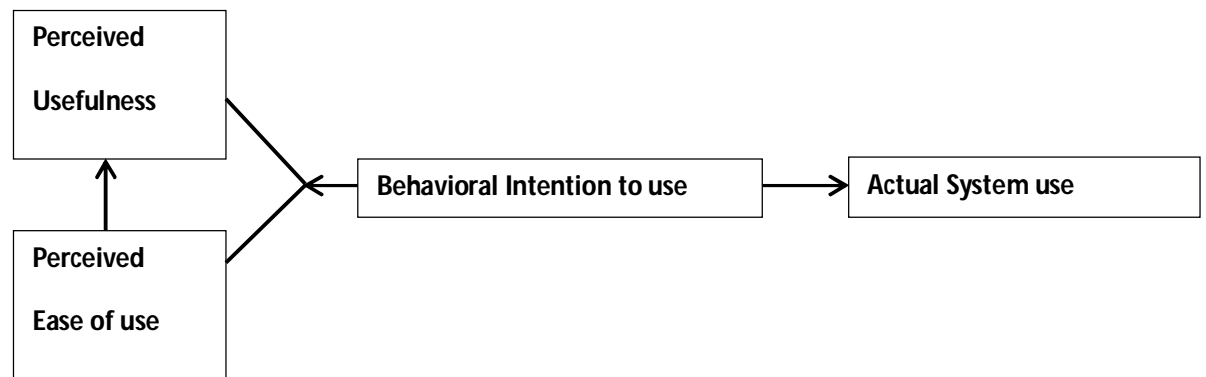
2.7.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) in information systems is a system consisting of the network of all communication channels used within an organization. The theory explain how users come to accept and use a technology, the model suggests that when users are presented with a new software package, a number of factors influence their decision about how and when they will use it (Davis.F 1986). The model was developed by Davis,F (1986). in explaining computer usage behavior and how does IT change the way people interact at work. TAM theory states that perceived usefulness and perceived ease of use are the fundamental determinants of an individual's intention to use a system that is heading to achieve actual system use.

TAM found that users formulate a positive attitude towards the technology when they perceive the technology to be useful and easy to use, if a user perceives a specific technology as useful; will develop a belief in a positive use-performance relationship to that technology. Since effort is a finite resource, a user is likely to accept an application when perceives it as easier to use than another one. The extent, to which one evaluates new technology as useful, will likely be ready to use it. At the same time, the perception of the system is influenced by the way people around

evaluate and use the system (Nida,2006).MFIs application of IT depends on perceived ease of use and perceived usefulness that will eventually motivate their behavioral intention to use IT. The model aims at explaining user's intention to use an information system by understanding factors which lead users to accept or reject an information system.

Figure 2.6: Technology Acceptance Model



Source: (Davis F.1989).

2.7.2 Technology Adoption and Diffusion of Innovations Theory (TADIT)

Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas technology spread through cultures (Roger, 1999). Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers1995). The model recognizes innovation as any new idea, practice, or object considered new to an individual. The diffusion of innovations involves both mass media and interpersonal communication channels (Rogers 1996). Technological Diffusion of Innovation Theory states that potential adopters of a technology progress over time through five stages in achieving full diffusion process. First, they must learn about the innovation (knowledge); second, they must be persuaded of the value of the innovation (persuasion); they then must decide to adopt it (decision); the innovation must then be implemented (implementation); and finally, the decision must be reaffirmed or rejected (confirmation).

For MFIs to introduce different technology related services need to develop informative campaigns aimed at connecting innovators and users through sharing available technologies that are applicable to them and their customers such as communication channels including interpersonal communication or mass communication people and share new innovations and adoptions available to them to enhance MFIs performance by increasing number of customers and reducing service time. MFIs will connect innovators with the challenges arising from the current technology in order to improve the next version so that it fits the users' expectations.

2.7.3 Summary of Empirical Literature Review

Users formulate a positive attitude towards the technology when they perceive that technology to be useful and easy to use. When users perceive a specific technology as useful, they will believe in a positive use-performance relationship to the users and the technology. Since effort is a finite resource, a user is likely to accept an application when perceives it as easier to use than another one. Further any use of technology in an organization is likely to have an impact on the improvement if such technology in use is designed to fit with task to be performed by fields and individuals within that organization. The users will use tools and technology that will enable them complete their assigned task efficiently, and with greatest net benefit.

Each new technology demands adoption by individuals in the organization potential adopters of a technology progress over time through stages till they achieve full diffusion process. Diffusion takes place over time with innovations going through a slow, gradual growth period, followed by dramatic and rapid growth, and then a gradual stabilization and finally a decline. It implies that rate at which a person adopts a certain technology increases with time as that technology is exposed to that person. The same applies to organizations' adoption of a certain technological innovation.

2.7.4 Conclusion

Empirical evidence from various studies at different levels shows that ICTs offer an opportunity for development OF MFIs. For the potential benefits of ICTs to be

realized in developing countries need to be put in effective competition among service providers, free movement and adoption of technologies, targeted and competitive subsidies to reduce the access gap, and institutional arrangements to increase the use of ICTs in the provision of public goods. Given the diverse potential benefits of ICTs, especially in the provision of public goods, subsidies traditionally used for poverty alleviation could be adapted to create incentives for the use of ICTs. For example, conditional cash transfer programs, which are largely tied to education or health, could be implemented at the community level to provide Internet access to children where educational and health services are delivered. Another example is to increase access to savings and banking services through banking cards for low-income households, as in recent experiments in India.

Furthermore, at the same time, such programs would contribute to the necessary critical mass of ICTs. Access to information through ICTs is a question not only of connectivity but also of capability to use the new tools and relevant content provided in accessible and useful forms. Connectivity has been a priority, and it is a prerequisite for the other two capability and content. But given the speed at which technologies are evolving and can move unconstrained by overly restrictive licenses and global patenting costs could fall significantly, facilitating adoption. Hence, we should emphasize the need for connectivity, capability and content to progress in tandem.

2.8 Knowledge gap

There have been documented incidences of poverty targeting, social inclusion, misuse of ICTs application, expensive of capital infrastructure, negligence on bank loans, theft and cyber fraud (crime), mismanagement of public funds, money laundries, and poor allocation of resources as well as mishandling of project funds through advanced technologies within the societies. There are also circumstances shown in the literature where reports produced by police who are fraud officers and bank loan managers possess significant deviations from reality something that called upon new mechanisms. Further, literature shows inadequacy in implementing internal security functions across the globe. Furthermore, literature is somehow scan

on the various challenges that MFIs organizations might be facing to breed to all these anomalies.

In this chapter various studies, papers, books and journals as well as news paper have been reviewed. After reviewing all those mentioned above it is revealed that, despite the various measures by the various regimes taken so far to access ICT usage in performance of MFIs in the loan services in peri urban areas that have been on the rise. The literature reviewed globally analyses ICT usage in development of MFIs at a global context which may not be generalized to the local context since nations differ in the level of development, performance, availability of ICT usage as resources and its value as well as ICTs policies.

At the national level the literature did not to distinguish ICT usage challenges between rural and urban areas, yet ICTs usage challenges are not uniform in both areas since the ICTs applications system vary. Also the commission and authorities established concerning ICTs were analyzing all the challenges in the ICTs sector and therefore could not come out with a comprehensive report on ICTs and MFIs in the urban and rural areas specifically. This study therefore explore how ICTs usage plays a role in the challenges of ICTs performance in MFIs in peri-urban areas specifically Ilala Municipality. This showed the gap of knowledge that this study intended to fill. It is on that basis where this study was actualized within Tanzanian Municipal council to investigate the impact of ICTs usage in performance of MFIs in loan services in rural and urban areas.

2.9 Chapter Summary

Empirical evidence from various studies at different levels shows that ICTs offer an opportunity for development, but not a panacea. For the potential benefits of ICTs to be realized in developing countries need to be effective competition among service providers, free movement and adoption of technologies, targeted and competitive subsidies to reduce the access gap, and institutional arrangements to increase the use of ICTs in the provision of public goods. Given the diverse potential benefits of ICTs, especially in the provision of public goods, subsidies traditionally used for

poverty alleviation could be adapted to create incentives for the use of ICTs. For example, conditional cash transfer programs, which are largely tied to education or health, could be implemented at the community level to provide Internet access to the different communities where educational, securities and health services are delivered.

Another example is to increase access to savings and banking services through banking cards for low-income households, as in recent experiments in India. At the same time, such programs would contribute to the necessary critical mass of ICTs. Access to information through ICTs is a question not only of connectivity but also of capability to use the new tools and relevant content provided in accessible and useful forms. Connectivity has been a priority, and it is a prerequisite for the other two capability and content .But given the speed at which technologies are evolving and can move unconstrained by overly restrictive licenses and global patenting costs could fall significantly, facilitating adoption and then, we should emphasize the need for connectivity, capability and good planning of ICTs usage.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter has reviewed various literature/writings and identifies that, not large extent has been done on the subject Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Ilala Municipality in particulars. This chapter covers the research methodology and description of the methods and techniques that used in the collection of data. This chapter provides details about the research methods and techniques that were used in data collection and data analysis for the study. According to Kothari, (2004) defines research methodology as a scientific and objective understanding of how research is conducted. Through it; various steps are employed in studying a research problem along with the logic behind them. This chapter is organized into ten subsections as follows; introduction ,research design , study area of justification , population sample and sampling design ,source of data, data collection and techniques, validity and reliability, ethical consideration ,data analysis and conclusion .

On the other hand it is argued that, principally methodology is a theory that guide study under investigations. In conducting research one can use particular kind of methods and explain why you use that methods and not the other. Making clear on this Kothari argues that: Thus when we talk of research methodology us not only talk of research methods, but also consider the logic behind the methods we use in the context of our study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated by either a researcher himself or by others.(Kothari,2009)

Research methods understood as the techniques applied in the collection of data or information in the research activity. These methods include questionnaire, interview, textual analysis and survey method (Kothari, 2004). This means that, by which a person gives order to answering questions and testing responses. Research methods lie along a continuum from formal to informal. This part will be composed of research methodology and procedures that will be used in the study. (Kothari, 2000) defines research methodology as “a way to systematically solve the research problem”. This chapter describes about the strategies of the study, survey population, sampling design, measurement of variables, methods of data collection, data processing and data analysis. Microfinance programs are now a key element of poverty alleviation strategies. The financial innovations of their lending methodologies such as the use of group lending, nonfinancial services and dynamic incentives have indeed raised the interest of policy makers and researchers as means to alleviate poverty in a self-sustainable way. In this study we test the explanatory power of theoretical models that attribute the performances of MFIs in terms of repayment to the use of such financial innovations.

3.2 Research Design

Research design is the arrangement of conditions for collection and analysis of data in a manner that aims at combining relevance to the research purpose with economy in procedure (Kothari, 2004). There are four types of research design namely explanatory, descriptive, experimental and analytical research design (ibid). This study used both explanatory and analytical research design. The choice of the two research design is based on the fact that these the two approaches vary in strength and weakness therefore the study uses both of them for complementary purposes. The explanatory research design for instance uses open ended questions and probing which gives participants the opportunity to respond in their own words rather than forcing them to choose from fixed responses, and quantitative methods demands.

This approach enabled the study to explore the respondents' feelings and attitudes with regard to Information and Communication Technology usage in development of

Microfinance Institutions services in peri-urban areas in Tanzania. The analytical research design offers opportunity for clarity on the process of analyzing collection of data. Analytical research design was useful for examining the effects as well as effects on the performance of MFIs in loan delivery service in the rural areas. In addition, a case study strategy was employed because this study intended to undertake an intensive investigation on what challenges do people face in the whole processing of ICT usage and what coping strategies they adopt to sustain their livelihoods in Chanika and Pugu wards, Ilala Municipality. Qualitative and quantitative research methods were used to collect primary data about the problem under investigation. In addition, quantitative research method was used to complement the qualitative one.

3.3 Selection of the Study Area and Justification

The study was conducted at Chanika and Pugu wards in Ilala Municipality in Dar-es-Salaam Region. Using a quantitative survey and descriptive research approach, this research has established the extent to which ICT has been used in the microfinance institutions in Tanzania. The study area was selected on the basis of the following facts. Firstly, it is one of the areas that is said to have predominant ICT usage barriers such as lack of National Coaxial Cables and fiber cables, poor networks, no enough MFIs and poor infrastructures of networks. Despite the barriers, ICT usage in MFIs has been on the rise; and different applications and technologies have been adopted by some MFIs to control costs, create efficiency and effectiveness in their operations, improve productivity, and improve outreach to the poor compared to the other wards of two municipals of Kinondoni and Temeke. These barriers have implications for the people living below the poverty line due to lack of access assets or collaterals to enable them to borrow loans through MFIs.

These two wards selected were the most affected Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania especially in the rural and urban areas. These wards also selected depending on the demographic characteristics such as high population growth which

go hand in hand with the increases of ICT usage value, the absence of microfinance institutions services and lack of national fiber networks. And also, it is the one among of Municipality which the government is implementing national coaxial cable and good infrastructure in some peri urban areas.

In addition these wards predominantly occupied by both the low-income, middle-income and high-income household in Ilala Municipality. The study not conducted in both two wards but systematic sampling were used to get one sub-ward to each ward whereby in Chanika Kibaoni and DCB Chanika street were selected and in Pugu secondary school and Pugu Kituo cha Afya were selected systematically as the study. This is because it is difficult to conduct study in all two wards due to various limitations such as time and fund.

Furthermore, the study area was selected due to the fact that this particular peri urban area represents an area being predominantly occupied by the low-income households that need microfinance services to be developed through ICT usage. Also according to UN-Habitat Report of 2004 the study area has a large population of people with highest proportion of women who needs financial assistance and to borrow funds from MFIs in order to develop their SMEs.

3.3.1 Description of the study Area

3.3.1.1 Geographical location of Ilala Municipality

Ilala Municipality bears the status of an Administrative district. It has an area of 210 km². The Municipality is bordered by the Indian Ocean on its Eastern part with distance of about 10 kilometers. On the southern part it is bordered by Temeke Municipality, whereas on its Western part it is bordered by Kisarawe District and on its Northern is bordered by Kinondoni Municipality. Its altitude that ranges between 0 and 900 meters above sea level influences the ecological characteristics of the Municipality. Thus the Municipality consists of a larger lowland area and a small part forming the upland zone.

The lowland areas start where the municipality borders with the Indian Ocean (Kivukoni ward) and extends up to Segerea, Ukonga and Kitunda wards. Beyond these wards, the small upland areas emerge as small hills or plateaus of Pugu, Kinyerezi, Chanika and Msongola wards. Whereas most of the lowland areas constitute the urban part of the Municipality, the upland areas are predominantly agricultural and rural in character. The soil type in these areas consists of sand, clay and loam properties.

3.3.1.2 Administrative Set up of the Study Area

Ilala Municipal Council (IMC) was set up local government (Urban Authorities) Act 1982 which reformed the municipalities' ordinance Cap 105 Local Government Ordinance Cap 333 and Urban Council Act No.11 of 1978. Soon after it became autonomous body by the Government Notice No.4 of the year 2000, thus giving it the power to engage in social, economic and political issues provided to the people. Also Ilala is among of the three municipalities in Dar es Salaam. It is divided into three (3) divisions, namely Ilala provident, Ukonga provident, and Segerea provident.

3.3.1.3 Economic Activities in Ilala Municipality

It is estimated that 480,000 residents of Ilala Municipality are employed in both private and public sectors. Out of these, 95% are employed in the private sector while the 5% are employed in the public sector. A working force of 300,000 people is self-employed. The majority of the residents are involved in petty business, fisheries, livestock keeping and agriculture production. Only 3% of the working force is engaged in subsistence agriculture in the pre-urban areas. There are no big farms but only small plots ranging from 2.5 acre to 6 acres. Few practiced hanging gardens around their houses in which various vegetables and flower are grown (URT, 2008:2-4)

3.4 Population Sample and Sampling Design

3.4.1 Targeted Population

The researcher expects that the Population of the study involved of forty five (45) people who are working in business support services, Bank officers who will be directly involves in MFIs loans services, Ilala Municipality officers, financial service vendors, ward officers, technical adviser, consultancy services, ITCs managers, telecommunication experts, government top management who will be purposively selected.

3.4.2 Population sample

Fraenkel and Wallen (2000) defines population sample as “the group of interest to the researcher where one would like to generalize the results of the study”. Thus, the target population for this study comprised of local residents including both men and women living in Chanika and Pugu areas within Ilala Municipality. In Chanika and Pugu areas are administrative wards in the Ilala Municipality of the Dar es Salaam Region of Tanzania. According to population census and housing, (2012), Chanika ward comprises of 21,164 males and 22,748 females of which both make a total population of forty three thousand, nine hundred and twelve (43,912). Pugu ward comprises of 40,065 males, and 43,250 females of which makes a total of 83,315 of which both make a total population of eighty three and three hundred fifteen (83,315). The mentioned wards were selected because they are comprised of large proportion of people especially women who are facing problems concerning ICT usage in performance of MFIs in loan services such as VIKOBA and SACCOS in particular and also due to the fact that there is high population (URT population and housing census,2012).

3.4.3 Actual population sample

The study included two categories of respondents namely, local residents and Key Informants (KI). The first category includes local residents of Chanika and Pugu wards comprising of 14 males and 23 females which makes a total of 37 respondents. The second category comprised of 8 key informants (3 were Men and 5 were Women) who were interviewed to provide additional information to the study. These included 2 officials from microfinance offices, 2 Ward Executive Officers (WEOs) and 4 from an SACCOS, PRIDE, FINCA and VIKOBA who is dealing with loans affairs known as NGO. The respondents were grouped in terms of gender (females and males), age, title, professional background and job experience. Questionnaire were distributed to 50 respondents 45 were filled and returned. The response rate was approximately 90% which the researcher considered to be sufficient for the purpose of this research.

Table 3.4 Household Sample by Wards and Streets

Wards	Streets	Number of Households	N	%
Chanika	Kibaoni	1000	10	22.2
	DCB Chanika	2000	10	22.2
Pugu	Pugu shuleni	2200	10	22.2
	Kituo cha Afya	1800	15	33.3
Total		7000	45	100

Source: Field Research, 2014

3.4.4 Sample design

Sampling design refers to a systematic way of choosing a group that is small enough for convenience of data collection, but large enough to be a true representative of the population from which it has been drawn (Barbie, 2010). In this study, purposive and random sampling techniques were used. A purposive sample is a representative subset of larger population, constructed to serve a specific need or purpose (Kothari, 2004). This study used purposive sampling procedure to select 8 Key Informants to be interviewed on matters ICT usage in performance of MFIs in loan services issues. These include respective officials from the Municipality social worker department, microfinance officers, Community leadership, and Civil Society Organization.

The purposive selection was based on the assumption that these people had broad knowledge of understanding on microfinance loan services issues. Random sampling technique was used to select 37 respondents including both males and females from Chanika and Pugu wards. These respondents were chosen randomly with regard to age ranging from 18 years and above. This enabled the study to acquire appropriate and unbiased information since every member had an equal chance of being selected.

According to Kothari (1997) sample size is most typically refers to the number of units that were chosen from which data were gathered. However, sample size can be defined in various ways. It is noted that sample size depends indirectly on the population size, variability of the population and the acceptable error set by the user. Table 3.1 presents a summary of the respondents that were involved in the study.

Table 3.4: Distribution of the Respondents who were Involved in the Study

Type of Respondent	Total Respondent	Type of Sampling	Technique used
Local residents from two wards (Male & Female)	37	Random	Questionnaires
Municipal, ward, and NGOs ,Experts, ICTs, Consultancy, representatives	8	Purposive	Interview

Total	45		
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Source; Survey Data 2013

3.5 Sources of Data

This study used both primary and secondary sources of data

3.5.1 Primary data

Primary data refers to those collected by an investigator for the first time of conducting the research (Kothari, 2004). Primary data collection allows for interaction between the researcher and the respondents, hence it facilitates explanation and description of the subject under study.

3.5.2 Secondary data

Secondary data are usually collected by someone other than the user (Kothari, 2004). Common sources of secondary data in social sciences research include censuses, organizational records and data collected through qualitative methodologies or research. In addition, secondary data provides information on past changes or developments. Secondary data were gathered by researcher in using the expletory approach of conducting study in which, researcher was reading wide, varieties of different books, refer lecturer notes and read publication, reports and journals relating to the study, pick some theories of the subject, collect data to the field and then analyses them. Also, Internet was also used to access materials from different websites. Survey questionnaires were used to reach the interviewees, i.e. the interviewees represented bank customers, bank customer service managers and bank employees. Each was take about half an hour to complete without much difficulty. The questionnaires were simple and straightforward that could be easily answered, by bank customers, bank employees and bankers customer service managers.

3.6 Methods of Primary Data Collection Techniques

The research were obtained data from primary data sources by the using the library and questionnaire (Kathori, 2005). A simple questionnaire is designed and was supplied directly to microfinance officers who are directly concerned with microfinance loans services to peri-urban areas to fill. The participants of the both genders during primary data collection were put into consideration to eliminate gender biasness. Questionnaires were used as the chief data collection instrument a total of 45 respondents were visited from peri-urban areas of the Ilala Municipality, Chanika and Pugu area. The primary data includes data collected through the questionnaires and interview to the key information basing on the characteristics of the study.

Primary data refers to those collected by an investigator for the first time of conducting the research (Kothari, 2004). Primary data collection allows for interaction between the researcher and the respondents, hence it facilitates explanation and description of the subject under study. Primary data were collected through the use of interviews, structured and unstructured questionnaires and Focus Group Discussions. Triangulation of these data collection methods was adopted to complement each other since these techniques vary in strengths and weaknesses. Where the questionnaire we're not be filled and picked on the first visit, additional visits were made immediately. The aim was reached of collecting data evidence from peri-urban population which relates with ICT usage on performance of MFIs in loan services issues.

3.6.1. Survey Methods

Taylor-Powell and Hermann (2000) define survey as the way to collect information directly from the people in a systematic standardized way. Survey use questioners that ask question in the same way to all respondents. The Survey method was used to gathering primary data for the study. According to Lovell and (1970) define survey as “a form of approach is strong in obtaining data from large population or from a representative sample from which generalization may be made. Second, the survey approach was used because it is strong in providing results which are reliable,

representative and valid. If this approach is properly conducted, the results are reliable and representative of a much wider population. Households 'survey conducted in the sample residential units located in the 2 selected sub-wards in study areas. The main instrument used for data collection under survey method is questionnaires consisting both open and close questions on the impact of ICT usage on the performance of MFIs on loan services in peri-urban areas. In addition survey method was used in this study because the findings could be generalized across a large population.

3.6.2. Questionnaires Technique

This technique was used because it has the ability to observe data beyond the physical reach of the observer (Kothari, 1990). Kothari (1985) contends that, questionnaires as the most important means of data collecting. In this study the questionnaires were mixtures of closed and open-ended questions. Structured written questionnaire was administered to the heads of households. The selection of the household based on the fact that they are the main decision makers in the households. The questionnaire were prepared and distributed in the area concerned and to the sample selected. Also the questionnaire were applied for aim of obtaining information pertaining to how the people on the study areas have been engaging in ICT usage in performance of MFIs loan services purposely.

3.6.3. Interviews Technique

This technique helps in obtaining valid and reliable information from the respondents. According to Krishnaswami and Ranganatham (2005) interviews defines as, "a two systematic conversation between an investigator and an informant, initiated for obtaining relevant information to a specific study". Interviews not only cover the conversation but also involve learning from the respondent's gesture. This technique helps to get the valid and reliable information from the respondent. This study employed structured interview guide during face to face interviews with key officials from VIKOBA and SACCOS, MFIs officer, Municipal officers, and Wards

officers. This technique was also used in collecting information from local residents living in Chanika and Pugu wards.

The goal was to solicit detailed information from the respondents on ICT usage and challenges people on MFIs in loan services in the community in which they live. The interview technique was used because it is quite flexible, adaptable and can be used with many people. Also the interviewee used to collect information personally from the sources concerned and this helps to reduce the chances the bias from the data collection perspective.

Also it is better to be applied in the study area because the study area is characterized by high population. The interviews also gives respondents chances to bring their personal view, opinion, values, beliefs, past experiences and prediction of the futures with reference to ICT usage in the performance of MFIs in loan services in the study area .

3.6.4 Focus Group Discussions

Josef (2010) refers to a Focus Group Discussion (FGD) as a special type of group in terms of purpose, size, composition and procedure, typically composed of 7 to 10 participants selected on the basis of certain common characteristics relevant to the topic of the study. In this study, a Focus Group Discussion guide was applied in order to obtain detail ideas, feelings and other information pertaining to both men and women in relation to ICT usage. Three FGDS were organized for men and women, group one in Chanika with 4 participants, group two in Pugu with 6 participants. The FGDs were organized to obtain information on various aspects such as factors leading to people with challenges facing people in obtaining microfinance loans services as well as coping strategies adopted to address the said challenges. The FGDs were also used to validate data obtained using other research techniques mentioned above.

3.7 Secondary Data Collection Tools and Techniques

Secondary data are usually collected by someone other than the user (Kothari, 2004). Common sources of secondary data in social sciences research include censuses, organizational records and data collected through qualitative methodologies or research. Kothari (2004) defines secondary data as “those which have already been collected by someone else and which have already been passed through the statistical process”. Basing on this study Secondary data collected from different government institutions and the office which have direct linkage with all issue of ICTs sector, Microfinance Institutions, academic institutions, civil societies and private organizations the visiting area aiming at making literature review, which includes the reading of published and unpublished materials such as books, journal, government reports, articles and the research reports.

Secondary data were gathered by researcher in using the expletory approach of conducting study in which, researcher was reading wide, varieties of different books, refer lecturer notes and read publication, reports and journals relating to the study, pick some theories of the subject, collect data to the field and then analyses them. Also, Internet was also used to access materials from different websites. Survey questionnaires were used to reach the interviewees, i.e. the interviewees represented bank customers, bank customer service managers and bank employees. The questionnaires were simple and straightforward that could be easily answered, by all respondents.

3.8 Ethical Consideration

Ethical consideration in research is important. According to Babbie (2010) ethics in research refers to issues related to morality which is conforming to the standard of conduct of a given profession or a group. Furthermore, researchers identify several issues that ought to be considered when conducting a research. Among them includes the right to privacy, protection from harm and to get consent from the respondent. Thus prior to undertaking this study, a research permits was obtained from the respective authorities. These included Open University of Dar es Salaam Directorate of research and Studies, Tanzania Communication and Regulatory Authority, Microfinance Officers, Ilala Municipal Office, Ward Executive Office (WEO), Customers of SACCOS, PRIDE, FINCA, VIKOBA, financial Institutions officers,

Community Development officers together with the Ward Social workers who involved with microfinance's loan service issues at a community development level. Respondents were also assured that the research was only for academic purposes and would not be used for any other purpose and confidentiality would be observed.

The government institution which were visited for the aim of getting the secondary data are the Ilala Municipal Office, and the MFIs as well as TASAF office which is a well documentation centre for millennium challenges for the issue concerning the poverty reductions in rural and urban areas for distribution and accessibility of ICT as the study area and also were visited. Also due to the development of the science and technology the internet were used as the source for the secondary data. Secondary data is very helpful in grasping knowledge about topic of the research. It helps the researcher to know the topic in detail and helps the researcher to confine his study and also guides to the core issue that are researchable (Kothari, 2005).

3.9 Data Analysis and Presentation

3.9.1 Data Analysis

The compilation and processing of the quantitative and the qualitative data which were collected started immediately after the field work. According to Kothari (2005) data analysis and processing involves editing the schedules and interview responses, coding and classification and entering data into the computer.

The quantitative data which collected on the study has been be sorted, edited, coded and then processed with help of the computer using different computer applications such as Microsoft Excel packages, the Statistical Package for Social Sciences (SPSS), Microsoft office 2010 computer application packages were used. This technology has been used to processing data and running the statistical test, has been be done by the researcher's satisfaction, and various outputs (listings, chart, graphs, tables) has been sorted and printed. Tables and bar graphs also employed to analyze the data the study. The bar graphs has been used as to provide a clear picture of the statistics of applicants getting loan services of MFIs or VIKOBA at all levels. The bar graphs also show the percentage of distribution of the respondent's responses on

ICTs usage in the performance of MFIs on loan services in peri-urban areas who were involved in the study. Also the charts have been clearly illustrating the contributing of different age groups and status on access of MFIs loan services in peri-urban areas.

Qualitative data gathered has been analysis technique. The content analysis technique examines the intensity with which certain words have been used. This instrument systematically analyses or describes the all forms or content of written and the spoken materials. The information also which will be collected on the public and the other institution and organizations will be analyzed through content analysis technique.

3.9.2 Data Presentation

Through descriptive statics outputs from SPSS and Microsoft Excel such as percentages of responses, frequencies and means has been used for constructing table, figures, illustration and charts by using Microsoft office 2010.

3.9.3 Data Interpretation

If possible chart and tables were used to test, computer and establish relationship between ICT usage and MFIs accessibility in peri-urban areas.

3.9.4 Chapter Summary

Generally, various research methods and techniques were employed in collecting data which culminated into the realization of this study. It is apparent from the discussions on deployed methods that there is no single method which was found adequate in examining the ICT usage on performance of MFIs in loan service issues and challenges of MFIs in loan outreach services. Thus, a combination of different approaches was used, in order to obtain deeper and clear insight on Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania issues in peri-urban areas particularly in Chanika, and Pugu wards of Ilala Municipality.

CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND DISCUSSION

4.0 Introduction

The previous chapter presents and discussion the methodology that used in data collection and analysis. The chapter presents the findings with reference to the problem stated in chapter one. It is divided into two parts; the first part presents the demographic characteristics and conditions of the sample population of the study area which includes general characteristics such as age, sex, education, marital status and occupation economic activities. In the subsequent sections it addresses the three specific objectives of the study. These include the understanding of the mechanism used in MFIs in ICT usage in outreach service delivery, an examining the performance of current ICT usage in MFIs and the verification or investigation of challenges of ICT usage in MFIs in loan outreach service to sustainable as well as effects on the performance of MFIs in loan delivery service in the peri-urban areas and challenges as well as coping strategies .It also describes general perceptions of community on the existence of ICT usage in all process of the performance of MFIs services to peri-urban areas and the existence of ICT usage cases in the area of study. At the end this part also provides the summary of the general findings.

4.1 Profile of Respondents and Their Key Characteristics

This variable was included to determine the number and category of respondents who were involved in the study. Table 4.1 provides a summary of respondents who were involved in the study with regard to sex and category. The target population included both males and females living at Chanika and Pugu wards in Ilala Municipality.

Table 4.1: Frequency Distribution of Respondents According to Sex

Categories(variables)	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Category 1	14	38	23	62	37	100
Category 2	3	38	5	62	8	100
Total	17	38	28	62	45	100

Source: Survey Data (2014)

KEY

Category 1 refers to local residents including males and females' living in Chanika and Pugu wards of Ilala Municipality.

Category 2 refers to key officials who were interviewed to enrich the data obtained from local residents.

Overall, 45 respondents were involved in the study. These were divided into two categories. Category one comprised of 38% males and 62% females where as category two included five officials out of whom 38% respondents were males and 62% females respectively. From these officials, two were officials from microfinance officers while two were Ward Executive officers (WEOS) and four was a representative from a Non Governmental Organization (NGO) known as SACCOS, PRIDE, FINCA and VIKOBA. It is worth mentioning that the analysis of the data was based mainly on the findings from category 1 of respondent's responses, while the respondent's responses from category 2, and was used to substantiate information obtained from category 1 respondents.

4.2 Demographic Characteristics of the respondents

4.2.1 Age and Sex Structure of the Respondents

This sub section examines the age and structure of the studies population. A total of 45 households were interviewed through surveyed questionnaire. The age sample of respondents ranges from 18-25 to 55 and above. The age group which participated more in this study was 36-45 years of age (Table 2 show clear). This study involves 14.3% of male and 30.4% of female population. In this study it is revealed that females, if compared to males, involves in MFIs in loan services to the extent. However due to patriarch systems some females respondents were scared to give information pertaining Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in the absence of their husbands.

Basing on this age distribution, respondents between the age group of 18 – 25 years were few because they were young and depended on their parents and other were still in school. Respondents above 55 years were not easily available and thus they amounted to the least group in this study. This variable was included because religions, culture and age, determines how micro credits and other loans facilities are allocated for men and women across different age groups in a society. Further, it was expected that people who belong to a certain age category might have different views concerning ICT usage and MFIs service issues and improvements of societies in their livelihoods in peri urban areas.

Table 4.2 Frequency Distribution of Respondents by Age and Sex

Age of Respondents	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
18 – 25 years	2	14.3	4	17.4	6	16.2
26 – 35 years	5	35.7	3	13.0	8	40.5
36 – 45 years	2	14.3	7	30.4	9	18.9
46 – 55 years	3	21.4	4	17.4	7	16.2
Above 55 years	2	14.3	5	21.7	7	8.1
Total	14	100	23	100	37	100

Survey Data (2014)

4.2.2 Education level of the Respondents

Respondents were asked to indicate their levels of education using a scale ranging from those who attended primary, Secondary, Ordinary Diploma, advanced diploma and Degree education level respectively. Table 4.3 provides a summary of respondents' responses with respect to their levels of education. The main reason for including this variable in the study was to establish whether there were any relationships between the level of education and gender issues related with Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania.

Table 4.3 Frequency Distribution of Education Level of the Respondents

Education Level	Gender				Total	
	Male		Female			
Education level	N	%	N	%	N	%
Primary	4	20	0	0.0	4	10.8
Secondary	1	5	2	11.8	3	8.1
Ordinary Diploma	3	15	6	35.3	9	27.3
Advanced Diploma	10	50	8	47.1	18	48.6
Degree Level	2	10	1	5.9	3	8.1
Total	20	100	17	100	37	100

Source: Survey Data (2014)

Education level of respondents varies from primary level to university level. It is observed that, majority 48.6% have attended advanced diploma whereby 27.3% Ordinary Diploma and 8.1% were attended University degree. However, 10.8% and 8.1% attended primary and secondary education level respectively. Basing on the data above, it is evident that, the area is characterized with many respondents who have moderate and high education levels. This moderate education level which accounted for 16.0% starts from the primary and secondary education levels, while

the high education which accounted for 84.0% starts from ordinary diploma to University (degree) level. This research has shown the fact that, most of the respondents in the studies area were literate and therefore they were aware of the impact of ICT usage in the performance of MFIs service in peri-urban areas. The Table (4.3) above shows sex and education level characteristics of the area of study.

Women are left behind on the issue of education particularly in developing countries. The situation has made women fall victims of oppressive practices even where supportive policies and laws are put in place while literate women have managed to fight for their rights. Therefore, education is seen as an empowering tool for people to demand their rights while educational institutions could be useful channels for information dissemination (ibid).ICTs usage, enable people with education in economic development and broader context, social inclusion such as e-democracy-health etc (Kauffman & Kumar,2008).

4.2.4 Social –Economic in the Study Area

By using open-ended questions, respondents were asked to indicate their main sources of income and livelihood. Table 4.5 presents the summary of the respondents`occupation with regard to sex. This variable was included to determine peoples` individual economic status in relation to acquire ICT usage equipments (mobile phones, computers, and iPads) ownership rights for an improved livelihood.

Table 4.5 Frequency Distribution of Responses showing occupational status by Gender

Occupational of the Respondents	Status				Total	
	Male		Female			
	N	%	N	%	N	%
Formal employment	6	42.8	5	13.5	11	29.7
Business	4	28.6	8	21.6	12	32.4
Farmers	2	14.3	3	8.1	6	16.2
Livestock	0	0	2	5.4	2	5.4

Others	2	14.3	5	13.5	7	18.9
Total	14	100	23	100	37	100

Source: Survey Data (2013)

The study findings in table 4.5 reveal that respondents were deriving their livelihoods from engaging in various types of occupations. The main activities in the study area of study are business which is accounted for 32.4%. The composition of these economic activities shows that, 29.7% of respondents are employee of public as well as private sectors. Other respondents 18.9% were engaged in specific activities such as carpentry, querying, fishing, and artistry. In addition, some respondents especially males reported that they worked as brokers. Likewise, 16.2% of the respondents were farmers while 5.4% respondents were engaged in poultry keeping, and livestock farming.

Generally, the findings indicated that both men and women were reported to have engaged in economic activities such as being employed in different economic sectors, or establishing various businesses. However, the majority of women were employed in a different economic sector of which of the business was informal and too small, providing them with little earnings compared to men. With such a situation they could not have access to use ICT usage equipments because of low purchasing power. Basing on the information above this study unveils that, the respondents of the studied area earn high and moderate income.

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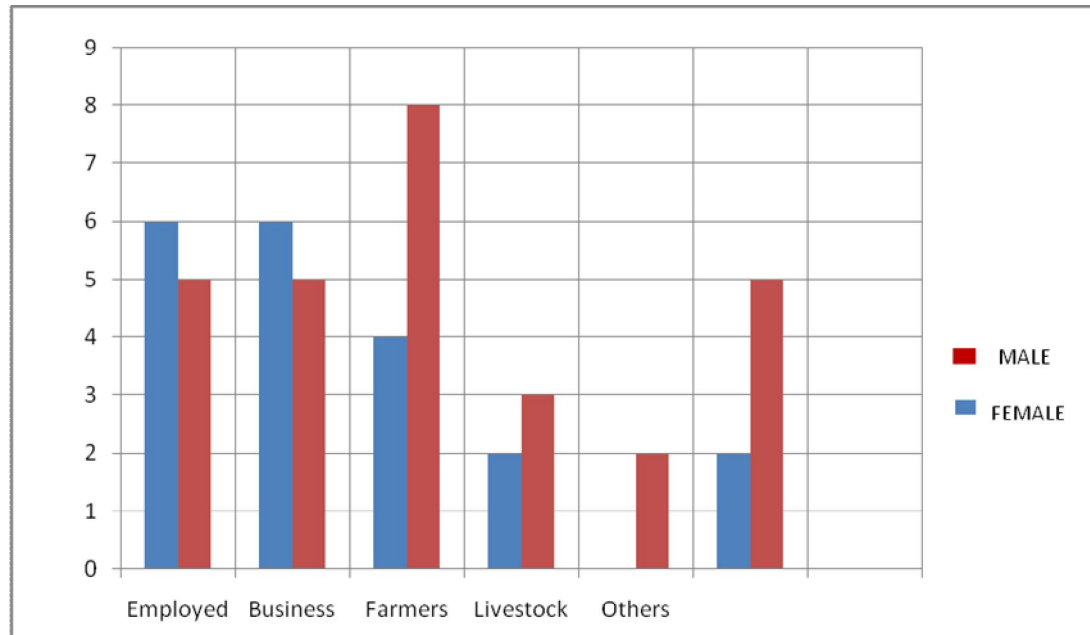


Figure 4.5: Showing the Economic Activities of the Respondents

Source: Field Data (2014)

4.3 Causes of Lack of ICTs usage on MFIs loan services in Peri-Urban areas

The first specific objective of the study was to examine the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas . The study was to examine impact of people`s lack of ownership of ICTs access and use. The main interest was to establish whether or not both men and women were experiencing problems in relation to ICTs access and use them. In approaching this issue the study examine the role of disaster monitoring and response, and social inclusion, a variety of cross-sectored urban problems, and most of the time they do not require large, and expensive capital infrastructure. Business enterprises that lack formal addresses and statistical information with satellite maps to run analyses, for example, poverty targeting, urban infrastructure and transport

planning, and socio economic analysis such as crime statistics and tracking illegal settlements (UNCTAD, 2012).

Also, among the people who inhabit informal settlements in and around cities, the lack of house of postal addresses makes it difficult for them to receive health and emergency services or to buy or avail of public utilities. The use of smart identity cards and debit cards, as well as offering services through inexpensive cell phones, which have high penetration even among the poor in countries of sub-Saharan Africa, India, and China, can help to open up new ways to obtain such services.

4.3.1 ICT Usage Access and Use Ownership Status

In this sub-section respondents were asked to indicate whether they owned ICT usage tools and equipment or not using closed ended question with Yes or No codes. Figure 4 presents the summary of despondences in relation to ICT Usage tools and equipment Ownership status.

Table 4:6 Frequency Distributions of Responses on ICTs Usage and Ownership Status

Variables	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	6	46.2	4	17.4	10	27
No	8	53.8	19	82.6	27	73
Total	14	100	23	100	37	100

Source of data 2013

Overall, the study findings in figure 4 show that slightly more than half of the respondents 73% reported that they do not own ICT Usage access and use while the remaining 27% reported that they own ICT Usage access and use. However, in terms of sex, the same data shows that there were 46.2% more male respondents who reported that they had ICT Usage access and use than 17.4% female respondents.

This distribution conforms to the real situation in most African societies including Tanzania, whereby the majority of men own ICT Usage access and use compared to women due to cultural norms and practices which mostly favor men than women. These findings corroborate with the findings of a study carried out by Sechambo and Mbilinyi (2009) who argues that in Tanzania women have been a disadvantaged group in owning and accessing assets such as land and other equipments or tools with high values within the family since the pre colonial period. It is argued that this deprivation of women property ownership is mostly perpetuated by the patriarchal system influenced by cultural interpretations and religious influences which in turn favor men than women. The patriarchal influence has continued to exacerbate women discrimination in owning assets even amidst intermarriages where spouses may profess different customs and religions.

In addition, through an interview with WEOs and Tanzania Communication and Information Authorities (TCIAs) members it was revealed that more men own ICT usage and access because they have more purchasing power than women. In addition, women have limited access and control over economic opportunities including the right to education which subordinates them into discrimination in seeking jobs, business and employment. Furthermore, the discussion made through FGDs, one of respondents commented that: “Women ICT usage and access ownership is still a big challenge because many women in peri urban areas especially in rural areas have lack of collateral of assets such as building ,land and other equipments which can enable them to get money through microfinance’s or borrowing in any financial institutions.

In most cases women have the right to access the ICT usage and use owned jointly but they do not own it because it is purchased by men and even registration is done by the name of their husband. The majority of women do not own ICT access and use, as it is vested in the hands of men as husband, fathers, brothers and sons”. Therefore basing on the above observation, it can be argued that culture is still a determinant factor which influences ICT usage and access ownership in the study area in regard to the inherent patriarchal system especially in East African Countries.

4.3.2 Means of ICT usage acquisition

By using a close-ended question with three variables, respondents were asked to indicate the means used by people within different families to acquire ICT usage tools and equipments. The variables include; (i) gift (ii) purchase and (iii) No Response. Table 4.6 presents the summary of respondents' responses showing means of acquiring ICT usage tools and equipments.

Table 4.7 Frequency Distributions of ICT usage acquisition

Variables	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Gifts	5	35.7	4	17.4	9	24.3
purchase	2	14.2	6	26.1	8	21.6
No Response	7	50	13	56.5	20	54.1
Total	14	100	23	100	37	100

Source: Survey Data (2013)

Overall, study findings on Table 4.6 suggest that slightly more than a half 54.1% of respondents did not respond to the question. This might be due to the fact that most of them had no ICT usage and access. In addition, 24.3% of the respondents reported that they obtained ICT usage and access through gifts while the remaining 21.6% of the respondents reported that they obtained ICT usage and access through purchasing. Likewise, in terms of sex the same data shows that 35.7% men respondents got ICT usage and access through gift while 14.2% own ICT usage and access through purchasing. 50% male respondents did not own ICT usage and access. On the other hand, 56.5% of female respondents did not respond to the question. This might be due to the fact that majority of women especially old women do not need to own ICT usage and access compared to men in peri urban areas. This situation is perpetuated by socio-cultural which in most cases prohibit women from

property ownership rights particularly assets with high values. Whereas, 26.1% female respondents reported owned ICT usage and access through gifts. This implies that it is easy for women to acquire ICT usage and access it through getting gifts from their husbands, friends, relatives and promotions.

General observations suggest that more than half of respondents do not have ICT usage and access to own whereby women comprised of a large proportion. Furthermore the analysis shows that some of respondents obtained ICT usage and access through inheritance while others through purchasing. However, through FGDs, one of the respondents pointed out that the few women who inherited ICT usage and access were from educated families especially those which have recognized the importance of giving equal opportunity to their children both men and women. In addition, it was found out that there were few women who have purchasing ICT usage and access, but still it was hard for the majority of women to buy ICT usage and access due to their low income and economic status

In addition, to the above, another respondent asserted that, in most of the families tools and equipments is still acquired by women through inheritance or gifts whereas men are privileged than women because some assets access and use ownership was traditionally inherited by men only. Furthermore, still, it was noted that matters of inheritance were leading to assets conflicts in different families as women have been placed in more disadvantaged position because of traditional beliefs, religious and their social economic positions. However, it was revealed that some changes were gradually emerging as few families were starting to allow women to own ICTs access and use and to control resources including collaterals of assets which enable them to get loan and services through MFIs.

4.3.3 Influence of culture on ICT usage and access ownership

In this category, respondents were asked to indicate whether good economy and knowledge and poverty influence people's ICT usage and access ownership by using a economy and knowledge or poverty as variables. Respondents were also expected

to provide justification for their views. Table 4.7 below presents summary of the respondent's responses.

Table 4.8 Frequency Distributions of ICTs usage on Influence of Culture

Variables	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Good Economy and knowledge	4	28.6	3	13.1	7	18.9
Poverty	10	71.4	20	86.9	30	81.1
Total	14	100	23	100	37	100

Overall, study findings on Table 4.8 reveal that slightly over half 81.1% of the respondents reported that poverty do not allow people to own ICT usage access and use. Only few respondents 18.9% said that good economy and knowledge allow people to own ICT usage access and use. Likewise in terms of gender, the same data shows that there were slightly more male respondents 28.6% who reported that good economy and knowledge has an influence on ICT usage access and use ownership than 13.1% female respondents. On the contrary, there were slightly more female respondents 86.9%, who responded that poverty do not allow women to own ICT usage access and use compared to 71.4% male respondents.

Some respondents argued that gender differences and ICT access and use are complex and contradictory. While only a decade ago researchers were united about gender difference with regards to ICT access and use, recent discussions about gender divides are less emphatic, but more varied. Although more studies are now reporting no gap between men and women with regards to ICT use in education(Rice and Katz 2003, Wasserman and Richmond-Abbott 2005), others are noting that

differences continue to exist, but more subtly than was previously the case (Enoch and Soker 2006).

4.3.4 Effect of lack of ICT usage and access ownership

Objective of this study is analyzed the prospects as well as effects of people`s lack of ICT usage and access ownership. Four specific issues were raised to establish whether or not people`s livelihoods were positively or negatively affected by the lack of ICT usage and access ownership, from individual, household to community levels. These are presented under subsections 4.3.1 to 4.3.5

4.3.5 Importance of ICT usage and access to people`s livelihoods.

The main focus of this sub section was to determine whether respondents recognize ICT usage and access to people as an important aspect for improving their livelihood. Respondents were asked to indicate whether ICT usage and access is an important aspect for improving people`s livelihoods by using Yes /No codes. Table 4.5 provides a summary of respondents` responses.

Table 4.9 Frequency Distributions on Importance of ICT Usage and use livelihoods with Regard to sex

Variables	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	6	42.9	14	60.9	20	55.6
No	8	57.1	9	39.1	17	44.4
Total	14	100	23	100	37	100

Source: Survey Data (2014)

Overall, findings on Table 4.5 shows that more than 55.6% of the respondents indicated that ICT usage and access is an important aspect for the improving people`s livelihoods. This is due to the fact that ICT usage has been a driving tool

towards their social –economic transformation within their families, government departments, schools, universities and financial institutions. While, 44.4% of the respondents said it was not an issue of concern due to the limited access to ICT usage ownership. Further, the study revealed that more than 60.9% of the female respondents indicated that ICT usage is an issue of concern in improving their livelihoods from individual, international organizations, financial institutions, households to community levels compared to male respondents 42.9%. On the other hand, 57.1% of the male respondents indicated that ICT usage was not an issue of concern in improving women`s livelihood compared to 39.1% of the female respondents who indicated that ICT usage is not an issue of concern in improving women`s livelihoods. General observation in this distribution shows that women`s livelihoods expect the few respondents who indicated that ICT usage is not an issue of concern.

The study findings from FGDs revealed that through ICT usage performance in MFIs in loans service, women can develop an income and allocate this income fairly within the household. Also, it was appointed out that through ICT usage performance in MFIs in loans service women can establish some investments that will enable them to earn more income hence improving their livelihoods. These study findings abide by other studies which show that ICT usage access and use for people bring the performance through MFIs in loans service and it gives rights for women that are the key determinants in women`s household welfare in both rural and urban area settings throughout the developed and developing world. For example Information Communication and Technology (ICT) are key factors in socio-economic development.

Furthermore, the access of relevant information and knowledge improves efficiency and productivity; enhances social services delivery; increases access to market opportunities;. For these reasons, ICT usage performance in MFIs in loans services has been considered such vital that in most developing countries including Tanzania, it has been incorporated in the poverty alleviation and other socio-economic development strategies. Furthermost, ICT usage access and use through MFIs in

loans services enable and empower people especially women by giving them an economic base from which to challenge gender oppression in the household and society at large.

4. 6 Effect of lack of ICT usage and use ownership

Respondents were asked to indicate between men and women, who were mostly, affected for lack of ICT Usage and use ownership. Table 4.6 presents the summary of respondent`s responses showing the most affected people due to lack of ICT usage and use ownership by using closed handed question.

Table 4.10 Frequency Distributions of Responses of the effect of Lack ICT usage access and use

Variables	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	9	64.3	18	78.3	27	73.0
No	5	37.7	5	21.7	10	27.0
Total	14	100	23	100	37	100

Source: Survey Data (2014)

Overall, the study findings on Table 4.6 show that the majority of 73.0% of the respondents indicate that women were the most affected while few 27.0% of the respondents reported that men were affected. Likewise, in terms of sex, the same data show that majority of the female 78.3% of the respondents reported that women are most affected by the lack of ICT Usage access and use ownership than 64.3% male respondents. This distribution conforms to the real situation whereas, in most of African Societies, Tanzania in particular women takes more responsibilities than men. Among the responsibilities are illustrated by Steinzor (2003) who argues that women dedicated most of their earnings they control to fulfill household needs such as caring of sick people, elders and buying food for the family and making payments

for school fees for their children while men often spend much of their income on personal matters such as drinking too much alcohols, married more than one wife.

Furthermore, findings from FGDs revealed that women lack of ICT Usage access and use ownership bear to multiple problems which affects their livelihoods at individual, household to community levels at large. Among them includes; failure to pay school fees for their children, lack of financial support from financial institutions because they demanded collateral of assets of which majority do not have. In addition, majority of women respondents reported that women were suffering from lack of self-esteem especially in decision making while others were experiencing domestic violence, which is caused by ignorance, education and poverty. To reduce domestic violence, in most developing countries, like in Tanzania ICT is regarded as an important tool for accelerating poverty reduction through its role in raising productivity, generating economic growth, creating jobs, facilitating learning, knowledge sharing and global information flows (ESRF: 2007).

According to Tanzania Development Vision (TDV) 2025, Tanzania is expected to become a knowledge-based society, with a vision to have a universally accessible broadband infrastructure in ICT as well as expertise that enhance sustainable socio-economic development and accelerated poverty reduction; and to become the ICT development hub regionally (TDV 2025), which would in turn help to mitigate hunger worldwide and have an improve livelihoods. World Food Summit (2002) support the argument of Steinzor by pointing out that ensuring women`s assets and property rights is essential to enabling them to better provide for their children, which would in turn help to ,mitigate hunger worldwide and have an improvement livelihoods.

4.3.7 Discussion of ICT usage in MFIs service at households and community levels

In most of African societies Tanzania inclusive, ICT usage access and use ownership issues are generally taken for granted and they are not a subject of discussion unless there are social events such as promotion or occasions to households ,theft of large

amount of monies, crime, abuses of bad language through ICT tools, evidence needed in courts. Respondents were asked to indicate whether ICT usage and use ownership matters were discussed at their families and the entire community by using ``No or Yes`` codes. Table 4.7 shows the summary of the respondents `on discussion of concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas matters at households and community levels in percentages.

Table 4.10 Frequency Distributions of ICs in MFIs at households and community levels

Responses	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	10	71.4	8	34.8	18	48.6
No	4	28.6	15	65.2	19	51.4
Total	14	100	23	100	37	100

Source: Survey Data (2013)

Overall, study findings on Table 4.7 show that slightly more than half 51.4% of the respondents in the study area reported that Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in Tanzania issues are not discussed in their households and the community levels at large. Furthermore, slightly less than half of respondents 48.6%) of the respondents reported that the impact of ICT usage of performance in MFIs service issues are not involved. Likewise in terms of sex the same study findings shows that there slightly more than half 71.4% of the male respondents who reported that the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas issues are discussed within households compared to 34.8% of the male respondents. On the contrary, there were 65.2% of the female respondents who reported that concerning Information and Communication Technology usage in development of Microfinance Institutions

services in peri-urban areas issues are not discussed within the households and community at large compared to 28.6% of the male respondents.

General observation suggests that in most of the households and communities, that the concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas issues are scarcely discussed. It was observed that most of the issues are discussed when there is a social event only. Such situation is perpetuated by existence of traditions and custom which still persist within different families within the community that failure or not agreed to adapt the new advanced technology. These findings deep rooted the authoritative nature of patriarchal elements which still persists among male headed households where both in rural and urban areas men do not see the need to discuss with women at household community levels (Ssali, 2004).

Many studies and surveys have been carried out by different agencies regarding the working of MFIs on loan services and their impact on the poor people in peri urban. The agencies like World Bank have found strong evidence that functioning of MFIs services have helped the people in meeting their daily needs and at the same time building their assets. It has been stated in The World Bank Economic Review that microfinance has not only helped people to develop in their material capital but also in the human capital, by better access to health care and education system, and general awareness among the people about their rights and duties towards society. One of the most important features has been the reduction of gender biased in the society. MFIs services have helped women acquire assets of their own, educated them and thus gave them the right and power in the household decision making.

However, during the FGDs it was reported that most households in different communities exclude women in discussion concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas a issues due to the prevalence of social-culture norms and values which regarded women as dependants to men. Most men think that women should be involved in implementation than in decision making.

4.4 Challenges in ICT usage by coping strategies to adopt sustain their livelihoods.

The objective three in chapter one of the studies sought to identify problems and challenges that people face in Chanika and Pugu areas in relation to the issue of the Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas which face to sustain livelihoods. Furthermore, the study aimed to investigate the coping strategies used to address the challenges people face in ICT usage in performance of MFIs services. In answering these issues, this section is sub divided into two parts; the challenges faced by people in ICT usage in performance of MFIs services as well as the coping strategies adopted by gender.

4.4.1 Challenges faced by people in ICT usage in performance of MFIs on loan services

In most cases it is established that many societies in Africa, Tanzania inclusive people face many challenges in challenges faced in ICT usage in performance of MFIs services is access and use ownership. In this sub section respondents were asked to identify challenges facing people in ICT usage access and use in performance of MFIs services matters by using an open –ended question.

Table 4.11 Frequency Distributions of Responses the Challenges faced in ICT usage

Challenges	Status				Total	
	Male		Female			
	N	%	N	%	N	%
Lack of Knowledge on ICT Usage	11	30	1	3	12	32.4

Lack of collateral and Poverty	4	11	1	3	5	13.5
Individual Mindset	3	8	1	3	4	10.8
Poor Administration	6	16	2	5	8	21.6
Advanced Technology	5	14	1	3	6	16.2
Gender Discrimination	2	5	1	3	3	8
TOTAL	30	82	7	18	37	100

Source: Survey Data (2013)

The findings in Table 4.8 show that 32.4% of the respondents reported that lack of Knowledge on ICT usage in performance of MFIs on loans services issues on access and use ownership rights was the main challenges in matters pertaining ICT usage. On the other hand, 13.5% of the respondents indicated that lack of collateral and poverty was among the challenges faced people in ICT usage within the societies in rural and urban areas. Furthermore, 10.8% of the respondents indicated that advanced technology was a problem individual mindset which mostly are influenced by social-culture norms, 21.6% of the respondents indicate that there poor administration in rural and urban areas, 16.2% of respondents indicate that individuals were constrained by issues related to advanced technology, and also 8% of the respondents indicated that gender discrimination by sex as another challenges. Lymo et al, (2002) asserts that in most of African societies including Tanzania, women do not own assets because it is believe in most of societies that women can obtain it from their husbands` family.

Basing on distribution of Respondent's Responses the Challenges faced in ICT usage, it implies that the community is not aware of ICT usage on the performance of MFIs in loans services issues. This can thus make one vulnerable where by some rights may be violated due to ignorance, no resistance, solidarity and support to people. However, it was noted that the process of people for obtaining access and ownership of collateral is dominated by complicated processes and bureaucracies which are not easy for people to abide with. For, instance, one of the respondents in FGDs asserted that, "in Tanzania the process of obtaining Business license or bank

loan from MFIs is very long and somehow complex, as it involves local government officials at Division level and Municipal level to the ministerial level where it involves dealing with a lot of people to authorize and putting signature”. With such situation as highlighted in the quotation above, a loophole for corruption practices is created which in turn affects many people who have no more time to travel from one office to another due to the facts that they spent more time without successfully. That fact that poor administration was also highlighted as second in challenges portrays a governance problem faced by people in ICT usage in performance of MFIs on loan services issues.

4.4.2 People`s experience of challenges in ICT usage

Respondents were asked to indicate that people`s experience different challenges in the process of obtaining loans from MFIs through ICT usage by using Yes/No scale. Table 4.9 provides a summary of respondent`s responses to this question.

Table 4.11 Frequency Distributions Responses to people`s Experience of Challenges in ICT usage

Status	Variables				Total	
	Yes		No			
	N	%	N	%	N	%
Male	7	19	2	5	9	24
Female	16	43	12	32	28	75
Total	23	62	14	37	37	99

Source: Survey Data (2013)

Table (4.9) indicates that, 62% of the respondents have experience of challenges in the process of ICT usage in MFIs services. The remaining few 37% of the respondents reported that there was no experience challenges ICT usage in MFIs services in peri-urban areas. This shows that it is well understood that men and women experience different types of problems as well as challenges in acquiring loans services from MFIs through ICT usage. This is attributed to the inequalities

between men and women in terms of education and income during the FDGs conducted. It was established that one with high level of income is better position of acquiring Loan since he or she would have ability to borrow by using collaterals. The discussion revealed that women are the least privilege in terms of education and income compared to men. This relation were in line with the analysis of this study in table 4.9 which showed that most women occupy informal sector activities which provide them with little earnings, inadequate to buy assets. Likewise it was noted during the discussion that women who have attained education are also in better position of acquiring assets or loan services from MFIs compared to no educated women. This is because education is empowering tool which also has implications for higher income.

4.4.3 Mechanisms used to resolve challenges facing people to obtain loan service through MFIs

Through close-end questions respondents were asked to indicate mechanisms used by people in addressing challenges which they face in obtaining loan themselves. The variables used were as follows, Education, Collaterals (assets), Group of Borrowers and no Response.

Table 4.10 Frequency Distributions on Mechanisms used to resolve challenges facing people to acquire loan service themselves

Variables	Status				Total	
	Male		Female			
	Yes	%	No	%	N	%

Education	4	33	9	36	13	69
Collaterals(more assets)	3	25	8	32	11	57
Group of Borrowers	4	33	5	20	9	50
No response	1	8	3	12	4	20
Total	12	100	25	100	37	100

Source: Survey Data (2013)

Table (4.10) indicates that, 36% of respondents have no education to know the challenges facing people to acquire loan service. On the other hand, 32% of the respondents reported that people have no collateral (or more assets) to enable them to acquire loans services from MFIs, while 50 of respondents reports that cases of reducing risky for taking loan alone and later fail to pay back loans is to form group of borrowers which minimize discipline of borrowing single person and maintain the status of borrowing loans from MFIs. This is because Borrowers are organized into groups and peer pressure among them, which reduced the risk of default. However, some of the respondents 20% did not respond to any of the above responses. This might be due to the fact that they do not have interest with loan from MFIs or they had other alternatives which they used to solve the problem.

Basing on the above findings, it is observed by majority of the respondents that various measures were taken to people to deal with the challenges that occurred in the whole process of accessing and acquiring loans services. In an interview with one of the MFIs bank manager, this was also concurred by commenting that; since then several microfinance institutions came up and have succeeded in reaching the poorest of the poor, and have devised new ground-breaking strategies with time for the fulfillment of their vision. These included the provision of collateral free loans to poor people, especially in rural and urban areas, at full-cost interest rates that are repayable in frequent installments. Borrowers are organized into groups and peer pressure among them, which reduced the risk of default.

Microfinance is now being considered as one of the most important and an effective mechanism for poverty alleviation. These are also effective mechanisms through which to disseminate precious information on ways to improve the health, education, legal rights, sanitation and other living standards, which are of relevant concerns for the poor. Above all, many micro-credit programs have targeted one of the most vulnerable groups in society – women, who live in households with little or almost no assets. By providing opportunities for self-employment, many studies have concluded that these programs have significantly improved people's security, autonomy, self-confidence and status within the household.

4.4.4 Coping strategies deployed by people to sustain their livelihoods

People's lack of ICT usage on performance of MFIs in loans services ownership has made them to acquire different coping strategies which assist them in sustaining their livelihoods. In this sub section respondents were asked to indicate coping strategies adopted by people in improving their livelihoods for sustainable development. Table 4.11 presents the summary of respondents' responses on coping strategies.

Table 4.11 Frequency Distributions of Responses on Coping Strategies Used to Sustain their Livelihoods

Coping Strategies	Gender				Total	
	Male		Female			
	N	%	N	%	N	%
Operating petty business	6	42.9	10	42.5	16	43.2
Security guard	4	28.6	3	13.0	7	18.9
Getting Married	1	7.1	5	26.1	6	16.2
Small activities Fishing, plumbing,boda boda	3	21.4	5	17.4	8	21.6
Total	14	100	23	100	37	100

Source: Survey Data (2013)

Overall, study findings on table 4.11 show that 43.2% out of 37 respondents indicated that most of the people involved themselves in petty business as a means

to sustain their livelihoods. But this income does not sufficient enough to people to enable them to purchase assets such as accessibility of land and buildings which can enable them later to use as collaterals in banks and MFIs during obtaining loans services. The 21.6% out of 37 respondents of responses that people was involving in small activities such as fishing and plumbing as a means of solving their life difficulties. Meanwhile, 18.9% of the respondents responses that were people that were involved in security guards without enough salaries to assist them in purchasing ICT usage and other necessary basic needs for their family.

Furthermore, 16.2% out of 37 respondents of responses were people who involves in driving motor cycles” bodaboda” business. Supporting their claim they give reasons pointing out the weakness that exist in laws, procedures and process of getting loans from MFIs, high interest rates on loans, poor ICT usage and misunderstanding of accessibility of the MFIs in loan services to rural and urban areas system, make their life difficulties.

4.4.5 Supporting People with Challenges of Lack of ICT Usage in Peri -Urban areas

Respondents were asked to indicate whether men and women received support from any organization or institutions by using a scale of Yes or No. The summary of respondents’ responses is presented on Table 4.12

Table 4.12 Frequency Distributions on Whether Men or Women Receive Support from any Institution

Variables	Status				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	3	21.4	18	78.3	21	56.8
No	11	78.6	5	21.7	16	43.2
Total	14	100	23	100	37	100

Source: Survey Data (2013)

Overall the study findings in table 4.12 show that the majority of respondents 56.8% indicate that people receives support from any MFIs to help them to cope with the challenges related to loans services in peri -urban areas .The remaining 43.2% respondents reported that the Government and other financial organizations including NGOs provided support to enable people to cope with challenges facing people`s lack of ICT Usage in performance of MFIs on Loans Services in Peri - Urban areas. However, the findings indicates that 78.6% of the respondents response of men were not receiving support from any financial institutions compared to 21.7% respondents of women responses who do not also receive support from any financial institutions. Areas of support include; gender sensitizations, education and income generating activities among others.

However, one of the respondents commented that the support provided by the NGOs, VIKOBA is more effective than that provided by the government. In addition, through an interview with one of the representative from Micro Finance Institutions (MFIs) it was reported that, the national policies should be attractive to enable MFIs to afford and apply the ICT innovations for pro poor advanced technology, by utilizing ICT systems MFIs performance is increased in terms of reducing cost of operations, reduction of errors, increased speed of service delivery hence serving time and improved competitive advantage which in totality increases productivity and overall performance of MFIs.

4.4.6 New Contribution to Knowledge

As mentioned earlier in Chapter Two, various studies related to this topic have been conducted at the global, regional level and national level. Generally, evidence shows that most of literatures focus on ICT issues in general; others focused on the performance of MFIs on loans services in peri urban areas and some focus on ICTs tools and use ownerships in rural areas rather than in urban areas. The aim was to see the impact of ICT usage on performance of MFIs in loans services in peri urban areas and hence to determine whether there is an increase of MFIs efficiency,

improve service delivery, lower transaction costs, improve MFIs market performance, improve operational performance and eventually increase number of member.

On the other hand, this particular study contributes to the body of knowledge of people's issues pertaining to resources allocation, availability, and distribution and uses specifically income and some assets obtained from running small businesses. It demonstrates how people need empowerment in social and economic resource so that their livelihoods get improved for sustainable development. Moreover, both public and private MFIs bases institutions, particularly NGOs dealing with MFIs loans services for people to be empowered, may use findings as an important tool in setting specific right initiatives which will make sure that people are included in the overall development initiative.

4.4.7 Conclusion

This chapter has pointed out the major findings of the study. The study findings reveal that social cultural norms, poverty, education, low income and advanced technology which exist not only in rural areas but also in urban areas still forbid people from owing assets and capital for running small business .Further, it was noted that through ICT usage, people especially women are assured with many opportunities but they are facing different challenges in the whole process of MFIs loans service acquiring and own use. These include; low income, social culture norms, conflicts between men and women on distribution of income generated by women from the running small business, poor administration and management of government's divisions and wards, failure to meet MFIs and other financial institutions conditions due to lack of collaterals which enable them to seek loan from borrowers.

Regarding to coping strategies, people in Chanika and Pugu wards employed various measures to address the challenges they were facing. Among the coping strategies adopted includes; buying mobile phones for enabling them to send and to receive monies(Airtel money,Tigo pesa ,M pesa) through financial services, opening bank

accounts, forming social groups like VIKOBA and establishing of various businesses as a means to sustain their livelihoods

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of findings, conclusion as well as recommendations for future study. It begins by providing an overall summary of the study findings, which is basing on each specific objective, the overall conclusion of the study, recommendations and lastly it provides potential areas for future study.

5.2 Summary of study findings

This study focused to examine the concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in peri urban areas at Chanika and Pugu wards with its effects on sustainable livelihoods both at individual and community levels. In order to understand the situation, the study was guided by three research objectives and research questions respectively. The research questions were namely as: First; what is the mechanism used by MFIs in ICTs usage on performance of loan outreach services? Second, how is the performance of ICT usage as well as effects on MFIs in loan delivery service in the peri urban areas? Lastly, what are the challenges which face ICT usage in performance of MFIs loan services to sustain livelihoods in peri urban areas?

General findings indicated that the community is benefited with the services offered or provided via microfinance models for ICT access being monetized, priced and delivered as the activities is transacted electronically. Some literatures were reviewed in order to come with up with different theories, conceptual framework and the knowledge gap. Furthermore, the study employed both qualitative and quantitative research approaches. A survey design was employed to collect data within the study area of Chanika, and Pugu. The total population for the study area

included 37 key respondents with 8 officials. Data were collected through the use of questionnaires, interviews and focus group discussion techniques. The study used both qualitative and quantitative approaches in analyzing data which were collected. The qualitative approach was involved in studying the case in order to understand the respondent's views on concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas in peri urban areas, while quantitative approach consisted of frequencies and percentages presented in tabular form.

5.3 Summary of the Study Findings Basing on Each Specific Objective

With respects to problems and challenges people(gender) encounter in ICTs usage on performance of MFIs loan services issues in Chanika, and Pugu areas as a case study, the following are the research findings based on the three specific objectives.

5.3.1 Causes the impact of ICTs usage on performance of MFIs in loan outreach services

The findings of the study revealed that slightly more than half 53.8% of the male respondents reported that they are not affected ICTs usage on performance of MFIs in loan outreach services and compared to a few 17.4% female respondents. It was noted that men had ICT usage on performance of MFIs in loan service outreach because they had power of purchasing assets such as mobile phones, computers and other ICTs equipments compared to women who were found to have low income and lack of education for new advanced technology.

Today, many MFIs are beginning to show signs of significant strain, with low management capacity, lack of widely accepted standards, rapid growth pressure and global recession all taking a toll. Whether the goal is to realize microfinance's full potential or to avoid potential pitfalls, for most MFIs, improving the way they use information and communication technologies (ICTs) is crucial. Furthermore, even the best-managed MFIs working in environments with relatively good infrastructure often struggle to implement MIS systems that are scalable and sustainable. The challenge is even greater in the resource-limited communities where many MFIs find

their natural constituents. Fortunately, while building strong institutions can take decades, implementing sustainable ICTs doesn't have to. Affordable and sustainable power, hardware, software and connectivity systems already exist; they are just not widely available, mostly due to lack of local knowledge and limited support capacity. Much of the success of better socio-economic development in emerging economies hinges on progressive policymaking, access to finance, a culture of change, and enabling infrastructure like Information Communication Technology. Within this context, micro-finance and ICTs play an important role in developing countries, and exploring mutual benefits and synergy between the two disciplines can yield promising dividends. There are two kinds of linkages between these sectors: the use of ICTs by micro-finance organizations on the one hand, and the use of micro-finance models to enable broader access to ICTs on the other. Also most of those with direct experience attest that the current zeal for Microfinance both on the supply or demand side may recently have gotten ahead of the sector's ability to deliver services to rural and urban areas.

5.3.2 Analyze ICT Usage as well as effects on the performance of MFIs in loan delivery service in the peri urban areas

Overall, findings on Table 4.5 shows that slightly more than half 55.6% of the respondents indicated that ICT Usage Access and use is an important aspect for the improving people's livelihoods. This is due to the fact that ICT usage has been a driving tool towards their social –economic transformation within their families, government departments, schools, universities and financial institutions. This implies that people were most affected when it comes to the issue of ICT usage and use on the performance of MFIs in loan delivery service in the peri urban areas.

In addition it was revealed that ICT usage by gender especially women is vital since it improves their economic and social welfare. Through MFIs women can have access of getting credit from different financial institutions which in turn can be used in different investments such as establishing own businesses. On the other hand, it was pointed out that the lack of collaterals by gender (women) led to economic and political inequalities in different opportunities such as denial of credit access from

financial institutions, suffering from low –esteem especially to participate in decision making concerning development of the societies.

These study findings abide by other studies which show that ICT usage access and use for people bring the performance through MFIs in loans service and it gives rights for women that are the key determinants in women`s household welfare in both rural and urban area settings throughout the developed and developing world. For example Information ommunication and Technology (ICT) are key factors in socio-economic development. For these reasons, ICT usage performance in MFIs in loans services has been considered such vital that in most developing countries including Tanzania, it has been incorporated in the poverty alleviation and other socio-economic development strategies.

5.3.3 The challenges that people (gender) face in the process of ICT usage with strategies to sustain livelihoods

The study findings show that among other challenges, respondents mentioned six main challenges that were encountered by people in the process of owing loan services through MFIs. They include; lack of knowledge on ICTs usage issues, poor administration, low income, lack of collaterals, individual mindset and gender discrimination which is perpetuated by social cultural norms and technological changes. However, in terms of sex, study findings show that despite the fact that both men and women face challenges in ICT usage and use, women are highly affected .

Further analysis shows that more than female respondents compared to the male respondents reported that lack of knowledge of ICTs was a problem towards women on performance of MFIs loan services. In addition, further analysis shows that there were 21.7% of the female respondents compared to 14.3% of the male respondents who reported that collateral and poverty was a problem towards women ICT usage in performance of MFIs on loans services to peri urban areas.

Moreover, the study findings show that people adopted different strategies for sustaining their livelihoods. The common strategies deployed were; operating petty

business which require little capital for investments such as selling second hand clothes, running small restaurant establishing small shops, local brewing, vegetables, fish and buns, foods (Mama Lishe). While other women were getting into married hoping that by doing so those men will take care of them and got financial assistance to enable them to involve in small business activities such as mining, quarrying, fishing among others. It was appointed out that through ICT usage performance in MFIs in loans service people can establish some investments that will enable them to earn more income hence improving their livelihoods. Furthermost, ICT usage access and use through MFIs in loans services enable and empower people especially by giving them an economic base from which to challenge gender especially women oppression in the household and society at large.

5.3.4: Conclusion

Generally, the study revealed that people was the impact of ICT usage in performance of MFIs in loan services prompted by several factors. Among the factors include; advanced technological changes, poor loans service administration and beaurecracy, low knowledge on loans through financial institutions, bad policy implemented, political issues and long time taken to apply loan from ward secretary officer to bank loan manager. Further still, it was noted that poor governance has largely contributed to people`s failure of loan service delivery to peri-urban areas. This research aimed to shed light on the impact ICT usage on MFIs performance which utilizes technologies in provision of microfinance loan services such as software applications. For MFIs the major constraints are the cost of software, lack of expertise, lack of training and the reliability of system and support structures.

The findings which are consistent with the literature indicated that the ICT usage on performance of MFIs loan services has a positive impact in terms of loan delivery, monitoring and outreach services. This means that, emphasizing the right ICT systems in MFIs will have great influence on overall performance and tackle challenges associated with efficiency, loan tracking, transparency outreach and sustainability. Therefore there is a need to develop effective and efficiency mechanism to make reflection of good governance on ICT usage issues.

5.3.5 Contribution to knowledge

This study has found out that, government use standard operating procedure and techniques in ICTs usage applications. Furthermore, the various indicators show that performance of microfinance institutions in rural and urban areas is good. The new knowledge that this study propound is that, there exist so friendly collaboration between ICT usage and MFIs. In addition; there is indication of symptoms of cyber fraud in MFIs (banks) due to application of advanced technologies. With this regards therefore, the study shows fertile areas where researchers may opt to invest the projects in detail.

5.3.6 Contribution to the Best Practices

Given the good performance of the MFIs services shown by the institutions in almost the ICTs usage indicators, it implies that, this is possible and practical. It is therefore important for other institutions to emulate best practices from MFIs in the implementation of ICTs function in their work place.

5.4 Recommendations

This section expresses recommendations from the findings of the study. Basing on the responses from the respondents` as discussion in chapter four, the study came up with four categories of recommendation for specific groups of practitioners, namely the academicians, policy makers, Private Sector, individual people and Public Sector.

5.4.1 Recommendation for Academicians

According to government policy on ICT Tanzanian` industry needs to be encouraged towards experimentation and research, with the support of mentoring, venture capital and fiscal incentives as small scale stars and artisan enterprises are an essential components of a vibrant ICT sector. The education system needs to be oriented to emphases entrepreneurial and professional skills. In addition to creating

opportunities for acquiring technical competence in ICT, advanced technical and commercial skills are very necessary in the sector.

This study help academicians to understand that ICT usage can be applied in class and distance learning by microfinance institutions since the research revealed that ICT usage has a positive influence on the development of MFIs therefore it can calls for innovative training methodologies. It requires new approached both in the content design and training delivery. It can be used to combine online and face to face training as well as mixing distance and in class learning to tackle three types of learning such as knowledge acquisition, skills development and behavior changes. Therefore curriculum should be developed that will be applied in class learning and online learning to meet the trainees needs in which will enable the people who are living in peri-urban areas to be benefited with ICT usage through MFIs on loan services.

5.4.2 Recommendation for policy makers

The findings from this research have a considerable implication to ICT and MFIs policy makers since it shows that plays a significant role in the performance of MFI in peri urban areas. It is in line with government policy which says that there is sufficient evidence that several large organization and companies make extensive use of networked computers, some with internet access. These findings call for policy makers to come up with the guidelines and policies that will create conducive environment for ICT usage in peri-urban areas. These include development and performance of ICT usage that is easy to use and fits to the MFIs tasks in peri urban areas and that will easily defuse to rural community.

The national policies should be attractive to enable MFIs to afford and apply the ICT innovations for pro poor advanced technology. This is because globalization and the pervasiveness of the Internet have given rise to new types of needs, rights and vulnerabilities, For secure electronic to occur, an environment of trust must be created and sustained through the legal and regulatory apparatus. ICT policies such

as tax exemption on computer hardware are not sufficient to achieve the desired growth in adoption and ICTs usage in MFIs. ICT usage explored on how MFIs loan officers should apply ICT systems in provision of loan services particularly on loan, delivery, monitoring and outreach services.

By utilizing ICT systems MFIs performance is increased in terms of reducing cost of operations, reduction of errors, increased speed of service delivery hence serving time and improved competitive advantage which in totality increases productivity and overall performance of MFIs. This study will help policy makers to prepare best policies on proper ICT usage by microfinance institutions which enable them to extend their services to many people in peri-urban areas at minimum cost. To enhance this, decision makers in these MFIs should invest in appropriate ICT systems which are compatible with the organizations needs. The government should create more flexible regulatory environment that must be conducive to innovative approaches to ICT deployment for great performance of MFIs.

Also training to employees on ITC development is highly recommended for aligning people in organization for accepting changes. This is balance ICT changes very fast, which results in change of ICT systems used. For example, according to one bank officer, in the near future MFIs would be in the process of changing from the present equinox system to flex cube system. This change of the system will require intensive training to employees to cope with such a change. ICT system which fits the organization should be available in affordable prices to MFIs to be used effectively so as to provide great impact of the development achievements in the country. Due to diversities of microfinance provide found in the country, there is a great driving force to utilize ICT effectively in providing services in order to attain the target objectives of the IMFs.

For many people to benefit microfinance services in the country, the Government should make a clear policy which emphasize on improving infrastructure. Better infrastructure can stimulate rural income by lowering the costs of MFIs to extend services to new client in rural areas. Infrastructure helps make the more remote rural

areas part of a broader market, contributing to perfume of MFIs. It also promotes information flows between communities and rural and urban areas, thus linking many clients to get microfinance services. Electrification can improve access to information and networks. Thus, rural infrastructure plays a vital role in empowering people, connecting isolated communities and providing rural and urban people with access microfinance services easily.

5.4.3 Recommendation for Private ICT Sector (Institutions)

The study recommends that the question of good governance should not be overlooked when one is talking about ICTs usage issues in relation to both men and women in the community. The institutions responsible for ICT usage governance should operate in a transparent, accountable and efficient manner. In addition, experience has shown that where such institutions are decentralized, ICT resources are likely to be more productively used and better preserved. Top management plays the critical role in employing ICT system and radical organization change. They should think strategically. It means that they should recognize their organization ICT resources and assess its need for appropriate ICT system application. Also they should be able to forecast the new future of their MFIs. Top managers should consider ICT usages through their organizational levels and try to expose the positive impact of ICT in their institutions.

Moreover, this study indicates that appropriate ICT that fit institution tasks to be performed should be developed from the new technologies to provide quality services and products for increasing performance. Although ICT implementations through organization are able to improve performance, management should be aware that without relevant ICT systems employed in performing organization's tasks, there is a great chance of failure to meet forecasted performance targets. Therefore top management should provide appropriate ICT infrastructures .in order to support positive contribution of ICT in performance of IMFs. Decision makers should ensure that MFIs should invest in relevant technologies after though and careful assessment of their requirements. Requirements should be addressed in perspective of current need future plans.

The findings in this research highly the need for managers to involve experts .in decision making on the software package requirement for their organizations so as to provide microfinance service providers due to its stronger impact service improvement and customer retention. Many customers would value to access services without regularly visiting a bank. Thus managers should consider the need to selected appropriate technology that will enable clients to access services easily and loan officer to provide microfinance services efficiently so serve many customers in short time.

5.4.4 Recommendation for Public Sector

Although various efforts have been taken by the government towards formulating ICT policies which provide equal rights of ICT usage to both men and women, and policy implementation, ICT management or administration remained an obstacle. The study has considerable implication to policy makers since it shows the importance of formulating or revises a regulatory framework for microfinance institutions which will give basis for appropriate ICT application for sustainable performance. Therefore it is recommended that if ICT management or administration systems at peri-urban areas are improved, people would have better access to ICT usage through practical efforts, thus contribute positively to their livelihoods. Furthermore, the government should intensify application of policies and laws that promote people to have or use ICT usage by translating those laws into effective programs for implementation.

In addition, it is recommended that education on ICT usage and rights to own should be intensified so that people understand their rights to have ICT usage. Lastly, it is recommended that, the national ICT policy should be regularly revisited to provide national framework that will emphasize on relevant use of ICT by MFIs to contribute towards achieving national development goals. The policy should be update from time to .time and that implementation strategies and plans are drawn and carried out in the most efficient and effective manner. The MFIs management and internal processes toward availing loan may be strengthened by investing in the appropriate

use of ICT system to support internal information flows, leading to greater accuracy and timelines of executive decision-making, resource allocation, risk management and operational control. Appropriate ICTs can deliver cost-effective integration of data, channels and processes, facilitating a single consolidated view of the whole portfolio. Every system needs electric power, and if systems are required to communicate, then there must be an appropriate communication infrastructure.

Usually MFIs operate in remote and underdeveloped areas where this is lacking. Power and communication infrastructure, which is the foundation for hosting ICT services, is inadequate in those areas where MFIs operate. MFIs should employ skilled ICT professionals. Progressive policies that make ICT accessible and affordable to the majority of the population are important for encouraging the use of ICT within MFIs and for the development of the MFIs sector. This will ensure useful planning, controlling, monitoring and implementation of any policies or program related to people in ICT usage on the performance of MFIs in loan service to peri-urban areas.

5.4.5 Recommendation for Individual People

Since low income was cited as one of the constraints that inhibit accessibility of ICT usage among people especially women, it is therefore recommended that investment in income generating activities should be promoted. In addition, it is recommended that people should be encouraged to form informal savings and credit associations which can operate through contributions of members and offer small and soft loans on the basis of personal, family or business acquaintance at low interest rate or can even operate as a revolving fund for association's members. This can free up the limitation caused by a lack of collateral and the stiff repayment schedule imposed by formal lending MFIs.

5.4.6 Recommendation for future study areas

Greater knowledge and understanding concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas is very important aspects to inform appropriate policies programmers and loan

service delivery. ICT usage has become much more important for institutions, not only the new technologies provide services and products but also as the enable to improve sustainable performance. This research investigated the concerning Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas

However, the findings presented in this study are a result of a micro survey conducted only in Chanika and Pugu wards of Ilala Municipality. The major limitation of this micro study is that the findings cannot be a representative of all peri-urban areas in Tanzania. For this matter, there is a need for a study of this kind to be carried out in a large area, compassing not only Kinondoni and Temeke municipals but including all regions in Tanzania.

In additions, recommendation for further research areas are directed to

- 1) Conduct research on determining challenges facing ICTs usage in MFIs in rural and urban areas in Tanzania by considering survey methodologies.
- 2) Conduct research on the relationship between friendly collaboration of ICTs users and its applications with the performance of MFIs function.
- 3) Conduct research on Information and Communication Technology usage in development of Microfinance Institutions services in peri-urban areas

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APPENDICES

APPENDIX ONE

Postgraduate studies in Finance

Open University Tanzania

Research instrument 1: interview Guiding. Question for people living in Chanika and Pugu wards.

Introduction, My name is Tomaides Mwela, a master's student in Finance at the above university. As part of the requirements for completing of MBA (Finance) studies, I am required to undertake an empirical research. My topic is **“The impact of ICT of usage in Development of MFIs services in Peri –urban areas in Tanzania”**. **A case study of Ilala municipality, Dar- es- salaam Region**. The main objective of this study is to examine the main impacts and challenges of people's. Lack of ICT usage and its effects on sustain able livelihoods both individual and community levels. More specifically, the study intends to study the following issues: (1) Objective: Examine causes of people's lack of ICT Usage in performance of MFIs in loan services in Peri Urban areas in the areas of study.(2) Analyze prospects as well as effects of people's lack of ICT usage and tools ownership.(3)Assess challenges faced by people in ICT usage ownership as well as coping strategies used by people to sustain their livelihoods.

The rationale of research has been that although ICT is an important technology as a resource for improving people's livelihood still prospects and challenges of people's lack of ICT usage ownership receives little attention due to the lack of electricity in peri – urban areas.

Thus, the study intends to examine the main impacts and problems of people's lack of ICT usage ownership in the areas of study and its effects on sustainable livelihoods both at individual and community levels. Please provide answers to this questionnaire. Answers provided will be strictly confidential and only used for the purpose of this study. Thanks for your time and assistance in this study and only used for the purpose of this study.

Fill in blanks with necessary information.

PART A: Personal profile (Respondents)

Name of respondent (option)

Questionnaire numberVillage name.....Ward name
.....

Municipality's name

B .Household head name (option)

Sex of respondent Male or Female (.....),Age of respondent (years)...
.....

C. Marital status of the respondent

SingleMarried divorcedWidowSeparated
.....Ethnic Group

D. Education status of respondent

Never attended school
Incomplete school.....(Standard i, ii, iii, iv, v, vi)
Completed standard viiAdult education.....
Secondarypost secondary education.....

F .Occupation of the respondent

Employed.....(Self
Employed).....government.....private
agency.....BusinessAgriculture
.....livestock keeping.....Others Specify
.....

G. Subsection 1: Causes of lack of ICT usage in Chanika, Pugu wards are poor infrastructure and education.

Put a tick to the answer you think is correct.

YesNo

G: Subsection 2: Mechanism used in The impact of ICT of usage in Development of MFIs services in Peri –urban areas in Tanzania

Please outline and explain the procedure you use in performance of MFIs in your business activities.

.....

G: subsection 3: Do your culture, allow women to have ICT usage and seek loan from MFIs? Yes/ No justify your answer

.....

G: Subsection 4: Impacts and effects of people's lack of ICT usage.

(i) Do you think ICT usage in performance of MFIs in loan services in peri-Urban areas is very important and an issue of concern to people especially women's livelihoods in Chanika, Pugu? Yes/ No. justify your answer.....

(ii) Who are the most affected between men and women's of not having ICT usage in peri-urban areas? (Put a tick) (i) Men (ii) Women

(iii) How does lack of ICT usage affects women's livelihood at individual, household and community levels at large? Provide the example

(iv) What benefits women will have by having ICT usage in peri-urban areas? Prove examples to support your answer.....

(v) Do you think issues related to women having ICT usage in performance of MFIs in loan service are discussed at household, family and community levels? If **Yes**, provide evidence and If **No**, explain why

G: Subsection 5: Challenges that people face in having ICT usage in Chanika and Pugu areas.

- (i) Mention at least (3) three challenges facing people in the process of having ICT usage on the performance of MFIs in loan services in peri-urban areas.

1.....2.....3.....

- (ii) Are their differences between the type constraints/ challenges men and women face in having ICT usage? Yes/ No in your answer provide concrete example.....

G: Subsection 6: Strategies deployed by people (especially women) to sustain their livelihoods

- (i) Which of the following mechanisms used by people in resolving challenges which they face in having ICT usage in the process of getting loan from MFIs? (Put a tick).

(a)Credit societies () (b) Microfinance Institutions () (c) No response () (d) Non Governmental organization () (e) Government ()

- (ii)Mention least four strategies adopted by people to sustain their livelihoods.

1.2.....
...3.....4.....

- (iii)Are you aware of any support from any organization for households and communities to address issue of people lack of having ICT usage? Yes/No provide concrete examples to show type of household, and type of support including those people who does not have ICT usage in peri-urban areas?.....

G: Subsection 7: Recommendations.

- (i)What should be done at household level to enable people to have ICT usage?
.....

- (ii)What can be done at community level so as people can have ICT usage?

Suggest three issues you think should be areas for further research. Provide justification for your choices

- (iii)Please give some explanations on the mechanisms/techniques which are used by your community in MFIs services. Please mention at least two.

(1)..... (2).....

PART C: Performance of MFIs Services

1. MFIs in your community can be categorized as follows. Please respond by ticking (v) appropriately. (a) Ictus age (b) checking application procedures (c) Time value of money (d)Risk management controls (e) other please specify with short explanations

APPENDIX TWO

MBA Finance

Open University of Tanzania

Research Instrument No. 2: Questionnaire for Bank officers, MFIs officers, NGOs, and Instructions/ Organizations

Introduction

My name is Tomaides R .Mwela, a Master's student in Finance at the above university. As part of the requirements for completing of MBA studies, I am required to undertake an empirical research. My topic is "**The impact of ICT of usage in Development of MFIs services in Peri –urban areas in Tanzania**". A case study of Ilala municipality, Dar- es- salaam Region". The main objective of this study is to examine the main impacts of ICT usage and challenges of people's Lack of having ICT usage and its effects on sustainable livelihoods both individual and community levels. More specifically, the study intends to study the following issues:

1. Examine causes of people's lack of having ICT usage in the areas of study.
2. Analyze impacts as well as effects of people's lack of having ICT usage.
3. Verify challenges facing the community in having ICT usage as well as strategies used to sustain their livelihoods.

The rationale of research has been that although ICT is an important resource for improving people's livelihood still impacts and problem of people's lack of having ICT usage receives little attention. Thus, the study intends to examine the main

impacts and challenges of people's lack of having ICT usage in the areas of study and its effects on sustainable livelihoods both at individual and community levels.

Please provide answers to this questionnaire. Answers provided will be strictly confidential and only used for the purpose of this study. Thanks for your time and assistance in this study and only used for the purpose of this study. Thanks your time and assistance in this study.

1. Personal Information

Name.....Age.....Sex male/
female.....

Name of institution or organization.....Designation.....

Special activities of the organization.....

2. Examining causes of people's lack of having ICT usage.

What are the main three cause of gender's lack of having ICT usage in Chanika, and Pugu areas?

.....

....

3. Analyzing Impacts and effects of people's lack of having ICT usage in peri-urban areas.

(a)Do you think the situation of gender lack to have ICT usage affects their livelihoods from individual, household level and the community at large? How?

Elaborate

(b)In your own opinion are there any linkages to people with have ICT usage for improving their livelihoods? Yes/ No. elaborate your answer.....

4. Assessing challenges that people face in having ICT usage

4.1. What are the three challenges facing people having ICT usage in Chanika and Pugu areas?

4.2 Do you think education level affects the way gender can acquire ICT usage?

4.3. Do you think government has role to play in people to have ICT usage?

5.0. Coping strategies used by people to sustain their livelihoods.

- 5.1. What do you think are the measures taken by people to cope with a situation of lack to have ICT usage?.....
- 5.2. Do you think measures taken by people to address issues of lack to have ICT usage in relation to their livelihoods are appropriate?.....
- 5.3. What measure did your organization/ institutions take to address issues of people's lack of having ICT usage in Chanika and Pugu areas?
- 5.4. What do you think is the way forward to address people's lack of having ICT usage to improve their livelihoods?.....

5. Recommendations

What do you think should be done by Microfinance Institutions ,development partners, government and your institution/ organization to address issues of people's lack of having ICT usage and improve their livelihoods in peri-urban areas?.....

6. What are your suggestions for future research?.....

Thank you for sparing time to respond all issues rose in this questionnaire.

APPENDIX FOUR

MBA Finance Studies

Open University of Tanzania

Research Instrument No.4 Checklist for Focused Group Discussion

Date..... January, 2014

1. What causes of people's lack of having ICT usage in your community?
2. What are the impacts as well as effects of people's lack of having ICT usage?
3. What are three major challenges that people face in having ICT usage in your community?
4. What are the strategies adopted by people to address challenges which they face by not having ICT usage?
5. What should be done to enable people to have ICT usage to improve their livelihoods at family, households and community level at large?

