

**USE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN  
EMPOWERING RURAL WOMEN OF KEIYO SOUTH CONSTITUENCY,  
ELGEYO/MARAKWET COUNTY, KENYA**

**BY**

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**ELDORET**

**2018**

## DECLARATION

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## **DEDICATION**

I do declare my full dedication of this Master of Philosophy thesis to the almighty God for being the source of my life and strength. I also wish to dedicate this work to my beloved children Barnabas Kipchumba and Gilbert Kiptoo for enduring long hours without a mother and financial constrains they withstood; my elder son Fannuel for believing in me and giving me endless words of encouragement, being patient and wishing me the very best in life.

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## ABSTRACT

Information and communications technologies (ICTs) are powerful tools that boost economic growth and poverty reduction. However, despite an increase in ICT use women in rural areas still lag behind. The purpose of this study therefore was to establish the use of ICT in Empowering rural women of Keiyo South constituency, in Elgeyo/Marakwet County, Kenya and recommend the best practices for using ICT to alleviate poverty among rural women in Kenya. The specific objectives were: to assess the level of poverty and information needs of rural women; establish the socio-economic benefits of ICT use among rural women in Keiyo South Constituency; find out the influence of ICT use on economic welfare of rural women and to determine the effect of ICT use on political empowerment of rural women in Keiyo South. The study was informed by Harris Info-Mobilization theory and adopted a qualitative research epistemology design. The target population was 3070 women in Keiyo South. Stratified sampling was used to divide the constituency into divisions and locations and purposive and snowball sampling were used to obtain 141 accessible respondents. Data was collected using semi-structured interview schedules supplemented by document review and observation and analyzed using descriptive statistics. The study found that the rural women of Keiyo South have limited access to ICT Technology and infrastructure which has impacted negatively on their socio-economic and political status. Access to information was mainly through informal sources such as friends and neighbors; they need education and training to provide them with knowledge and skills for accessing ICT information which can help them to reduce poverty. The study concluded that use of ICT has helped to reduce poverty through economic empowerment and has enabled the rural women to obtain new life skills. In addition, ICT has enabled them to participate in political election online. With relevant ICT infrastructure and policies in place, ICT should be used to improve the socio-economic and political status of rural women in Keiyo South and reduce poverty among them. The study recommended that the County government of Elgeyo/Marakwet should empower rural women economically by providing them with information through ICT and by enacting policies that support development of ICT infrastructure and projects for rural women. Through these projects, the rural women will be trained to gain the knowledge and skills for searching and retrieving information through ICT. This knowledge would help them to develop strategies for social, economic and political empowerment and for poverty reduction.

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**LIST OF ABBREVIATIONS AND ACRONYMS**

<b>AIDs</b>	Acquired Immune Deficiency Syndrome
<b>AIS</b>	Agriculture Information Service
<b>CIDP</b>	County Integrated Development Plan
<b>EAASY</b>	East African Submarine Cable System
<b>GAID</b>	Global Alliance for ICT and Development
<b>HIV</b>	Human Immune Virus
<b>ICTs</b>	Information and Communication Technologies
<b>IT</b>	Information Technology
<b>KACE</b>	Kenya Agricultural Commodity Exchange
<b>KNBS</b>	Kenya National Bureau of Statistics
<b>PHC</b>	Primary Health Care
<b>MDG</b>	Millennium Development Goals
<b>SME</b>	Small and Medium Enterprises
<b>SMS</b>	Short Messages Service
<b>SPSS</b>	Statistical Package for Social Science
<b>STI/STD</b>	Sexually Transmitted Infection/Diseases
<b>TEAMS</b>	The East Africa Marine System
<b>UN</b>	United Nations
<b>UNCSTD</b>	United Nations Commission on Science and Technology for Development
<b>UNDESA</b>	United Nations Department of Economic and Social Affairs
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>URTI</b>	Upper Respiratory Tract Infection

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND INFORMATION

#### 1.1 Introduction

Information Technology (IT) is a broad notion which is concerned with technology and other aspects of managing and processing information. It deals with the use of computers and computer software to convert, store, protect process, transmit, and retrieve information (Hudson,2001). Information and Communication Technology (ICT) sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware, software and services and electronic media, such as; the internet and electronic mail. ICTs have great potentialto contribute to development andempowerrural women. The social and political inequalities that characterizesharing of informationbetween the rich and poor, urban and rural, men and women, skilled and unskilled can hardly be overemphasized . Unequal access and use of ICTs can deepen, solidify existing economic, political and social inequalities (McNamara,2003:75), if it goes on unattended .

The benefits of ICTs are difficult to gauge in most African countries, particularly in the wake of poverty, hunger and disease. The United Nations Commission on Science and Technology for Development (UNCSTD) also acknowledged the predicament that most African nations might face further isolation if priority is not given to ICT strategies. UNCSTD asserts that ICTs do not offer a panacea for social and economic dislocation and this may lead policy makers to give lower priority to the need to create effective national ICT strategies (Marcelle, 2001:44).

Women poverty is measured through economic deprivation, political marginalization, denial of rights and limited access to credit facilities and other inputs (McFerson, 2010). The Kenya government in an effort to increase ICT services across the country launched Huduma Centres on 7<sup>th</sup> November 2013. The Huduma is a citizen feedback and monitoring system whose objective is to harness and amplify citizens' voices in public services and use of public resources while harnessing technologies as empowering tools. Through this innovation, the citizens' voices their concerns to the relevant authorities for action as well as forming a basis for interaction between the government and citizens. Through these Huduma centers, the citizens can be facilitated to use web and mobile-based platforms to channel their concerns of service delivery via Short Message Service (SMS), Voice to government agencies and expect feedback. Such initiatives need to be urgently rolled to the lower levels of county/ constituency, to influence the development of ICT policies and infrastructure in rural areas like Keiyo South constituency. Although it has some cost implications, this may be considered as solutions to universal access of ICTs.

## **1.2 The Mandate of Keiyo South Constituency**

Keiyo South is an electoral constituency in Kenya. It is one of the four constituencies in Elgeyo/Marakwet County (CIDP, 2012-2017). It is mandated by the Independent Electoral and Boundaries Commission Act to provide the following services to the constituents: Education; Infrastructure; Socio-cultural values; Security; Health Services; Political leadership; and protection of Environment (Keiyo District Strategic Plan, 2005-2010). The constituency aspires to be a leader in resource mobilization and utilization for sustainable development.

### **1.2.1 Poverty Levels and Health**

The population of the poor in the constituency is estimated at 47.82% who live in absolute poverty Elgeyo/Marakwet Action Plan, (2016-17). The most vulnerable groups include; the aged, orphans, handicapped, unskilled casual laborers, female headed households or child headed households, small agricultural farmers and alcoholics (Keiyo District Development plan, 2004:14).

The Elgeyo/Marakwet County integrated development plan (CIDP, 2012-2017) indicated the causes of poverty in Keiyo South constituency to be: inadequate infrastructure, HIV/AIDs, low agricultural productivity, poor marketing systems, illiteracy, inadequate educational facilities, cultural practices, gender imbalance and disability. The severities of each of these are prevalent among women or child headed households due to family breakages or HIV/Aids, widowed or early pregnancies leading to school drop outs.

Keiyo South Constituency has four health facilities which are under-utilized (Chepkorio, Kaptarakwa. Fluorspar and Metkei) due to inadequate staff and equipment. The most prevalent diseases in the constituency are upper respiratory tract infection (URTI), Malaria, diarrheal diseases, and urinary tract infections or HIV/AIDS. Thus ICTs should be considered in promoting programmes of Primary Health Care (PHC); and STI/STD including HIV/AIDS to rural women of Keiyo South constituency, who are the first primary care providers (Keiyo District Strategic Plan, 2005-2010).

### **1.2.2 The State of Rural Women in Keiyo South**

Keiyo South is a constituency inhabited by the Keiyo community which is a sub-tribe of the Kalenjin. The community still upholds its cultural beliefs where women are not

recognized as property owners contrary to the current Kenya constitution which supports women rights to property ownership. The community derives its income from agriculture, and according to this culture, women do not own land. Culturally, men are property owners and women form part of their property. Women subscribe to this culture by working in their husbands' lands and produce food and income for the family. The produce derived from the farms is sold in the market but the proceeds belong to the family. Men will then use this to pay school fees for the children and save the remaining for future use (Elgeyo/Marakwet, 2013-2017).

Those women, who are not married and not in formal employment, hustles to earn their living through illicit brew or provide labor in other people's farms. Others engage in unsustainable businesses such as hawking farm produce like milk, Irish potatoes or even charcoal burning.

Three quarter of Keiyo South Constituency is very remote and Semi-Arid and it is the terrain of the area that determines the location of some basic amenities. Health facilities are located in distant places where it is favored by the terrain of the place, thus women access to major health facility is scarce and distant. This has limited their opportunity to access information on reproductive health and family planning, as a result majority of them get more children against their will and cannot manage to support them. In this regard women are disadvantage in two dimensions namely :reproductive health and empowerment, leading to loss in potential human development due to inequality between female and male achievements in these dimensions.



### **1.2.3 ICT Access in Keiyo South Constituency**

The constituency has limited ICT infrastructure and communication is mainly through postal services and mobile phones. There are two Post Offices in the constituency which are located at Flouspar and Chepkorio Centre. Internet service is only available in government offices and private cyber cafes in the major urban centers like Eldoret in the neighboring county of Uasin-Gishu. The mobile telephone coverage in the constituency is about 40 percent with most areas around Kerio valley and the escarpment with no mobile phone network. There are however, plans by the national government in conjunction with private service providers to extend the fibre optic cable network from Eldoret to the county headquarters at Iten and other areas in the county (Elgeyo/Marakwet, 2013-2017). Information and documentation centres are not available in the constituency. The only available sources of public information are government officers like chiefs and District Commissioners through public “Baraza”. Other sources include radio and Television for the few who can afford. Majority of women in the constituency are living in abject poverty, are illiterate and dependent mainly on their husbands for information. Men here are said to own ICT equipment like radio, TV and mobile phones, while the few women who might have access do not have time to listen or utilize the equipment because they are always busy supporting the family core activities when their men are busy in village meetings.

ICT access and use among rural women of Keiyo South can be one of the main remedies which would help to bridge disparities between men and women, urban and rural women, and hence make Keiyo South Constituency a global Village, encourage equality and empowerment for all (Ochieng, 2011: 23).

Kenya has placed considerable emphasis on the importance of ICT in its Education Sector Support Programme (ESSP). This is evident in the promulgation of the National ICT Strategy for Education and Training and the primary school's Laptop Projects initiated by the president on 4<sup>th</sup> March 2013 and now in the implementation stage. The Ministry of Education has taken steps to support the implementation of the strategy either by direct action or through the various institutions and agencies with which it works. However, ICT use in most schools in Keiyo South might not be realized in the near future. Majority of the schools lack the infrastructure to support ICT use, such as, electricity, Telecommunication Infrastructure and access roads.

Besides the infrastructure, most schools do not have the capacity to implement the ICT projects. According to one of the Key informants at the ministry of Education, the training of teachers on ICT is being proposed before the rolling of ICT project in schools. This means that teaching of ICT use for most schools in Keiyo South will have to be delayed until when the Infrastructure will be in place and the ICT capacity of teachers is developed and this will disadvantage most pupils.

### **1.3 Statement of the Problem**

Rural women in Kenya are living in poverty, they reside in remote or resource poor areas Kimani E (2006). Their poverty manifest itself in the forms of hunger, malnutrition, illiteracy and limited access to essential social services such as basic education, health, water and sanitation, as observed in Kenya Sessional Paper No.3 of 1992 & Kenya Vision 2030. Based on the traditional beliefs and practices, rural women have had less or no ownership, access and control to family assets and resources, as compared to the urban women who are younger, literate and economically empowered (Kwake, 2007:5). The rural women of Keiyo South are no

exception, they are vulnerable to similar conditions of poverty which at times may go beyond the view of income level to include powerlessness, noiselessness, vulnerability, and fear. Providing them access to unlimited information through ICT can help to empower them to overcome social, economic and political constraints that depict rural areas. Such information includes but not limited to: Health and nutrition, modern agricultural practices, access to loans and distance learning or any other information which can be used to empower them to reduce poverty. However, there are challenges hindering utilization of ICT in rural area namely: ICT infrastructure which is less developed, gender divide with women and girls enjoying less access to ICT than men and boys, The ICT policies available does not address socio-cultural attitudes and preconceptions about women's interaction with technology, and situational obstacles experienced by women in trying to fit to a knowledge society. How then can the rural woman of Keiyo South constituency be assisted to tap the potential benefits of using ICT to reduce poverty within the prevailing socio-economic and political conditions?

#### **1.4 Aim of the Study**

The study aimed to investigate the Use of ICTs in empowering rural women of Keiyo South Constituency, Elgeyo/Marakwet County, with a view of recommending the best practices for using ICT to empower rural women in Kenya.

#### **1.5 Objectives of the Study**

Objectives of the study are to:

- i. Assess the state of poverty among rural women in Keiyo South Constituency
- ii. Assess the information needs of rural women of Keiyo South

- iii. Examine the influence of ICT use on social-economic activities in empowering of rural women in Keiyo south Constituency
- iv. Determine the effect of ICT use on political empowerment of women in Keiyo South Constituency.
- v. Assess the Challenges faced by rural women when using ICT to access and use information in empowering them.
- vi. To Recommend the best practices for using ICT in empowering rural women in Keiyo South Constituency

## **1.6 Research Questions**

- (i) Do what extent has poverty affected the living status of rural women in Keiyo South.?
- (ii) What are the various information needs of rural women in Keiyo South?
- (iii)How does ICT use affect the socio-economic empowerment of rural women in Keiyo south?
- (iv)How does ICT use contribute to the political empowerment of women in Keiyo south?
- (v) What are the challenges affecting ICT use in empowering rural women in Keiyo south?
- (vi)What are the best ICT use practices to be recommended for empowering rural women in Kenya?

## **1.7 Assumptions of the Study**

The study was carried out with the following assumptions

- i Access and use of ICT in the provision of information on social, economic and political as some of the factors that are lacking in empowering rural women.
- ii Limited access and use of ICT is due to poor ICT infrastructure, low ICT literacy skills, low economic empowerment of rural women.

### **1.8 Significance of the Study**

This study should provide information that is relevant to the stakeholders in identifying factors that affect ICT in poverty reduction. The study would be resourceful to the County Government in the formulation of policies on ICT use for poverty reduction among rural women in Keiyo South. From the research findings; problems that need to be addressed by policy makers should be identified to guide in policy formulation for solving these problems. Further the results of the study should enable researchers, policy makers and other interested parties better understand the ICT needs of rural women.

The study should generate information that can be referred to in decision making by the County government of Elgeyo/Marakwet on matters touching on the use of ICT to reduce poverty among rural women and ought to serve as a general reference tool on decisions about the state of use of ICT to reduce poverty among rural women of Keiyo South. The recommendations made in this study should aid ICT decision support systems for poverty reduction among rural women.

The study has provided a knowledge base on ICT and how it can empower rural women and the kind of information services offered. These findings can be used by knowledge developers and other members of the community other than women to

make informed decisions on how to use ICT to reduce poverty. The study findings ought to encourage women in rural areas to embrace use of ICT and reap the benefits for reducing poverty among them.

## **1.9 Scope and Limitations of the Study**

### **1.9.1 Scope**

The study on the use of information and communication technology in empowering rural women of Keiyo South Constituency was limited to rural women between the ages of 18-60 years. These were women who were still active in economic activities. The policy and decision makers of Keiyo South, including the governor's office and relevant institutions such as; Gender, Education, Health, Agriculture and ICT were targeted to guide in government position and implementation. The study concentrated on the use of ICTs in accessing, processing, storage and dissemination of information, and poverty reduction strategies and communication practices of rural women.

The study sampled three divisions of Keiyo South; Chepkorio, Soy, and Metkei division and the findings were used to represent the condition of other constituencies because of the similarities which existed. Although it was believed that there could be other rural women outside Keiyo South facing similar issues in Elgeyo/Marakwet County, the findings can be generalized to represent the entire county. But the study was only limited to ICT use in empowering rural women of Keiyo South but the findings can be applied to the development of ICT infrastructure for use by all rural women in Kenya.

### **1.9.2 Limitations**

The researcher intended to cover only rural women of Keiyo South Constituency, Elgeyo/Marakwet County and not the entire County. The choice of Keiyo South was

because of its ease of access and Security. Another factor was the terrain of Elgeyo/Marakwet County, with limited road access; Translation from the local language to the official English language might have interfered with the actual meaning of respondents and the financial constrains which could not be within the means of the researcher. However, the findings of the study were rich and applied to rural women in the entire Keiyo/Marakwet county and Kenya as a whole.

### **1.10 Definition of Key Concepts and Terms**

**“Baraza”** – Is a Swahili word that means a deliberation meeting held by collective group of a people of wisdom

#### **Gender**

This refers to the socially constructed roles of and relations between men and women. Gender can also be referred to as socially constructed behavioral expectations, roles and responsibilities that are culturally determined and attributed to both men and women.

#### **Gender identity**

This is a personal conception of oneself as male or female (or rarely, both or neither). Gender identity, in nearly all instances, is self-identified, as a result of a combination of inherent and extrinsic or environmental factors; gender role, on the other hand, is manifested within society by observable factors such as behavior and appearance.

#### **Gender Mainstreaming**

This is a partnership between women and men to ensure both participate fully in society's development and benefit equally from society's resources. It covers the following aspects: policy design; decision making; access to resources; procedures and practices; methodology; implementation; and monitoring and evaluation

**Income Levels**

This means the maximum amount an individual can spend during period without being any worse off. It is the flow of cash or cash equivalents received from work (wage or salary), capital (interest or profit), or land (rent).

**Information Communication and Technologies (ICTs)**

The study understands ICTs as tools or techniques that allow recording, storing, using, diffusing and accessing electronic information (World Bank, 2002). This research also accepted more broadly that ICTs are “tools that facilitate communication and the processing and transmission of information and the sharing of knowledge by electronic means” (UNDESA-GAID, 2009: 5) & (Hamel, 2010, p. 1)

**Information Needs**

The information needs concept was used in the study to denote the desire or reasons for which rural women seek for information or problems which can only be solved by accessing the right and up to date information.

Therefore, this study adopted the definition by Wilson (1981; 12) that; Information need is a gap in a person’s knowledge that, when experienced at the conscious level as a question, gives rise to a search for an answer. If the need is urgent, the search may be pursued with diligence until the desire is fulfilled.

**Information-Seeking Behavior**

This refers to the way rural women go about looking for information to satisfy their information needs, either in Health, Agriculture, Political or social and cultural issues. This will be through access to any ICT technology.



**Poverty**

This research used poverty to encompass lack of material resources, poor access to healthcare and education, and the lack of rights, freedom, empowerment and opportunity (UNCTAD, 2010). Other aspect of poverty adopted in the study is “Poverty alleviation” which refers to any change-for-the-better in the social environment, although it is difficult-to-measure, its benefits are accepted.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

A literature review is an account of what has been published on a topic by accredited scholars and researchers. It serves as a guide as to how a particular subject, topic or problem has been researched on. And it forms part of the introduction to an essay, research report, or thesis. The main objective of a literature review for a researcher is to convey to the reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are. And it must be defined by a guiding concept such as; research objective or the problem of discussion.

This chapter therefore discusses the conceptual and theoretical framework upon which the study was based and reviewed previous conducted studies which had relevance to this study. The purpose of this is to bring out the strength, weakness and significance to this study. First, the researcher presented the theoretical framework and the related theories that had been presented in literature related to the Use of ICT in empowering rural women. Literature was then reviewed according to the objectives of the study, followed by the conclusion of analysis for the reviewed literature is presented based on the opinions of the advocates of various studies, therefore presenting the motivation behind this research.

#### **2.2 Theoretical Framework**

A framework is the structure of ideas and how it is put together. A theoretical framework therefore is an essay that inter-relates theories involved in a study. It guides a research on how to determine what things to measure and what statistical

relations to look for (Musangi, 2012). The study proffered to adopt Info-Mobilization theory to inform the research problem.

### **2.2.1 Info-Mobilization**

This study was informed by info-mobilization theory. According to (Bosire, 2011 and Kwake, 2007), Info-mobilization is based on Socio-technical systems theory (STS) which is an outgrowth of the general systems theory and its use to design information systems in organizational settings. Socio-technical system theory states that separate efforts to optimize the technical system and the social system will lead to sub-optimal results, and can even be infeasible. It further asserts that an “information system can be a success in one organization/community but a failure in another, while the same organization/community can experience success with one information system but fail with another”. Hence, the information system and its context must be studied, understood, and managed together, not separately. Info-mobilization applies this theory to rural communities in developing countries, where they are seen to be more applicable than in commercial or government organizations because community actions are influenced more by social factors and individual choices than are organizational actions. Harris (2004) suggests work systems to be most effective when technology systems and social systems are closely aligned.

Info- mobilization theory focuses on concurrent processes of social and technological change and on the joint optimization of human and technical processes within communities (Harris, 2004). Info- mobilization is an organic process of change in which collaborative groups explore and learn about problems and solutions in an iterative manner (Musangi, 2012).

What info mobilization implied for ICT in development is the incremental and iterative development that allows for collaborative learning process based on the evolving information needs of communities. Knowledge is dynamic and technology keeps on changing, to cope with the dynamics of knowledge, therefore the rural women need technology that can link them together with other advanced women to form collaborative networks, so that they can learn from them to implement their own projects.

Info-mobilization provides a methodology for adopting ICT by the rural women which is adoptive planning, where changes are realized continuously while the community learns from the changes. The implementation is always disjointed because all projects cannot be implemented at the same time; before proving their workability. The learning process is also adoptive according to the social and technological systems which require hands-on participation and no one is coerced to take part.

The theory confronts the communities with their information requirements. It addresses the design, delivery and utilization of their information systems by; defining community information requirements based on needs and priorities that have been expressed by the community themselves. In this case, information needs of the community will be related to poverty reduction. Igniting community aspirations and empowering them with appropriate skills for local development and information based. The rural women need to be enlightened on how they can take advantage of ICTs to access information which can be used in reducing poverty.

Harris (2004) further reiterated that there was need to expand community social-capital, through enhanced access to communication facilities and information resources. The policy makers in Keiyo south constituency need to be aware of the

state of communication facilities and the information resources available in order to direct resources to the needy areas. Thus embedding community based ICT services within existing governance and social structures and infusing enhanced capability of information access within the community. In this context whatever projects to be implemented must be within the existing government policies.

This is to ensure that appropriate channels are used which can deliver the relevant information to the intended users and achieving sustainability of finance, service delivery and operating functionality. The derived benefits should be safeguarded from usurped by existing elites, but are equitably subdivided among the socially and economically disadvantaged groups. For this study the socially and economically disadvantaged were the poor rural women of Keiyo south.

The info-mobilization theory consists of the actions necessary to ensure that ICTs have optimal impacts for development among communities in developing countries. These include: familiarizing the community with their existing use and sources of information as well as with the gaps that exist between existing and desired information resources. This means that the rural women should be made aware of the use of existing ICT resources as well as the barriers which might hinder their effective utilization.

Creating awareness to the rural women about the value of information which is available through ICTs use is what this particular theory is emphasizing; to sensitize the community to the existence and accessibility of abundant information resources and to the capabilities of ICTs for accessing and manipulating information. This is in how the rural women should be imparted with knowledge and skills to manipulate

various ICTs to access information which can reduce poverty and the power to adopt the technology willingly.

Harris (2004) further emphasized on empowering the community with information literacy; that is, the skills necessary for the mastery of new media, the internet and multi-media. The method implies that the rural woman needs training and workshops to be able to learn the ICT skills and be information literacy. Hence, motivating community to apply ICTs to the new opportunities that become possible from their relationship with ICTs. This means that the rural women needs to be enticed with gifts and even money so that they can be encouraged to utilize ICTs and thus access information which can empower them economically.

The content to be accessed through ICTs and artifacts in the collection should reflect the rural women's local needs with some affiliation with their cultural practices for posterity and cultural heritage. While fostering appropriate local mechanisms for sustaining the equipment, services and operations of community based ICTs. This is achieved when the county government comes up with beneficial projects whose proceeds can be used in buying and maintenance of ICTs for rural women use. This way, Info-mobilization employs various participatory techniques including; household survey. Base line community focus groups, group dynamics, user committees, training and orientation sessions and demonstrations and facilitated rural women conferences, (Harris, 2004)

#### **2.2.1.1 Application of Info-Mobilization Theory to Empowering Rural Women**

This study about the use of Information and Communication Technologies in empowering rural women of Keiyo South, has borrowed the techniques applied in Info-mobilization theory where the system starts by first defining the information

needs of the rural women of Keiyo South constituency, by the would be implementers or the governing organ. Then begin to satisfy those needs, in this context, systems for communication which can disseminate information to satisfy rural women information needs are developed and out of experience become increasingly capable of understanding and satisfying information needs of higher order. This progress is said to follow an iterative order of action, then evaluation of results and learning knowledge, then ends with an indication of further action (Harris, 2004).

Info-mobilization theory confronted the community of Keiyo south by emphasizing the importance to first identifying the information needs of the rural women, and explained how to mobilize the community resources towards the development of ICT projects that can initiate development in rural areas. Info-mobilization theory cautioned that projects cannot be implemented once because a project which may be successful in one place may fail in another place. In this case a division in Keiyo South would be identified to pilot the ICT projects and two women groups could be picked to pilot the project. Then learning from their experiences, a decision can be made and other bigger projects can pick up from there.

The systems identified for the projects need to be adaptive to the characteristics of the rural women. Thus the technology required is that which is easy to use and interactive which can motivate the users to continuously use it, towards meeting higher information needs. The method require income generating projects which can be used to sustain the process and even provide a token of motivating the rural women from the proceeds of the project, as it improves the economic status of the community.

ICTs comes with costs, cost of telecommunications and equipment, which is inevitably expensive and the best case for realizing reduction is made by effectively

demonstrating how ICTs can be made to achieve development rather than focusing on poorly designed implementations. Since they are to be assigned to rural women who are poor, and have not been info mobilized, they will be destined to deliver sub-optimal outcomes which are not their wish.

Policies that support the mobilization of resources from the government and even donations from well-wishers and those would be entrepreneurs need to be considered, to fund the training and infrastructure cost. Through training, the rural women can be encouraged to automatically embrace the new technology for economic development and the final product will be poverty reduction. Info-mobilization theory refers to the method of adopting ICT to be continuous process, which evolve in an iterative manner through social systems (ICT), because in the learning process, rural women can also be socializing with other women online.

Harris, (2004) also in this theory cautioned communities against misappropriation of the proceeds from the projects but instead to direct it to benefit the disadvantage group, with the context of Keiyo South constituency, the income from the projects can be shared among the poor rural women.

The final product of info-mobilization theory is poverty reduction. This should be achieved by providing the rural women of Keiyo South with access to the right and up-to-date information through ICTs. This information can empower them socially, economically and politically and through training they become equipped with the necessary ICT skills and methods which they can be used to search retrieve and disseminate information for improving their livelihoods and make informed decisions. The acquisition of these methods and skills require some training for the rural women to gain confidence and to motivate them to automatically adopt ICT use without any



coarse-ion. The acquired skills shall be used to manipulate these ICTs and make them effective poverty alleviating technologies, through which the rural women can raise their economic standard and their community.

### **2.3 Review of Related Literature**

This section presents the literature that was reviewed in relation of ICT use to reduce poverty among rural women. This was thematically reviewed according to the objectives of the study using the following order; ICT and women for Empowerment, potential benefits of ICT on social, economic welfare and political empowerment.

#### **2.3.1 ICT use in Empowering Rural Women**

Information and Communication Technologies (ICTs) such as radio, internet, telephone, television, computers and mobile phones can facilitate communication processing and transmission of information to be used in reducing poverty among rural women of Keiyo South. ICTs have the potential to improve the quality of lives of the rural women. (ICT4WD) reported that Information and Communication Technologies for Rural Women's Development has emerged a very important medium for communication and exchange as well as a tool for economic development, in rural areas. However, this potential is yet to be effectively leveraged because of the lack of or poorly developed ICT infrastructure and capacity deficit that many rural and semi-urban areas continue to experience. The lack of properly developed ICT and experience could hinder the effective mainstreaming of ICT in development interventions. However, ICT use strategies and policies needed to be considered for any important poverty reduction project to be realized in most developing countries like Kenya.

### **2.3.1.1 ICT Use in Empowering Rural Women**

The population of men and women is equally distributed. They have the same potential, knowledge and strength. However equal opportunities have been denied to women, and they are socially excluded and discriminated against in many developing and underdeveloped countries (Haffkin, 2002). Women are unable to express their real potential, knowledge and skills and they are suppressed or controlled by the male-dominated community (Taggart, 2001). They cannot communicate freely and express their ideas openly and this has led to waste of human resources in many countries. UNESCO (2015) report on “Gender Issues in the Information Society” stated that the capability of women to use information through ICT is dependent on many social factors, including literacy and education, geographic location, mobility and social class. Social development movements, various kinds of development activities, Policies and governance have helped rural women to reach the main stream of society. In the process of women empowerment, the ICTs are also playing a major role especially through technologies like cell phones and the internet. The cell phone is an extremely efficient ICT for the empowerment of women. It has been accessed by the majority of the people, rural and urban, rich and poor, educated and uneducated, because of its features. The internet is not as easy as other ICTs. It needs basic education and economic support. This technology cannot be accessed by majority of the community. In most parts of Africa, women ICT users are part of a small, educated urban elite. Low levels of education and illiteracy, reinforced by poverty, account in large measure for the problems African women face in accessing and using ICTs. Meanwhile ICTs offer immense possibilities for reducing poverty, overcoming women’s isolation, giving women a voice, improving governance and advancing

gender equality (Haffkin, 2002). This makes the need to make ICT accessible to all most especially women in rural communities a critical issue.

Kimani and Kombo (2010) observe in rationalizing about gender perspective in the development process, while men dominate in this field, majority of women are found in the informal sector handling small-scale businesses and using the meager income to sustain the entire families. The main challenge to gender development in this area is access to relevant knowledge, skills and credit to support their small-scale enterprises. This is an area of major policy concern as unemployment in the informal settlements in Kenya is a major challenge to the gender development process.

#### **2.3.1.2 Social Benefits of ICT Use in Empowering Rural Women**

The social influences of ICT use in empowering rural women were highly regarded. Studies by Kwake (2007) and Oдини, (2012) affirmed positive approach towards the influence of ICT use in rural women economic development and in poverty reduction. Examples of ICT influence in women empowerment include; health, agriculture, education, community development and employment. However, other studies (Chawdhury, 2000; 26) raised concerns as to how ICT could be used to reduce poverty among rural communities in developing countries. He continues to argue that ICTs do not have any more to do with poverty and food security in the developing countries than rain dances have to do with food. In the meantime, he notes that many skeptics have not seen the role of ICTs in efforts intended to alleviate poverty and bring food security to developing countries. Although he acknowledged that the problem of poverty alleviation was complex, efficient production systems and physical infrastructure could be a few of the necessities in rural areas like Keiyo south.

The fact that poverty can be chronic or temporary is often linked with inequity, vulnerabilities and social exclusion which other researchers like (Adeya, 2001) noted in her study on ICTs and Poverty. ICTs can have the potential to reduce poverty and improve the well-being of rural women and their families; if only the problem of illiteracy, access, skills and poverty could be addressed by providing community access to ICTs. Enact policies which include among other things, gender specific ICT policies, community access tariffs, subsidized tariffs for areas with extremely low incomes, and special incentives for companies that invest in rural areas through policies (Jorge, 2002). There are also researchers with conflicting views on ICT programs that provide women access and those that empower them through ICTs. (Gurumurthy, 2004) reiterate that ICT activities for women should be effective in addressing poverty issues and should go beyond issues of access and infrastructure to consider the larger social context and power relations, which was also found to prevail in Keiyo South Constituency and needed to be addressed by the concerned parties before introducing any women empowering strategy.

### **2.3.1.3 Economic Benefits of ICT Use in Empowering Rural Women**

ICTs in economic development are found to lead into socio-cultural, economic and political change thus resulted in a shift in development discourse (Hafkin and Wild 2002, Hafkin and Taggart 2001, Adeya 2001). Similar sentiments were echoed in summits, meetings and conferences on 'ICTs for development', 'cyberspace', 'digital economy', 'information superhighways', 'the information society' and 'networked society'. Thus most Multinational organizations have now mainstreamed ICTs in their development programmes to address poverty related issues.

Other initiatives in Kenya include the establishment of the private owned “Pasha Centers” funded under the ICT Board of Digital Village Project (DVP) established in 2010, which was aimed at bridging the disparities of ICT potentials between urban and rural areas. Although this project was expected to have bared fruits by 2013 in all the counties, to date those projects have not reached most rural areas in Kenya like Keiyo South but they are concentrated in major urban cities like Nairobi; leaving out the rural areas to suffer the brat of digital divide.

The mobile telephone can provide business opportunities such as savings and loans, mobile money which include; M-Pesa, Mobile Banking and M-Shwari as well as serve as a communication tools (Kabati, 1999). These sentiments were further confirmed by the findings of this study which found out the major applications of the mobile phone among the rural women of Keiyo South Constituency were the M-Pesa and Mobile Banking apart from communication. The application of M-Swari was found to be very minimal among rural women but with the long distance between the rural and urban centres being a major issue, M-Swari was envisioned to gain popularity among the rural women of Keiyo South in the near future. But there is need for the project managers to emphasize the importance of using the mobile phone as a resource and a communication medium which can empower the rural women economically.

Institutions which were found to effectively utilizing the mobile phone facility to promote rural women businesses were; Kenya Women Finance Trust and Faulu Kenya. Rural women in Kenya can now be able to take loan from these banks and repay online, which can save on time and transport costs. Although these institutions

charge high interests in their loans, they are the major financiers of rural women economic projects.

Another old Technology which is still useful in the rural areas is the battery driven radio, this can be useful as a marketing and promotion tool and training facility for the rural women in Keiyo South Constituency. Radio can be used to reach a very large heterogeneous group and can effectively serve them wherever they are distributed within the county. However, language content in ICTs is biased towards their place of origin (the west) and translating it to local language might alter the meaning and render the information ineffective. Telecenters can also provide solution to universal access for rural women; however, it doesn't guarantee affordable access. Most Telecenters are implemented as business ventures that need to be sustainable and therefore, charge for services can be high due to equipment, salaries and maintenance costs. Sustainability of these services might not be guaranteed, because it works in other places and not in others.

Telecenters are photo shops and cyber cafes which could also serve as communication and learning centers for rural women to communicate and interact with ICTs and also serve as business units which need to be sustained. Research conducted (Koblo, 2008) has identified successful projects done in other East African countries like Uganda and Zimbabwe where rural women have been empowered through the telecenters and mobile business to improve their livelihoods. Similar projects should be introduced to the rural women of Keiyo South Constituency to serve as communication and training centres where rural women are trained to gain the skills and confidence to use ICTs. There after they can make their own decisions on which ICTs to adopt and use to access information for empowerment.

#### **2.3.1.4 Political Benefits of ICT use in Empowering Rural**

During the World Summit on Information Society, held in Geneva Switzerland; (Mudhai, 2004:2-4) gave a narrative which underscored the importance of ICTs in uniting African countries in development. Mudhai reflected on the latest developments initiated by African governments to leap into the 'information age' with reference to examples of achievements in Nigeria, where there was an increase within two years in fixed telephone lines from 300,000 to 720,000, and a rise in mobile phone subscribers from 500,000 to 2.5 million over the last two years. Other examples, provided by Mudhai in (Kwake, 2007; 117) are: Egypt, which stresses the importance of the E-Africa Connection project with NEPAD. The NEPAD project was among other projects which included EAASY which had specific Kenya initiatives towards breaching the digital divide and empowering Kenyans politically using ICT projects. These projects were regional based pull efforts together to reduce the financial implications. Botswana was among those countries who invested heavily on the ICT industry to the tune of US\$ 300million in East African Submarine Cable System (EASSY). This cable system's intended docking points situated in Kenya, Tanzania, Uganda, Mozambique, Madagascar, Djibouti and South Africa.

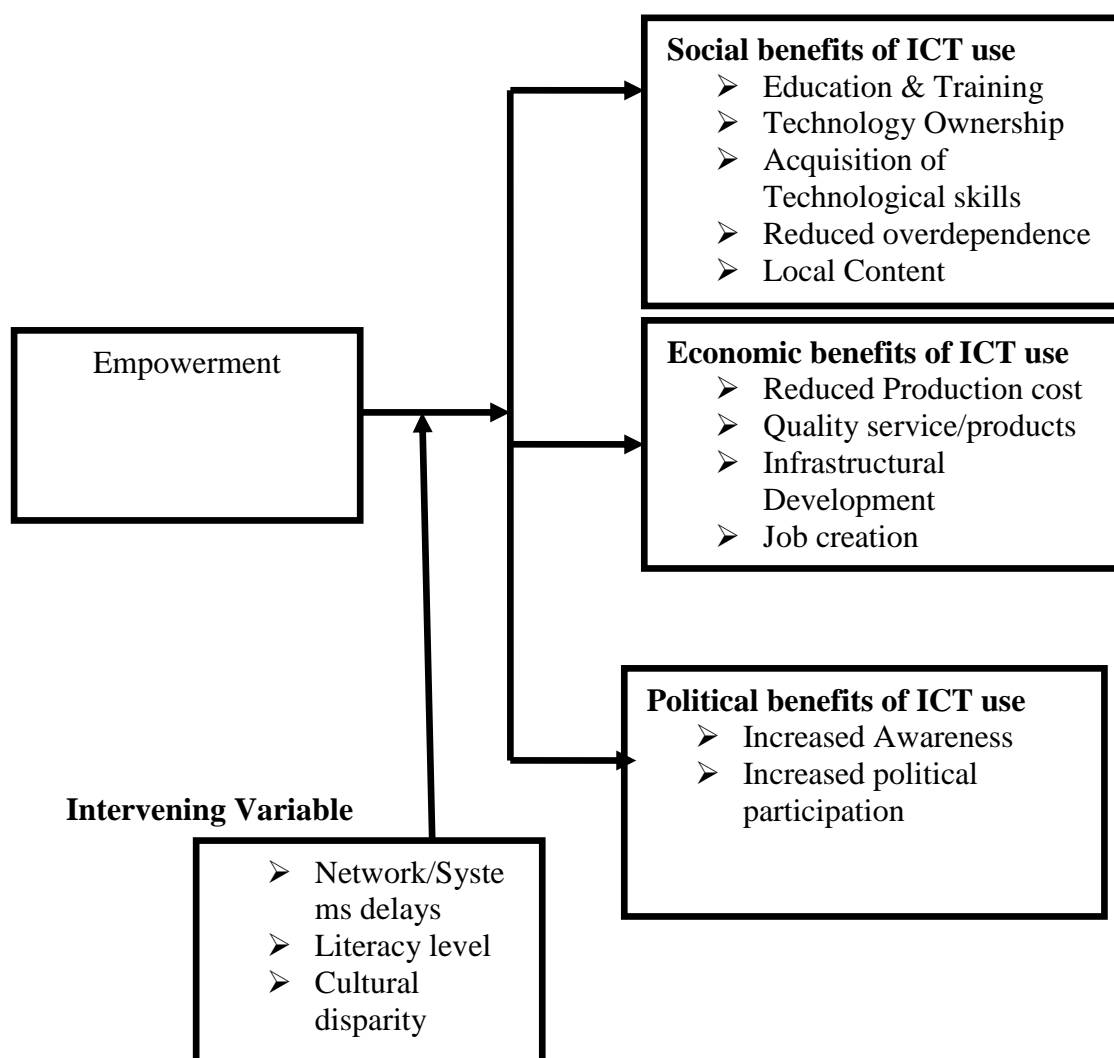
The objective of the regional governments was for EASSY to support their ultimate goal of reducing poverty and increasing economic opportunities for its citizens and their efforts to facilitate the attainment of UN Millennium Development Goals (Stienen, 2007) and SDGS(SDplanNet,2014) which are also envisaged in the Kenya Vision 2030. However, thwarted by the slow progress in EASSY project, Kenya signed another memorandum of Understanding with another submarine fibre link called East Africa Marine System (TEAMS). Within the same time another Kenyan private sector company; Kenya Data Network was also making collaboration with Fag Telecom

whose connection link was in Yemen(IRPAED, 2006). Consequently, the two Memorandum of Understanding between TEAMS and Kenya data Network has now enabled the Kenyan Government to come up with the HUDUMA Centres now operational in most Kenyan Urban Centers. These Huduma centres are expected to enhance development of ICT infrastructure and policies in rural areas for poverty reduction.

## 2.4 Conceptual Framework

### Independent Variable

### Dependent Variable



**Figure: 2.1 Conceptual Framework**



As shown in Figure 2.1 the Independent variables will be expected to have a direct impact on poverty among rural women. There are various ways ICT can reduce poverty among women. ICT when well utilized improves social, economic and political status of rural women. Through education and training they can acquire new knowledge and skills which can be used to access ICT information. With regular use of ICT, they can gain the confidence to become habitual users of ICT and are encouraged to own their own ICTs for regular use. The information acquired can help them to gain political freedom and participate in decision making to promote economic security and facilities in form of participation in trade and production and in policy formulation. Access to digital information can help to create awareness on the availability of social opportunities in form of health and education. Shortage of ICT infrastructure affects the quality of life among the rural women, with the adoption of ICT among women there is considerable reduction in poverty among them and improved living standards. However, there are some other factors which include Network/Systems delays and Literacy level, cultural disparity (intervening variables) which the study found out to have affected the use of ICT among the rural women and need to be further evaluated.

## **2.5 Literature Gap**

It is evident from the literature reviewed that many questions in the role of ICT in empowering the rural women remain unanswered, despite programmes to reach out to the local community especially in the rural areas, it is evident it is quite slow. The study brings out how ICT can empower the rural women to improve their livelihoods.

The contextual experiences of rural women with ICTs, especially mobile, although beginning to be researched remain largely unarticulated. How has adoption of ICTs impacted on their daily lives in their businesses? What are the implications for local rural

women empowerment, social emancipation and advancement? These questions are key and were part of the core concerns of this study.

## **2.6 Summary**

In conclusion, this chapter examined the numerous researches which have been carried out and how such knowledge can be a guiding tool in analyzing the contribution of ICTs to empowering the rural women of Keiyo South. The literature reviewed ICT and Empowerment how the potential and enabling element of information and communication technologies has been identified as a tool for social and economic development, there has been a major advancement in ICTs especially the mobile technology. In ICT and rural women, it was noted that the social dimension of their success in access and use is limited because of their reach. ICT infrastructure has not reached a big proportion of the rural poor. A review was done on the rural women ICT empowerment implemented projects and some of the ICT projects were identified. It was noted that the impediments to access and use of ICTs for empowering rural women in developing countries are the good will of government, knowledge and skills, affordability and universal access which are key development strategies for ICT use in empowering rural women to reduce poverty.

Info-mobilization theory as the key theoretical framework which reflected the experience of rural women as they struggle to be empowered and the role ICTs play in empowering their socioeconomic and political status. In Kenya technology like Mobile Money Transfer has slowly penetrated to the rural areas and Kenya's penetration rate rose from 2% in 2001 to 39% as of the second quarter of 2008. This technology has been accepted and adopted thus trying to empower rural women. Finally, the literature gap was identified as it was evident that many questions in the role of ICT in empowering the rural women in Keiyo South constituency remain unanswered, despite programmes to reach out to women especially in the rural areas.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology is the process used to collect information and data for the purpose of making an informed decision in a research study. The methodology may include publication research, interviews, surveys and other research techniques, and could include both present and historical information (Kothari, 2004).

In this research study the research methodology describes the processes which were used to collect data in the study of ICT use for empowering rural women of Keiyo south. It discusses the research design, study population, sampling procedure and sample size, data collection methods, validity and reliability of instruments, data analysis and ethical issues

#### **3.2 Research Method**

Research method have been defined as a comprehensive set of approaches to gather evidence and analyze specific problems, and that it encompasses techniques and tools (Mikkelsen 2009). The concept technique is used to designate a practical way of collecting data and for analyzing the information obtained in the research process. Tools are the instruments that are used in the process. Research methods could be qualitative or quantitative or both. The techniques include surveys, observations, interviews and experiments; whereas tools include diaries, questionnaires and interview schedule. The study applied qualitative methods epistemology that enabled the researcher to collect qualitative data from rural women of Keiyo South Constituency, Elgeyo/Marakwet County.

Qualitative research is said to be concerned with qualitative phenomenon, i.e., phenomena relating to or involving quality or kind (Kothari,2004). For instance, when we are interested in investigating the reasons for human behavior; why people think and do certain things.It aims at discovering the underlying motives and desires, using in depth interviews for the purpose. Other techniques employed in qualitative research word association tests, sentence completion tests, story completion tests and similar other projective techniques or attitude or opinion. Qualitative research is especially important in this study of ICT use in empowering rural women of Keiyo South constituency because the study aimed at understanding socio- economic and political behavior of rural women and the factors that motivate them to improve their livelihoods. This research the study employed such techniques as; interview schedules, observation and document review in collecting data from the rural women with most open ended questions.

### **3.3 Research Design**

Research design is defined by Orodho (2003; 23) as the Scheme, outline or plan that is used to generate answers to research problems. In qualitative research there are several research design which include; Ethnographic, phenomenology, grounded theory, phenomenon-graphical, case studies, and action research. This research is limited to only two designs; the grounded theory and case study because of their relevance in the current investigation.

#### **3.3.1 Grounded Theory**

Grounded theory is a research design that seeks to develop theory that is grounded in data systematically gathered and analyzed. The theory is inductively derived from the study of the phenomenon it represents. That is, a phenomenon is identified, developed

and verified through systematic data collection and analysis (Mouton 2009). Grounded theory is relevant in this research study of information systems because the study aims at developing context, process descriptions and explanations of the phenomenon. And also in analyzing data and coding them into themes that are used to generate theories.

### **3.3.2 Case Study**

Case study research is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin 2004)". It involves in-depth, longitudinal examination of a single incident or event: This study adopted a case study method because the study is interested in understanding the in-depth case a group of rural women in Keiyo south constituency.

### **3.4 Population of the Study**

A study population refers to a group of individuals, objects or items from which samples are taken for measurement. It also refers to an entire group of persons or elements that have at least one thing in common (Kombo, 2006), for example rural women of Keiyo South Constituency have the same demographic data such as: age, marital status, social and economic class among other. According to Kenya Bureau of Statistics; KBS(2012), Keiyo south constituency has a total of 8577 women population of rural women, drawn from the 17 (seventeen) administrative locations as indicated in Table 3.2

The population which was studied consisted of rural women aged between 18-60 studying, working and living in Keiyo South Constituency of Elgeyo/Marakwet County. These age bracket was chosen because it forms the active and strong age who

are involved in building the economy of the place. The word “rural” is intended to mean places with rural characteristics, such as: low levels of service (e.g. transport, water and medical services), low settlements structures and high incidences of poverty (Okunna, 2004, and Kwake, n.d). These are the women within the productive age, have basic education and who can attest to empowerment of women

**Table 3.1: Population of Key Informants**

Category	Population	Sample size
Ministry of education officials	2	2
ICT officers	2	2
Social workers	2	2
Agricultural officer	1	1
County officials	3	3
<b>Total</b>	<b>10</b>	<b>10</b>

**Table 3.2: Population of Rural Women in Keiyo South Constituency**

Division	Location	Female Population
<b>Chepkorio</b>	Marichor	450
	Nyaru	472
	Kabiemit	567
	Kitany	480
	Mosop	580
	Kaptarakwa	570
<b>Metkei</b>	Tumeiyo	464
	Maoi	460
	Kapwosor	504
	Kapkwoni	480
	Metkei	541
	Kachalwo	450
	Chemoibon	425
<b>Soy</b>	Kibargoi	479
	Soy	524
	Epke	580
	Chepsigot	551
<b>Total</b>	<b>17</b>	<b>8577</b>

**Source: (District Statistic Offices, Iten, 2001)**

The six groups of key information were sampled because the roles they play in their duties and the decisions they make that affect the lives of rural women. The ministry of education officials had the responsibility to inform the study about the enrolments of girls in school and the level of completion. The ICT officer updated the study about the strategies the county government have put in place to empower rural women through the use of ICT. The social workers are the ones to inform of any ongoing rural women projects in the county. Majority of the rural women are involved in farming and the agricultural officers could better inform on their information needs and issues affecting the agricultural sector. The county government officials were sampled to inform the study about the plans the county government have in place for empowering rural women.

The population were stratified into six (ICT officer, Social workers, Agricultural officers, County officials and rural women) to form a stratum. Therefore, different sampling strategies were used for each stratum.

### **3.5 Sampling Procedure**

#### **(a) Sampling Key Informants**

Sampling is the procedure a researcher uses to gather people, places or things to study. A sample is a set of respondents selected from a larger population for the purpose of determining parameters or characteristics of the whole population (Okombo and Tromp 2006)

The study employed different sampling techniques which were in line with this particular study and to provide information which was sought from the rural women of Keiyo South and the policy and decision makers of the county.

On the side of decision and policy makers, all these respondents were purposefully sampled because of the nature and relevance of information they were expected to provide which informed the study.

Census was used as a sampling strategy for the key informants. The motivation for using census is to get information about insights into the research problem from the respondents (Ritchie and Lewis 2003). This included; 2 Ministry officials from education department, 2 Social workers, 1 Agricultural officer, 3 County officials and 2 ICT officers from the Keiyo South Constituency. The ministry officials and ICT officers from Keiyo South were targeted for the study because they are involved in policies and decision making in the county.

**b) Sampling the Rural Women?**

Purposive and snowball sampling methods were applied in rural women of Keiyo south. These methods gave the women in the locations, sub-location and villages in the constituency an equal chance of inclusion in the sample. In qualitative research, the inquirer purposefully selects individuals and sites that can provide the necessary information. Purposeful sampling means that researchers intentionally select participants who have experience with the central phenomenon or the key concept being explored. Mugenda, (1999) defined Purposive sampling as a technique that allows a researcher to use cases that have the required information with respect to the objectives of the study. Consequently, Wad worth, (2007;23) refer purposive sampling as ‘sampling by purpose in mind’ so long as the researcher has verified that the respondents meet the criteria for being in the sample.



In the first stage the researcher purposely chose six from the seventeen locations of Keiyo South to form the sample frame. These are Kapwosor, Marichor, Kaptarakwa, Epke Chepsigot and Chemoibon. Through snowballing the rural women from every location chosen were grouped according to three sectors of occupation; formal, informal and household

### **3.6 Sample Size**

Patton (1990:169) observed that qualitative inquiry typically focuses in depth or relatively small sample, even single cases. He further stated that there are no rules for sample size in qualitative inquiry, what will be useful, what will have credibility, and what can be done with available time and resources. These aspects applied considerably to this study, due to the use of qualitative method where open ended questions and discussions was applied to find information from the rural women of Keiyo South Constituency.

The population of the rural women studied was sampled from the six locations namely: Marichor, Kaptarakwa, Kapwosor, Chemoibon, Epke and Chepsigot, which had an estimated population of 3070 women and only 141 were available for interview. According to Mugenda and Mugenda (1999) between 10-15 % of population can be taken in for a sample size. Therefore, the study took 10% of rural women, who were from the six locations depending on the roles they played in the society and which the researcher found resourceful formed the sample size. However, during the final stage, the expected sampled group were not all available and the researcher had to use the available size at then. These included: women group leaders, women in formal employment, religious leaders and Housewives. This provided a sample size of 141 women interviewed. The study focused on rural women because

they play a very important role in socio economic development only if they are equipped with education and access to information using necessary infrastructure.

**Table3.3: Sample Size for Rural Women**

<b>Division</b>	<b>Location</b>	<b>Female Population</b>	<b>10 % Target Population</b>	<b>Accessible population %</b>
<b>Chepkorio</b>	Marichor	440	44 10%	22 5%
	Kaptarakwa	570	57 10%	29 6.5%
<b>Metkei</b>	Kapwosor	504	50 10%	30 7.8%
	Chemoibon	425	42 10%	25 6.5%
<b>Soy</b>	Chpsigot	551	55 10%	20 4.5%
	Epke	580	58 10%	15 10.8%
		<b>3070</b>	<b>307 100%</b>	<b>141 46%</b>

**Source: (District Statistics Office, Iten, 2001)**

Snowball sampling was also used to get the list of women groups available in every location and their leaders. This was because the women present inform the researcher about the number of women groups they have and where to locate their leaders to shed light about their activities

### **3.6 Data Collection Instruments**

The data collection instruments refer to the tools or methods used in gathering information in a research study. There are various instruments used for collecting data which include the following; questionnaires, interview schedules, observation and focus group discussion (Kombo, 2006). This study used the following data collection instruments to collect data; interview, observation and documented review to elicit information from the respondents under study.

### **3.6.1 Interview**

The interview is a primary technique for information gathering during a survey of a research study. The interviewing skills of the research scientist determine what information is gathered, and the quality and depth of that information. Interviews are powerful tools for collecting research data especially for qualitative investigations such as the study at hand. Punch(1998) & Keith (2005) noted that interviews is one of the leading ways in assessing respondent's perceptions, attitudes, views and definitions of situations and construction of reality, hence is one of the main data collection tools in qualitative research. Interview was useful to the researcher in the sense that highly personalized data such as personal experience was attained; probing opportunities and good return rate was achieved. Interview was also appropriate for those respondents who were not fluent in the official languages (English and Kiswahili) but were fluent in the Kalenjin or where they had difficulties with written language.

#### **3.6.1.1 Structured Interview**

These involve subjecting every informant in a sample to the same stimuli, for instance asking each informant similar questions. The researcher was not able to collect information from the County development officers and policy makers of Keiyo South Constituency who include; the governor, senator, county women representative and members of county assembly who were said to be busy and most of the time not available in the office. Those whom the researcher managed to interview were: the ministry officers, ICT official, and agricultural official and official in charge of women and youth affairs.

For the interview to be successful the researcher made appointments with the relevant officers, the interviews were undertaken at some agreed dates and time agreed by both the researcher and respondents. The questions designed were, elaborate and to the point which helped the researcher to obtain detailed understanding of the research study at hand.

### **3.6.1.2 Semi-Structured Interview**

Semi-Structured interviews were used to interview 141 rural women of Keiyo South constituency who were involved in the formal or informal sector or those in households. These women were grouped according to the four divisions and corresponding locations in Keiyo South Constituency. For this to happen the researcher first identified the chiefs of each location who then helped to link with the leaders of rural women and invited them to a local chiefs meeting where the researcher was part of the team. It was through such meetings that the researcher was introduced to the women leaders and interacted with them and requested them to invite her to their women group meetings in the villages so that she could have time to interview the local women. The information obtained in such meetings was based on the rural women perceptions, attitudes, feelings and insights in relations to research questions and other issues which could have affected the socio-economic status of the rural women.

Semi-Structured interviews were essential in this study because they are non-standardized and are appropriate for rural women who might be illiterate and do not need to follow any sequence. In this way the interviewer had a list of key themes, issues, and questions to be covered by the type of interview, whose order of the

questions were changed depending on the direction of the interview to allow for additional questions to be asked.

Semi-structured interview formed part of in-depth interviews. Women were able to tell the researcher how much things have changed, evolved over decades and how broader social change has affected their individual lives when using ICT.

### **3.6.2 Document Review**

The study reviewed documentary sources that exists as; Constituency development plan, ICT structural development plan, Women development information literacy programmes, Community social and cultural rights. This helped the researcher to have a clear understanding of the perspective of the problem under investigation. These were found in the county headquarters Iten. This was a good method to map and audit ICT's strategies that support rural women empowerment and also to get an overview about the Constituency.

### **3.6.3 Observation**

Observation have been defined as the systematic description of events, behaviors, and artifacts in the social setting chosen for study" (Marshall,1998) Observations enable the researcher to describe existing situations using the five senses, providing a written or verbal account of the event. It is the primary method used by anthropologists doing fieldwork. Fieldwork involves "active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience" (DeWALT & DeWALT, 2002,) Participant observation is the process enabling researchers to learn about the activities of the people under study in the natural setting through observing and participating in those activities. It provides the context for development of sampling guidelines and interview guides.

This study observed rural women of Keiyo South in their own settings at home and in their farms or group meetings. Through their talks and activities, the researcher was able to formulate quick interview questions which enriched the study.

### **3.7 Validity and Reliability of Instruments**

#### **3.7.1 Validity**

Validity is the accuracy and meaningfulness of inferences which are based on the research results. Validity is the degree to which results obtained from the analysis of data represent the phenomenon under study. Validity also refers to the degree to which the study accurately reflects or assesses the specific concept that the researcher is attempting to measure. Validity is also concerned with the study's successes at measuring what the researcher is set out to measure. Validity was enhanced by the use of simple understandable language and of the interview schedule that were determined by the use of experts and research supervisors.

#### **3.7.2 Reliability**

Reliability have been defined by (Kothari, 2004) to refer to a situation where measurements are reliable to the extent that they are repeatable and that any random influence which tends to make measurements different from occasion to occasion or circumstance to circumstance is a source of measurement error. To ensure that the instruments designed yielded relevant information to answer the research questions, interviews were pilot tested by use of test retest method. Therefore, five respondents mainly the decision makers from neighboring Constituency, Keiyo North who included; the ICT engineer, ministry of educational officials, social workers, agricultural officer and county officials were sample for pilot the study. Together with

six women who were randomly interviewed and their response were used to formulate interview questions for the main interview, which yielded positive results

The study then used split-half method to calculate correlation coefficient. This method requires that the instrument is administered once after which it is split into two halves. The first half had odd numbered items while the second half had even numbered items. The two halves are scored separately to obtain the two sets of scores. A correlation was then run between the first and second halves. To get the reliability of the whole instrument, Spearman's coefficient formula was applied; thus

$$R = 1 - \frac{6\sum d^2}{n(n^2-1)}$$

Where,

$d$  = Absolute deviation of the actual ranks of variables  $x$  and  $y$ .

$n$  = number of pairs of scores.

The correlation obtained was 0.72 which was above 0.6 therefore the instruments were deemed reliable (Mugenda and Mugenda, 2003)

### **3.8 Data Collection Procedures**

The researcher, after successfully defending the proposal and with the acknowledgement of supervisors to go ahead, sought for a research permit from the National Council for Science Technology and Innovation to carry out the research from various groups of respondents. In addition, clearance was sought from the sub-county director of education and deputy sub-county commissioner, Keiyo South Constituency. Similar communication was passed to all 6 ward representatives in the

constituency, together with an explanation as to the purpose of the study, its nature and how the information obtained was to be used.

The researcher further solicited help from the officers in charge of the various institutions that were included in the study such as the county governor's and commissioner's office. Each institution was visited on a specific day in order to book appointments with respondents.

### **3.9 Data Presentation, Analysis and Interpretation**

The data collected was analyzed and interpreted bearing in mind, the objectives and research questions of the study. Qualitative data was analyzed using thematic approach. Thematic analysis is commonly used in qualitative research (Braun, Virginia; Victoria Clarke, 2006). It emphasizes pinpointing, examining, and recording Pattern (or "themes") within data (Daly, Kellehear, & Gliksman, 1997). Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question (Fereday, Jennifer; Elimear Muir-Cochrane, 2006). The study sought to answer the research questions and objectives of the study by establishing the latent determinants of using information and communication technology (ICT) in empowering rural women of Keiyo South Constituency, Elgeyo/Marakwet County.

### **3.10 Ethical Issues**

In conducting research, ethical issues are one of the main concerns. Confidentiality of information must be protected from unauthorized persons or environment. Respondents "should not be harmed or damaged in any way by the research. Also important is that interview is not used as dubious means of selling something to the



respondent” (Gray, 2004;235). If respondents are uneasy and become upset, the interview can be cancelled or postponed.

The researcher ensured that the following issues of ethical solutions suggested by (Patton, 2000), and(Gray, 2004) were followed which included: purpose of the inquiry was explained to the respondents, promises and reciprocity, risk assessment or repercussions if any. Confidentiality of information obtained was upheld and no respondent was forced to provide information against their wish. The researcher made sure to obtain a permit from the National Council for Science Technology and Innovation to conduct the research.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

The purpose of this chapter is to present, analyze and interpret data gathered from the respondents in the study. More specifically, this chapter analyzed the respondent's opinions and recorded information on the use of information and communication technology (ICT) in reduction of poverty among rural women of Keiyo South constituency, Elgeyo/Marakwet County. The data is presented in form of text, tables, pie charts and percentages.

##### 4.1.1 Procedure for Organizing Data

In order to organize and categorize data obtained through the interview schedule, the following procedure was used:

- Completed interview schedules were analyzed according to selective coding. From this coding categories were developed that reflected on the response from the respondents.
- According to selective coding six categories were identified, as discussed in the paragraph below.
- All the interviews when done face to face over a period of 3 weeks.
- Data was analyzed and the findings were interpreted and grouped into themes

The following section is organized into; response rate, distribution of respondents per administrative divisions and locations. It was further categorized into demographic characteristics of respondent's section, occupation of the rural women, cultural perception and discrimination of rural women, information sources Available, challenges to effective use of ICT among rural women and women views on how to

improve ICT use among them. This was then organized as per the objectives in the interview schedule and under each category data was analyzed and interpreted. It was then categorized into potential role of ICT on social, economic and political benefits, among rural women as a primary strategy for poverty reduction in Kenya.

#### **4.2. Response Rate**

Out of 141, a total of 130 rural women were interviewed giving a 92% response rate while 7 out of 10 key informants were interviewed, this represented 70% of expected response. Gaining access to some key informants especially the ones from the Governor's office proved difficult because of their busy schedule, thus the above response. According to King (2005) a response rate of 80% is recommended and for this study the average response rate is 81% which within the recommended threshold.

**Table 4.1: Response Rate**

<b>Category</b>	<b>Sample size</b>	<b>Response rate</b>	<b>Percentage</b>
Rural Women	141	130	92%
Key Informants	10	7	70%
<b>Total</b>	<b>151</b>	<b>137</b>	<b>90.7%</b>

Upon receiving the questionnaires, the researcher assessed the completeness of all questionnaires. The main sections of the questionnaires were; variables on socio-demographic and variables on the objectives were duly filled. However, 5% of the questionnaires had some open-ended questions which were not filled but this did not affect the overall analysis as well as analysis on the specific objectives.

#### 4.2.1 Distribution of Respondents per Administrative Divisions and Locations

The rural women of Keiyo south interviewed were drawn from three divisions namely: Chepkorio, Metkei and Soy. Two locations were selected for interview from every division, giving a total of six locations which were interviewed. Chepkorio and Metkei division were the first to be visited because it was easily accessible by road. Majority of the respondents were from these two divisions, a total 59(45.3%) from metkei, 62(47.8%) Chepkorio and Soy division had only 20(6.9%).

**Table 4.2: Distribution of Women per Division and Location**

<b>Division</b>	<b>Location</b>	<b>Female Population</b>	<b>10 % Target Population</b>	<b>Accessible population %</b>
<b>Chepkorio</b>	Marichor	440	44 10%	22 5%
	Kaptarakwa	570	57 10%	29 6.5%
<b>Metkei</b>	Kapwosor	504	50 10%	30 7.8%
	Chemoibon	425	42 10%	25 6.5%
<b>Soy</b>	Chpsigot	551	55 10%	20 4.5%
	Epke	580	58 10%	15 10.8%
		<b>3070</b>	<b>307 100%</b>	<b>141 46%</b>

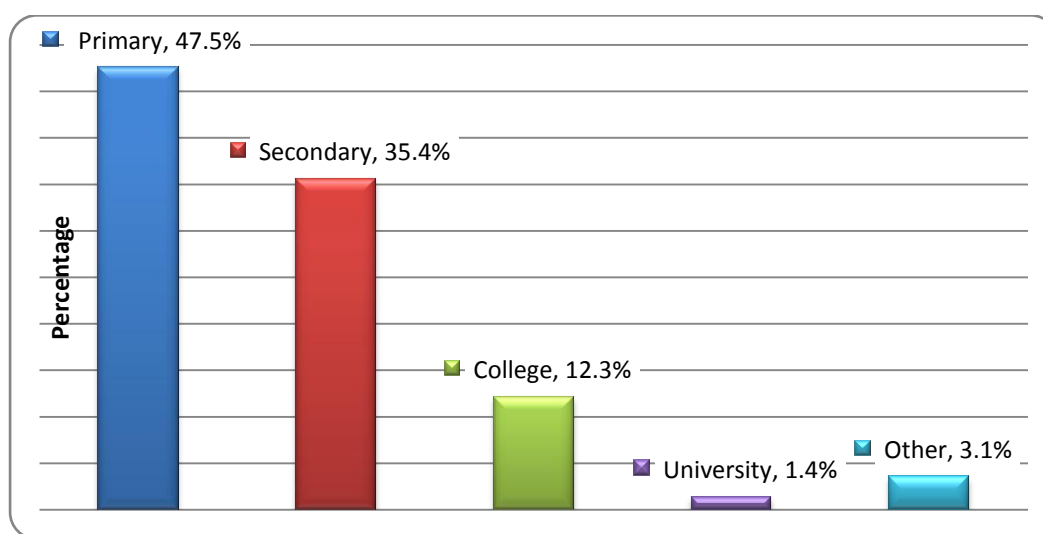
**Source: (District Statistics Office, Iten, 2001)**

As shown in table 4.2 most of the women were sampled from Chepkorio and Metkei, whose experiences reflected the characteristics of women from other locations, however few were sampled from Soy division. Chepkorio and Metkei lie in the highlands and therefore share almost similar climatic conditions and are involved in almost similar economic activities with good climate, productive area and densely populated and scarcity of land. The findings also indicate that the division has electricity in place, water and some fairly good road network.

### 4.3 Demographic Characteristics of Respondents

#### 4.3.1 Education

Education level was very important to be analyzed because it helped to ascertain whether it affects rural women perceptions on ICT use. Also it was important in understanding the way one can seek and use information to implement poverty reduction strategies.



Source: (Author, 2015)

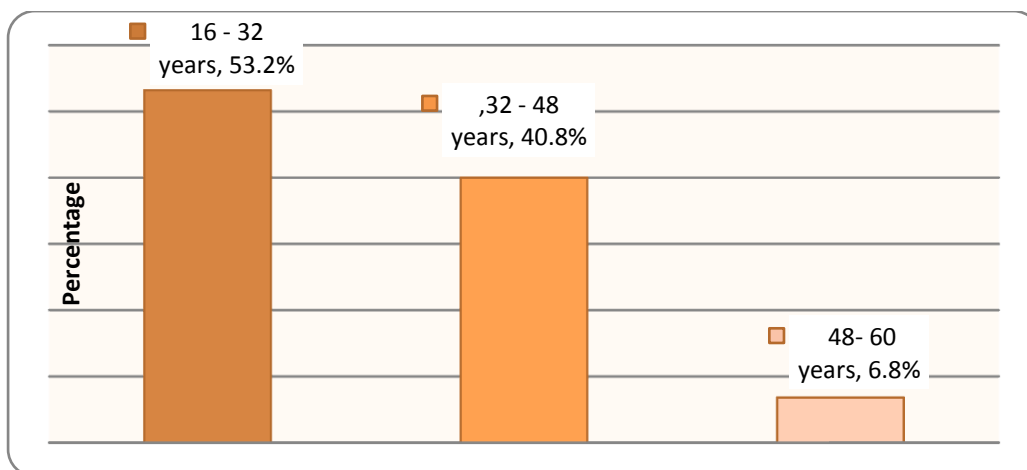
**Figure 4.1: Education Level of Respondents**

Majority of the respondents had primary level of education 62(47.5%) while 46(35.4%) had attained secondary education, 16(12.3%) had gone through college and 2(1.4%) had attained university education and 4(3.1%) had never been to school at all. This gives the impression that majority of the rural women are able to read, write and even carry out basic arithmetic or record keeping about their business or harvests, Fig 4.1 indicated the high rate of rural women with primary education only. This could be an indication of high rate of poverty, because majority of them cannot qualify for formal employment. UNICEF/ESARO's, (2007 attributed low education as to poor representation of women at the senior positions in the civil service in

Africa. (Lillian Omutoko et al, 2006) in support sighted Kenyan Universities experience where she postulated that female students constitute an average of only 39% of the total enrolment of female students. Low education limits rural women from accessing meaningful information because they are unable to determine their information needs. Their inability to determine relevant economic information can lead to high rate of poverty among rural women. According to the information provided by the education officer, majority of primary school enrollments in Keiyo South are female students but as they continue learning majority of them dropout along the way. This was attributed to some social problems for example; early pregnancies, lack of school fees, orphaned or both. Which he said to have reduced the number of women who have access to Tertiary or University Education and limit their chances of employment opportunities. In emphasizing the importance of education Burtch (2006;13) viewed education as a “major force in economic, intellectual, social and cultural empowerment” and is widely recognized as essential to processes of poverty reduction.

#### **4.3.2 Age Bracket of the Respondents**

Finding out the age factor is very important because it affects one’s information needs and the way that information is used. The age brackets of respondents are illustrated in Figure 4.2



**Figure 4.2: Age Bracket of Respondents**

**Source: Author**

The study found out that majority of the respondents 69(53.2%) were aged between 16-32 years and 53(40%) were on the age bracket of 32-48 while 8(6.2%) were aged between 48-60 years old. Majority of the rural women were aged between 16-32, these were young and strong women who are still within the child rearing stage and they need resources to take care of their children. But they cannot take-up their responsibilities fully because they are poor and the resources available are scarce. Similarly sentiments were echoed by (Obayelu, 2006; 45) who noted that rural women are poor, they are involved in agricultural work and unsustainable businesses with unfair workload inside and outside the home. They lack information to equip them with knowledge about improved agricultural production methods, health and businesses which are available through ICTs.

### **4.3.3 Rural Women Occupation**

The study sought to find out the occupation of the selected respondents. An item was included in the questionnaire which sought information on occupation of the respondents. Their findings are summarized in table 4.3

**Table 4.3: Rural Women Occupation**

<b>Status</b>	<b>Frequency</b>	<b>Percent (%)</b>
Opinion leader/traditional leader	2	1.4
Teacher	2	0.7
Women group leader	1	0.7
Subsistence farmer	61	46.2
Government officer	12	9.2
House wife	45	34.6
Business	7	5.0
<b>Total</b>	<b>130</b>	<b>100.0</b>

As shown in table 4.3, the findings indicated that 61(46.2%) were farmers and 45(34.6) were housewives and the rest 24(19.2%) were in formal employment or business.

This means that majority of the rural young women in Keiyo South constituency are unemployed and their population form the majority poor yet they play a major role in the survival strategies of rural households. Kimani and Kombo (2010) observed that in analyzing gender disparity in development process majority of women are in the informal sector handling small-scale businesses and using the meager income to sustain the entire families. From the findings in table 4.3 that most of the respondents were farmers who needed to be provided with information on how to improve their production and uplift their living standards. Such information can be accessed through the radio and television especially the local radio as well as mobile phones and Internet.

Analyzing the occupation of rural women is a demographic factor worth studying because it influences women economic capability. Women in formal employment or



in business command more economic power than a house wife who depends on her husband or a single lady who depends on herself. The Kenyan Constitution and the Bill of Rights chapter 4(2) gives everybody the fundamental right to property ownership and freedom from any discrimination. However, the situation in Keiyo South is different; women are not entitled to any inheritance from their parents. While the men do and are regarded as property owners and women too form part of their husband's property. Majority of the women were involved mostly in farming activities as shown in Table 4.3. Similar conditions were also reported in India by Sethuraman (1997) who confirmed that the informal sector plays an important role in rural employment and women are key players in the sector. In Kenyan perspective Kiriti, et al. (2003) reported that customary conventions play a major role in determining the socio-economic status for women. This therefore an indication that designing strategies for rural women social empowerment should be in tandem with the customs and beliefs of the affected community.

#### **4.4 The State of Poverty among Rural Women**

##### **4.4.1 Cultural Perception and Discrimination of Rural Women**

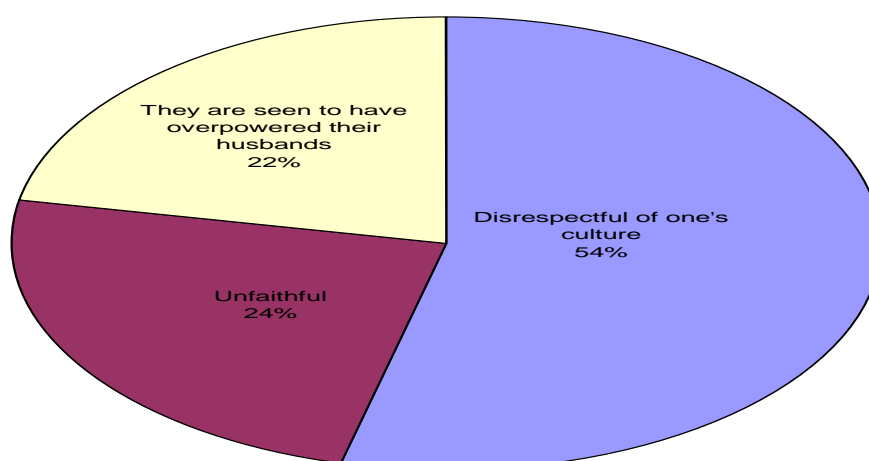
The Keiyo community like other African communities uphold their cultural beliefs of rarely involving their women in decision making, issues about their earnings and how it is spent. According to the research findings; the proportion of women with no say on how their income is spent was found to be greatest amongst the poorest and illiterate families in Keiyo South. As opposed to the learned and urbanized families who are enlighten about their rights and freedom.

Limited access to financial resources increases rural women's economic dependency on men and make them more vulnerable to various economic and environmental

shocks. The research in trying to establish the extend of cultural exclusion of rural women in Keiyo South asked questions such as whether their husbands restrains them from engaging in economic activities and 100% of the respondents gave YES answer. They further said that men undermined their projects at home to kill their morale. Some of their responses included;

*When we want to engage in women group's economic projectsour husbands dismiss us by referring to those groups as "gossip forums" and they turn furious whenever they arrive home and learned that we had attended such functions (Respondent #1)*

This fact was confirmed by the Agricultural officer during the interview which the researcher wanted to establish whether there are government strategies to fight poverty in the area. The officer responded that they have a program called NJAA MARUFUGU whereby the ministry of agricultural donates seeds and fertilizers to every household at the onset of a planting season. But the proportion of women coming for the seeds is lower than that of men thus failing to achieve its main objective. The reason being majority of the rural women were involved in farming activities and were expected to actualize the projects, as income generating activity and as well as producing sufficient food for the family.



**Figure 4.3: Community Perception of Pro-Active Women**

The second question was about how the community perceives pro-active women. The findings indicate that woman's mobility and engagement in productive work outside their homes are not accepted and they face attitudinal obstacles such as being branded disrespectful or seen to have overpowered their husbands in consolidating and developing a sustainable business. This was a response of 54% and 22% respectively and other extreme cases link them to unfaithfulness and this was a response of 24% of women as shown in Figure 4.3

The findings indicate that negative perception of women in Keiyo South is common among the cultural antagonistic families but to a lesser extend amongst the young educated and modernized homes. This has contributed heavily to the poverty status among the poorest homes.(Sharma, 2003; 13) postulated that societies that discriminate by gender pay a high price in terms of their ability to develop and to reduce poverty. Also (UNDP, 2006), warned that societies that effectively exclude women from learning, healthcare and the public sphere deprive themselves of the creativity and productivity of half its citizens. This practice was identified among some families in Keiyo South who were deeply rooted in cultural practices.

#### **4.4.2 Property Ownership**

The study also sought to find whether the rural women owned any domestic animals and the findings are summarized in table 4.4 below.

**Table 4.4: Domestic Animals' Ownership**

<b>Animals</b>	<b>Frequency</b>	<b>Percent</b>
Cattle	3	2.1
Chicken	19	13.5
Without domestic animals	99	76.2
Sheep	9	6.9
<b>Total</b>	<b>130</b>	<b>100.0</b>

Table 4.4 shows that majority 99(76.2%) of them admitted not to own any animal those who owned chickens were 19(13.5), 9(6.9%) had sheep which they said they were given by friends as gifts during their wedding or child's birthday and only 3(2.1%) have cattle. The findings showed that most of the women didn't have any livestock in their homestead, few had chicken and sheep. From the above findings it is clear the rural women are culturally discriminated in property ownership. This makes it necessary for policies on property rights in Keiyo South to be reviewed to include women. Duncombe, (2007;22) provided guidelines for analyzing inequality in property ownership amongst men and women. These included; capital assets and their vulnerability context and transforming structures and processes which he considered to empower rural women to reduce poverty. According to a report by the World Bank (2001; 23), lack of assets and income are some of the poverty indicators which need to be evaluated.

#### **4.4.2.1 Sources of Income for Rural Women**

Analyzing the state of poverty among rural women in Keiyo South constituency, it was necessary to first understand their various sources of income. The findings indicated that majority of the rural women do not have specific sources of income and are involved in hawking various commodities, others are subsistence farmers and few lucky ones are employed in formal employment as indicated in the findings Table 4.4.1;

**Table 4.4.1: Sources of Income**

Source	Frequency	Percent
No specific source but depend on Hawking	44	38.8
Formal employment	25	19.2
Farming family land	61	46.9
Total	130	100.0

Table 4.4.1 shows that 44(38.8%) said that they depend on hawking, 25(19.2%) indicated that their source of income came from formal employment while the rest 61(46.9%) indicated that their source of income came from farming.

Looking at the above sources of income for the rural women, it is now evident that the rural women of Keiyo South do not derive enough income to sustain themselves and be able to own Information Technologies. Studies by researchers; Olatokun (2009), Alampay (2006), ITU (2003) and Heeks (2000) in Bosire (2011) have also confirmed that income level plays a significant role in people's capability to own and use ICTs. Bosire, further emphasized that income is not only related to people's ability to own ICTs, but is also strongly attached to peoples' level of education.

**Table.4.4.2: Rural Women Rate of Income**

<b>Item</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Adequate	25	19.2
Inadequate	37	28.5
Low	25	19.2
Very Low	43	33.1
<b>TOTAL</b>	<b>130</b>	<b>100</b>

From Table 4.4.2 above shows that 25(19.2%) said that the rate of income among rural women was adequate, 37(28.5%) said it was inadequate, 25(19.2%) said that income level was low while the rest 43(33.1%) said that income was very low. It was evident in their interview response that most of the rural women income rate was very low.

From the analysis, those who receive sufficient income are the well-educated, who have gone up to Tertiary college or University level and are in formal employment and have access to low interest loans from their SACCOs, which they sometimes

subsidize with other small economic activities. These women can also afford to own a ICT which can be used at home or in the office and are enlightened. Bourguignon (2004) supported the importance of studying one's income level to guide in formulating strategies for empowering women in countries with low inequality like Kenya.

#### 4.4.2.2 Over Dependence

The study also sought to find out the number of people who live in the women's household and depend on them and the findings are summarized in Table 4.4.3

**Table 4.4.3: Number of People in your House**

Number of people in your household	Frequency	Percent
1 - 2people	22	17.0
3 – 4people	41	31.9
5 -6people	67	51.1
<b>Total</b>	<b>130</b>	<b>100.0</b>

Table 4.4.3 showed that from the 130 women, 22(17.0%) said to have between 1 and 2 people staying with them, 41(31.9%) said they stayed with 3-4 people while the rest 67(51.1%) stayed with 5-6 people. The findings showed that most of the women stayed with 5-6 people. The study went further and sought to know how many of these people depended on these women to provide for them. Table 4.15 shows the findings based on the women response.

**Table 4.4.4: Distribution of Dependence among Rural Women**

<b>No. of Dependents</b>	<b>Frequency</b>	<b>Percentage %</b>
1-5	66	46.8
6-7	46	32.6
More than 7	29	20.6
<b>Total</b>	<b>141</b>	<b>100</b>

Majority of the women 66(46.8) admitted to have 1-5 people living with who are dependent on them, 46(32.6%) said that 6-7 people dependent on them while the rest 29(20.6%) indicated that they had many people depending on them. It is clear that majority of the selected women had between 1-7 people depending on them. This rate of dependence without reliable sources of income increases the already existing burden and widen the poverty gap. According to the World Bank (2003) report on; development indicators; cautioned that the overburdening of rural women intensifies the unequal distribution of resources.

#### **4.4.2.3 Role of Women**

Role is another major factor in analyzing the causes of poverty among the rural women because it influences the fight in poverty reduction. Their role determines whether the women can make part of decision makers or not. When decisions are made on behalf of the rural women, who are the implementers, it jeopardizes their effort and reduces their productivity. Table 4.4.5 indicates their response about their roles in the society.

**Table 4.4.5: Respondents Role in their Community**

<b>Role</b>	<b>Frequency</b>	<b>Percent%</b>
Mothers and home keepers	78	60
Housewives	26	20
Others	26	20
<b>Total</b>	<b>130</b>	<b>100.0</b>

The role of women in most African countries like Kenya revolve around the kitchen and motherhood (O'Brien & Kim, 2015). The findings of this study has supported this fact; Table 4.4.5 shows that, 78(60%) of the respondents said that their main role according to their community is that of a mother, 26(20%) of the women interviewed played the role of housewives and while the rest 26(20%) played other in the society. The findings indicated that most of the rural women in Keiyo South were mothers and home keepers. The first two major roles are intertwined; they revolve around the household responsibilities which are culturally assumed to belong to women. These roles influence negatively on the rural women participation in economic development because the society believes that a woman's position is only limited to the house and her responsibilities revolve around the kitchen; At the same time, they go to the farm to plant, harvest or take care of the livestock, but they are not involved in major decisions that affect their lives. As a result, they don't have time to seek and source for economic information, thereby increasing their poverty status and widening the information gap. Similar sentiments were echoed by Bosire, (2011) who also confirmed that it is a common practice in most Kenyan societies and some other African states across the globe. ICTs have been found when properly used transforms live; for example, In Kenya, women and men weavers were trained on using the



Internet to learn new weaving techniques and develop more realistic prices for their products, EGM/ICT (2002). ICT provide unique opportunities for economic growth and human development in Kenya

#### **4.5 Information Sources available for Rural Women**

##### **4.5.1 Information Needs of Rural Women**

The study sought to find out information needs of rural women. The findings based on the responses of women are summarized in Table 4.4. This table shows that most of the women 49(37.6%) sought information on farm management while only a few 3(2.1%) sought information on dairy farming skills and horticultural practice. It is clear that most of the women wanted information on how to manage their farms. The importance of information was noted by (Ajama,2011) that understanding the activities rural women engage in is very important because it is their demographic and socio–economic characteristics that influence the action women would take about their information needs.

**Table: 4.5.1: Information Needs**

<b>Information need</b>	<b>Frequency</b>	<b>Percent</b>
Farm management	49	37.6
Housekeeping, hygiene and health	23	18
Education and training	28	21.3
Guidance, counseling and Legal Information	10	7.8
Dry land management	8	6.38
Micro finance management	6	4.96
Dairy farming skills	3	2.1
Horticultural practice	3	2.1
<b>Total</b>	<b>130</b>	<b>100.0</b>

The study sampled a number of accessible women and 28(21.3%) suggested that they need to be provided access to information on continuous education, vocational trainings, workshops or distance learning. This could help them to improve their learning skills and improve their social responsibilities and make informed decisions on issues affecting their lives. Report by FAO (2009) asserted that, educated women are endowed with greater decision-making power within the household and also ensures that their children are educated in order to break the poverty cycle. Educating rural women on how to access ICT information resources can provide them the opportunity for continuous education and to enroll in vocational training or distance learning.

#### 4.5.2 Information Sources

The study sought to find out where most of the rural women got their Information that suits their needs. The responses are summarized in Table 4.5

**Table 4.5.2: Sources of Information available to Rural Women**

<b>Source</b>	<b>Frequency</b>	<b>Percent</b>
Government offices	22	17.0
Radio/TV broadcast	19	14.6
Public meetings/barazas	35	27.0
Village elders	30	24
Other: Neighbors	24	18.4
<b>Total</b>	<b>130</b>	<b>100.0</b>

Out of the 130 rural women, 22(17%) indicated that their source of information was from government offices, 19(14.6%) said that they obtained information from radio/TV broadcast, 35(27.0%) obtained their information from public meetings/barazas, 30(24%) said that they obtained their information from village

elders while the rest 24(18.4%) said that they obtained their information from other neighbors. Generally, the Information-Seeking behavior of the rural women of Keiyo South reflects an inclination towards the non-formal, informal, oral and inter-personal sources. (Wessel, F. ,1990) cautioned against over-dependence on informal and interpersonal providers. He linked the practices to absence of informal institutions or limited knowledge on the importance of information on the side of the user.

#### 4.5.3 Time taken to Access Information

Another issue raised for concern to the rural women is that of time to access any relevant information from various sources such as; government institutions, radio, TV or any other public information. The selected women were asked to state how long they take to obtain information for their needs. The responses are summarized in table 4.5.3below;

**Table 4.5.3: Respondents View of time taken to Access Information**

<b>Time</b>	<b>Freq.</b>	<b>% </b>
Less than a day	16	12.1
A day or more	53	41.1
Other: Depends on the need and availability of my friends and neighbors at home	61	46.8
<b>Total</b>	<b>130</b>	<b>100.0</b>

Out of the 130 women, 16(12.1%) said that it takes less than a day to access their needed relevant information, 53(41.1%) said that its takes a day or more while 61(46.8%) said that the time taken dependents on the availability of their friends and neighbors. As shown in table 4.5.3 most of the women indicated that the time taken to obtain information depends on the availability of their friends and neighbors;

## **4.6 Social-Economic benefits of using ICT in Empowering Rural Women**

### **4.6.1 Social benefits of ICT use in Empowering Rural Women**

The first objective sought to find out the impact of ICT use on the social lives of rural women in Keiyo South. A question was posed to find out the social benefits of using ICT for empowerment and the findings revealed that most women have embraced the use of ICT technology especially the use of radios, TVs and mobile phones to enhance their quality of life. However, it was noted that most of the rural women have not fully utilized ICT in obtaining new information. They do not think the use of ICT has provided them with new knowledge and skills or enabled them avoid face to face communication with political and social opponents. Few of them agreed that the use of ICT has increased ability to communicate socially with friends and family. Similar findings were reported Iiboudo (2003) who came out in support of radio to have the capacity to enable the broad participation of women of a local community and is the cheapest of all mass communication tools and one that rural people can easily obtain. Panos Institute (2004) has also confirmed the findings of this research about the capability of ICTs, more especially on the mobile phone. This modern technology is said to have greatly simplified the provision of service among other rural women. It was noted that mobile phones had contributed towards development by facilitating social change and economic activity; improving the quality of life, bringing cost benefits in rural social service delivery, and promoting good governance and transparency.

### **4.6.2 Economic Benefits of ICT use Among Rural Women**

The third objective also sought to find out the Benefits of ICT in Economic life of Rural Women in Keiyo South. An item was included in the interview which sought information on the influence of ICT on the social life of rural women.

The findings revealed that majority of the respondents, 85(65%) use ICTs to reduce travel time and costs for social and business and communications purposes while 29(23%) thought otherwise. Out of the 130 women 82(63.1%) agreed that they use ICT to Network with friends to look for information about jobs, 25(19.42%) said to use ICT to get new products and services. In addition, 79(60.8%) of the selected women agreed that they use mobiles to send and receive and save money. It was noted also that few women 23(18%) use ICT to obtain climate information.

Information from the key informants interviewed, majority of the ministry of educational officials indicated that ICT especially has been used by rural women in obtaining information on how to improve their farm products through tailored programs especially on channels broadcasted in their local dialect. Most of the ICT officers also reported that women use ICTs to stay in touch with current events within and beyond Kenyan borders. The agricultural officer indicated that:

*In the past few years most rural women have acquired mobile phones, through these gadgets they can access internet at an affordable rate from the local telecom companies. They use this platform to socialize with fellow women as well as accessing information on best farm practices. They also use their phones to save, send and receive money easily wherever they are. (Respondent#1)*

One of the women and youth representatives' officials asserted that:

*It is imperative to have an understanding of the numerous gender dimensions which impact on accessing and using ICTs. Rural women are less likely to prioritize ICTs in their daily lives as they have less time and less comfort in using ICT based services (Respondent#2)*

The second youth representative said that:

*Most of the ICT policies in Keiyo South do not prioritize female gender in rural ICT initiatives. And that Government support and promotion of rural infrastructure and equal access to and use of ICTs among women and men is critical. Policy makers should include a gender lens on every policy that affects access to and use of ICTs in rural areas (Respondent#3)*

The findings have identified ICT as the most effective tool to reduce poverty and bring about economic development almost simultaneously among rural women. However, these benefits can only be realized if there are supporting policies for rural women empowerment and infrastructure are in place. In that regard the rural women can benefit as much if not more from ICT use as the rich and educated in urban areas. Studies Drunker, (2001) informed that wherever rural women have been provided quality access to ICT, “it has helped to raise incomes, allow better flow of information and higher participation in national and global economy”. Adeya, (2002) reported that “there is a positive relationship between ICT and human development”. Therefore, it is worth to note that access to and use of ICTs among rural women in Keiyo South is not just about connectivity but about their capability to acquire and use the tools and content in ways that improve their lives.

#### **4.7 Political Benefits of ICT use Among Rural Women**

The third objective sought to find out the benefits of ICT on the political status of rural women. An item was posed during the interview which sought to determine the role of ICT use in improving the political status of rural women in Keiyo South,

The findings revealed that majority of the respondents, 87(67.4%) agreed that they are able to listen and watch news. Out of the 130 women, 53(41%) agreed that they mobile phone to communicate with their MCAs, MP or any government official, while 56(43%) agreed that they use ICT to learn more on leadership qualities. Moreover 27(20.6%) use ICT to participate in any political debate online.

The findings indicate the low trends of ICT use in politics. This was shown by majority of the women disagreeing that they use ICT to participate in any political election. It was also noted that most of the women didn't use their mobile phone to

send any comments during a political leader TV or radio interview. However, on a positive note most of them indicated that they were able to listen and watch news using televisions and that they use mobile phone to communicate with their MCAs or MP or any government official.

According to the Okinawa Charter on Global Information Society women, everywhere should be enabled to participate in and should not be excluded from the benefits of the global information society. The resilience of the society depends on democratic values that foster human development such as the free flow of information and knowledge, mutual tolerance, and respect for diversity. Although ICT indeed plays a major role in supporting a culture of democracy, democratic processes and civic values that uphold a democratic system. The findings in this study clearly outline that the populace is not well informed of the benefit of ICT in promoting the culture of democracy within the existing political environment. Similarly, Yunus (2007) posits that ICTs play a major role in all aspects of national life: in politics, in economic life, as well as in social and cultural development and is rapidly transforming our lives, the way we do business, access information and services, communicate with each other and entertain ourselves.

When interviewed most of the education officers were of the view that ICT have enabled rural women to have a voice and being listened to by the community and political leaders and people in decision-making positions in government and industry. On the other hand, it was also noted that most of the ICT officers were of the view that ICT have enabled women to network and meeting with people in government and other women to lobby and discuss issues affecting rural women and rural communities, and to organize various actions. Majority of the youth and women

affairs representatives indicated that in Keiyo south Constituency information and communication technologies (ICTs) are a mirror on society. They further said that social, economic and political structures relating to gender and to class influence how women and girls access and use digital ICTs. One of them specifically needed evidence and said that:

*There is only limited evidence that women's individual or collective voice, enabled by digital ICTs, influences political movement, leadership and actions. (Respondent#4)*

It was also noted that the agricultural officer was of the view that ICTs have presented new opportunities for rural women to express themselves, share their opinions and lobby on issues important to them. They further asserted that this has strengthened their public voice and their political interests. However, the education officer noted that in Keiyo south majority of women are computer illiterate which have reduced their chances of active participation in most political issues using the internet. The officer noted that;

*The internet becomes the dominant domain of the public sphere as well as the site of governmental action and service delivery. (Respondent#5)*

The study has revealed that rural women's political empowerment in Keiyo is focused towards increasing rural women's power to take control over decisions that shape their lives. This can be achieved by the county government enacting policies that improves rural women participation in decision making and control over distribution of benefits. And for rural women who can effectively access and use ICTs; they offer potential especially in terms of reducing poverty, governance and overcoming isolation, if only they are provided with the correct policies and infrastructure.



Sreekumar (2007) support rural women’s political empowerment but cautioned that computer illiteracy may emerge as a structural disadvantage like illiteracy. In such situations he said that women’s access and use of digital ICTs increases, and inequality in access and use also increases making the overall net effect on women’s voice and influence become negative. Sreekumar based his example on a study of cyber kiosks in rural India, where participation in the information society was not simply a matter of choice. Even if women’s actions were not determined, prevailing structures and institutions do shape whether they can take advantage of new opportunities that ICT has to offer.

#### **4.8 Challenges to Effective use of ICT Information in Empowering Rural Women**

The study sought to find out the challenges faced by Rural Women in using ICT to empower themselves. The findings are summarized in Table 4.8.1

**Table 4.8.1:Challenges to Effective use of ICT in Empowerment**

<b>Source</b>	<b>Frequency</b>	<b>Percent</b>
Limited ICT Skills and Illiteracy	13	10
Limited Access and use of ICT	25	19.2
Lack of Technology Ownership	12	9.2
Lack of Awareness	44	33.8
Limited ICT infrastructure	32	24.6
Lack of gender specific ICT policies	4	3.1
<b>Total</b>	<b>130</b>	<b>100.0</b>

Table 4.8.1 shows that, 13(10%) respondents said that the major challenge faced by women in rural areas was limited ICT skills 25(19.2%) indicated that there was limited access and use of ICT, 12(9.2%) said that most of the women didn’t have ICT

gadgets, 44(33.8%) lacked awareness in the use of ICT in empowerment, 32(24.6%) indicated that there was limited ICT infrastructure while the rest 4(3.1%) said that the available ICT infrastructure lacked gender specific ICT policies.

As shown by the findings above most of the women indicated that most rural women were not aware on how to use ICT in empowerment. Most of them also indicated that there was limited ICT infrastructure. The other few indicated that the existing ICT policies do not cater for gender specific issues. These are critical impediments to the use of ICT in empowering rural women which the county government needed to address.

Studies by researchers Jorge (2002) have found out that in most developing countries like Kenya; Telecommunications and ICT policy lack a gender focus and when it comes to women participation in decision making bodies, most rural women are far behind. Jorge, further cautioned that many challenges related to ICT use for rural women's economic empowerment result from lack of gender awareness in the policy making process. Slaymaker, (2002) has reported immense growth in rural women economic development through ICT use. That ICT can be used to "overcome rural women's isolation, giving them a voice, improving governance and advancing gender equality."

#### **4.9 Women's Views on how to Improve ICT Use among them**

The study sought to find out the opinion of the rural women on how to improve ICT use among them. Table 4.8 shows that 44(33.8%) of the selected women suggested that the use of ICTs to create markets for the products and services of rural women should be practiced, 56(43.1%) suggested that the present ICT infrastructure should link ICT organizations with Women's Rights organizations, 12(9.2%) suggested that

women should be trained on the use of ICT and how to apply them in a bid to empower themselves to improve their livelihoods. The rest 18(13.8%) said that women should be made aware on the importance of ICT in empowerment.

**Table 4.9.1: Views on how to Improve ICT Use**

<b>View</b>	<b>Frequency</b>	<b>Percent</b>
The use of ICTs to create markets for the products and services of rural women	44	33.8
The linking of ICT organizations with Women's Rights organizations	56	43.1
Women need Education and Training	12	9.2
Create awareness on importance of ICT in poverty reduction	18	13.8
<b>Total</b>	<b>130</b>	<b>100.0</b>

## **CHAPTER FIVE**

### **SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter gives a summary of the findings, conclusions drawn from those findings and proposes recommendations that may be used in the use of ICT to empower rural women to reduce poverty. The chapter is divided into five areas namely: Summary of findings, conclusions, recommendations and suggestion for further study.

#### **5.2 Summary of the Findings**

##### **5.2.1 Demographic Data**

The study can summarize by saying that the rural women of Keiyo South are disempowered due to of remote location where developmental activities are still low. Rural women of Keiyo South were found to be disempowered due to illiteracy and have low education. Most of them did not go beyond secondary and primary education. Due to low education, they cannot secure meaning full employment. Majority of them are farmers and depend on subsistence farming for a living which may not sustain them with their family.

##### **5.2.2 Poverty Status of Rural Women**

The summary on the findings of the study have shown that Poverty can be chronic or temporary and it is often linked with inequality, vulnerabilities and social exclusion (Adeya, 2001).

In Keiyo South various disparities still exist between men and women and between urban and rural areas. These disparities are occasioned generally by cultural, economic and technological factors which need to be addressed with greater concern

and urgency to enable rural women participate effectively in development matters. Such disparities include; women's roles, overdependence, limited rights to property ownership, cultural exclusion in decisions making and lack of bargaining power.

### **5.2.3 Sources of Information**

The rural women of Keiyo south have various information needs which have not been fully met. They need information about their health and hygiene, modern farming practices, sells and marketing, and networking and linkages. They also need information on social economic and political empowerment which they don't have. However, access to these information is limited by lack of ICT skills, cultural perceptions, illiteracy, and poorly developed ICT infrastructure. They consult unreliable sources of information such as friends, neighbors or spouses which is an indication of lack informal institutions and limited knowledge on the importance of information on the side of user.

### **5.2.4 ICT use in the Socio-Economic Empowerment of Rural Women**

#### **5.2.4.1 Social Benefits of ICT use in Empowering Rural Women**

The study found out that ICT is the latest technology to revolutionize the minds of rural women in Keiyo South. They use TV, Radio and mobile phones to enhance their quality of life. It was also noted that most of them have not fully utilized ICT in obtaining current information because they do not have the relevant skills and few of them agreed that the use of ICT has increased their ability to communicate with friends and family. ICT was found to have significant effect on the way rural women think and perceive ideas which can be used to empower them from social exclusion and give them a voice. Informed citizens according to World Bank report (2002) are better equipped to take advantage of opportunity, access services, exercise their rights,

and hold state and non- state actors accountable. However, these can only be possible if the rural women are trained to get the relevant skills for access and use ICT information. Most of them are not able to even own these technologies because their income is very low and they need to be empowered. To achieve this goal, the county government of Elgeiyo/Marakwet and Keiyo South in particular should first of all understand the information needs of the rural women as directed Harris (2004). The information needs shall serve as a guide in formulating ICT empowering strategies. United Nations Millennium Declaration (2005) also supported the strategies but emphasized on full and equal access to ICT-based economic and educational activities for improving women's socioeconomic status

#### **5.2.4.2 Benefits of ICT use in the Economic Empowerment of Rural Women**

In summary it was noted that most of the women in Keiyo South agreed that they use ICTs to reduce travel time and costs for social and business communications purposes which has improved their living standard. ICT especially the mobile phone was found to be used by the rural women to apply and repay loans through table banking and Kenya Women Finance Bank. They also use the mobile phone to send and receive money from family and friends. However, the challenges which were noted to limit rural women's access and use of ICT information were; Illiteracy, limited ICT skills and Infrastructure as well as inability to own ICT Technology. This is because ICT are believed to be and is still restricted to very few people living in urban centers (Munyua, 2000). The old ICTs such as radio and Television is also used but is not effectively utilized because women are always busy in their farms or doing house chores that they do not have time to sit, watch or listen to information.

### **5.2.5 Potential benefits of ICT use in Political Empowerment**

It was noted that ICT has the potential to unite African countries (Mudhai, 2004) to leap into the information age liberate rural women from political misrepresentation and give them a voice. Kenyan government in compliance with UN Millennium Development Goals and SDGS(SDPlanNet,2014) has signed MoU's with other African countries to liberate Kenya from the Digital Divide and make it an information society. This has resulted into the present HUDUMA centres now operational in most county headquarters in Kenya. ICTs has enable rural are not involved in decision making. They do not have access to information which can enlighten them about their democratic rights. They uphold their cultural norms and beliefs which they subscribe and does not question decisions that intimidate them.

### **5.2.6 Challenges to ICT Use and Access of Information**

Access to information for empowering rural women to make informed decision is critical according to the findings of the study. Rural women's illiteracy level and language barrier limit them from consulting information sources such as internet or newspaper or other relevant sources to update themselves of current affairs. Most of the information sources use the official languages, Kiswahili or English which might not be easily understood by most of them. Their decisions are guided by masses, past experiences or hearsay.

The ICT Infrastructure is limited and motivation strategies for ICT investors such as subsidized tariffs and policies need to be considered. Through which rural women shall be empowered to participate in decision making and policy formulation forums.

### 5.3 Conclusion

Based on the findings of this study, the following can be concluded: -

The study concluded based on the first objective that a significant and rising incidence of absolute poverty exists in Keiyo South and women suffer from poverty more often than men. This is more pronounced in female headed households. The high poverty rates among women can be linked to their low education, roles, unsustainable income and limited access to property ownership. Their lack of voice and participation in decision-making in the family/household and other institutions and because gender disparities persist in access and control of human, economic and social assets. They hold very low jobs in the informal sector and derive most of their income in subsistence agriculture where the income is low.

On the second objective of social empowerment through ICT the rural women, there is limited access to ICT information because rural women are illiterate and they lack the skills of using ICT to gain meaningful information to improve their livelihoods. They admit to need information about their health and hygiene, new methods family planning or agricultural production and training. They consult unreliable sources of information because they do not own any ICT Technology, the available ones belong to their husbands. They are always busy and do not have time for themselves to access and use ICT information. They need to have confidence to redeem themselves from their always assumed position in the Kitchen.

About Economic influence of ICT in empowering rural women. ICT was found to be an enabler for rural women. They use ICT to subscribe to groups and borrow loans and repay using their mobile phones. Internet access is limited and the infrastructure is limited leaving them to remain with the common ICTs; radio, Television and the



mobile phone. They use the mobile phone to know about current market prices send money to friends and family and to also receive from them. They do lack the purchasing power to own ICT technology and they borrow from few friends who own them. The ICT policies are limited and do not address gender parities in the community and they are always denied access. They need policies in place that support infrastructural development and projects for rural women empowerment.

#### **5.4 Recommendations of the Study.**

The study has observed that ICTs are powerful information transmitting tools which need to be embraced to empower rural women to reduce poverty. Radio and TV are the existing examples of old ICTs which can serve as tools for community building, especially in sparsely populated areas. It has also proven to be effective in transmitting information about poverty reduction such as; new farming techniques, insecticides use and application, market prices, stock exchange and weather forecast. The content should be translated to local dialects and disseminated through existing vernacular radio and TV stations to bridge the gap of illiteracy among rural women.

On social empowerment there is need for the social organizations and county government to champion and promote the Kenyan constitution, bill of Rights chapter 4(2) that gives everybody equal opportunities. This way the rural communities can be enlighten and liberate rural women from social injustices.

The study also recommended to the county government to enact policies to empower rural women economically. Guided by Harris Info- mobilization strategies, they need to first understand rural women information needs to assist in formulating policies which can lead to establishment of community projects for rural women. These projects can serve as training centres for rural women as well as income generating

projects. Women can acquire the skills and money derived from the proceeds of the projects 'to improve their livelihoods. The county Government should also provide incentives to private investors to motivate them to invest in ICT projects in rural areas which can enable rural women have universal access to information on social economic and political empowerment and poverty reduction.

The study also recommended training for rural women to adopt technology transfer in improving their lifestyles and for upgrading skills to achieve greater productivity. For this projects to effective Harris info-mobilization theory advise on piloting the projects from one area and see what can suit where. This is because a project might function in one side and fail to work in another place but the proceeds belong to the women.

Thirdly the county government should enact gender specific ICT policies which support women empowerment, universal access, infrastructure development and provide rural women with access to ICTs at affordable prices. The policies should consider upgrading of the current Huduma centres to universal access points like community access or information resource centers and Telecenters and extend the coverage to sub-county level.

### **5.5 Areas of Further Research**

From the study findings it was noted that majority of the rural women were able to use ICT especially radios and TVs to ensure that they improve their livelihood. However, there were areas that the study sought felt were not touched, therefore the study suggested that a study be done on

- i. The role of women in cultural change among the rural communities in Kenya
- ii. The influence of Mobile banking on women economic status

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## APPENDICES

### APPENDIX I: LETTER OF INTRODUCTION

Lelon Lydia Jebet  
P.O. Box 1125-30100  
Eldoret  
Tel: 0722296360  
**E-mail: [jebetlelon@gmail.com](mailto:jebetlelon@gmail.com)**

#### TO WHOM IT MAY CONCERN

My name is Lelon Lydia Jebet, a Masters of Philosophy student in Information Science at Moi University; Carrying out a research on **“The use of ICTs in Reducing Poverty Among Rural Women of Keiyo South Constituency, Elgeyo/Marakwet County”**

This study is aimed at identifying and generating information on the use of ICTs in disseminating and transferring information to reduce poverty among the rural women of Keiyo South Constituency. And the role in which information has played in empowering the rural women, factors that have hindered or that have rendered slow penetration of ICT in the rural areas, as well as factor that hinder development of ICT projects which would empower rural women. The findings provided will help enlighten other rural women in Kenya on how ICT can improve their livelihoods and in empowering them socially and economically through project implementation.

Therefore I would request you to spare a bit of your time to answer these questions which will help me to gather information on the use of ICTs to reducing poverty among rural women in Keiyo South constituency. You have been identified as a potential respondent in this research .The information will be treated with utmost confidentiality and used for academic purpose only.

Your genuine response will be appreciated

Thank you in advance

Yours Faithfully

Lelon Lydia Jebet



## APPENDIX II: QUESTIONNAIRE FOR RURAL WOMEN OF KEIYO

### SOUTH CONSTITUENCY

This research study seeks to investigate how the use of ICT can be used to reduce poverty among rural women of Keiyo South.

#### PART A BACKGROUND INFORMATION

##### Section A: Background Information

##### a) Level of Education

- (i) Primary  College   
 (ii) Secondary  University   
 (iii) Others please specify.....

##### b) Administrative Division

- (i) Metkei  Soy   
 (ii) Chepkorio

##### c) Location

- i) Metkei  Marichor   
 ii) Kabiemit  Soy   
 iii) Kaptarakwa  Kachalwo   
 iv) Tumeiyo   
 v) Others please specify.....

##### d) Age bracket of respondent

- i) 16-32   
 ii) 32-48   
 iii) 48-60

##### e) Role of respondents in the society

- (i) Opinion leader/traditional leader   
 (ii) Youth leader   
 (iii) Teacher   
 (iv) Women group leader   
 (v) Subsistence Farmer   
 (vi) Government officer   
 (vii) Student   
 (viii) House wife   
 (ix) Traditional healer/practitioner   
 (x) Business man/woman   
 (xi) Religious worker   
 (xii) Other (please specify).....

**Section B Status of Poverty among Rural Women**

**1. Level of poverty among rural women**

a) What are your sources of income?

EXPLAIN

.....  
 .....  
 .....  
 .....

b) How can you rate the proceeds of your business activities in terms of income level and job satisfaction as per this scale?

**Key: 1 - Adequate, 2 - Inadequate, 3 - Sufficient, 4 –Insufficient and 5 – Very low**

**1 2 3 4 5**

Adequate	
Inadequate	
Sufficient	
Insufficient	
Very low	

c) What are the socially attributed causes of poverty among rural women?

---

**Tick**

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Illiteracy and low education

Gender discrimination

Single parenting/widowhood

Over dependency

Role of Women in the society

Others specify.....

.....

d) Which of the following animals do you own?

Cattle

Sheep

Chicken

Pig

NONE

e) What role do women play in your community?

- Leaders
- Decision makers
- Head of the household
- Housewife
- Others specify.....

f) How many people live in your household?

- 1-2
- 3-4
- 5-6
- Others specify.....

g) How many of these are;.....

h) Depend on you for financial support?

1-5

6-7

Many.....  
 .....  
 .....

i) How do the community perceives you as a woman?

.....  
 .....  
 .....  
 .....

**Section C Access to information**

a) What kind of information do you require to meet your daily activities?

STATE:

- a).....
- b).....
- c).....

b) Where do you access the information you need from?

- a) A library
- b) Radio and Television
- c) Government agencies
- d) Friends and village Elders
- Others specify.....

c) How much time do you spend to get this information?

- Less than a day
- A day or less
- A week or more
- Others specify.....

### Section D: Challenges to Effective ICT Use of ICT among Rural Women

a) What are the Challenges to Effective ICT Use of ICT among Rural Women?

Kindly tick against what you perceive as the major challenge below

---

#### Source

---

Limited ICT Skills and Illiteracy

Limited Access and use of ICT

Lack of Technology Ownership

Lack of Awareness

Limited ICT infrastructure

Lack of gender specific ICT policies

---

#### Total

---

Others

---



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b) Kindly suggest the most appropriate ways of improving ICT Use among women

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### PART B SPECIFIC OBJECTIVES

#### Section A: Social Benefits of ICT use among rural women in Keiyo south

The item below measures the social benefits of ICT use among rural women. To what extent do you agree or is agreed on each of the statement provided below:

Key: SA =strongly agree, A = agree, N = Neutral, D = Disagree, SD = strongly disagreed

	SA	A	N	D	SD
I Use ICTs to reduce travel time and costs for social and business communications purposes					
I Network with friends to look for information about jobs					
I Use ICTs for getting new products and business clients					
I Use mobiles to send and receive money					
I use mobile to save money					
I use ICT to obtain climate information					

### **Section B: Influence of ICT use on economic welfare of rural women in Keiyo south**

The item below measures the influence of ICT use on economic welfare of rural women in Keiyo south. To what extent do you agree or is agreed on each of the statement provided below:

Key: SA =strongly agree, A = agree, N = Neutral, D = Disagree, SD = strongly disagreed

	SA	A	N	D	SD
I Use ICTs to reduce travel time and costs for social and business communications purposes					
I Network with friends to look for information about jobs					
I Use ICTs for getting new products and business clients					
I Use mobiles to send and receive money					
I use mobile to save money					
I use ICT to obtain climate information					

### Section C: Effect of ICT use on political empowerment of women in Keiyo south

Below are some of the political benefits of ICT use. To what extent do you agree or is agreed on each of the statement provided below. Please tick the ones which apply you

Key: SA =strongly agree, A = agree, N = Neutral, D = Disagree, SD = strongly disagreed

	SA	A	N	D	SD
Obtain new skills by using new ICTs, and new products on the mobile such as mobile banking					
Get information, especially from the radio, relevant to improving agriculture, learn about my rights as a woman					
Children getting educational information especially via the radio					
Obtaining new skills (learning to use the computer; getting skills to improve agriculture [radio])					
Children able to get educational programmes (radio)					
Communicate with friends and family					
Participate in local government decisions					
Avoid face to face communication with political and social opponents					
Use the mobile to get assistance during need and in emergencies					
Increased ability to communicate socially with friends and family					
Increased ability to participate in discussions on political decisions (mainly radio)					
	SA	A	N	D	SD
am able to listen and watch news using televisions					
I use my mobile phone to communicate with my MCAs or MP or any government official					
I use ICT to learn more on leadership qualities					
I use ICT to participate in any political debate online					
I use my mobile phone to send any comments during a political leader TV or radio Interview					
	SA	A	N	D	SD
am able to listen and watch news using televisions					
I use my mobile phone to communicate with my MCAs or MP or any government official					
I use ICT to learn more on leadership qualities					
I use ICT to participate in any political debate online					
I use my mobile phone to send any comments during a political leader TV or radio Interview					









