UNIVERSITY OF AGDER

The role of ICT in community rural development

THE CASE OF BUWAMA MULTI-MEDIA COMMUNITY CENTRE MPIGI DISTRICT, UGANDA

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This Master's Thesis is carried out as a part of the education at the University of Agder and is therefore approved as a part of this education. However, this does not imply that the University answers for the methods that are used or the conclusions that are drawn.

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Abstract

The study explored the role of ICT in community rural development with a critical look at how the project is meeting community needs. Much focus analysed people's perception of the project, impact of the project to rural livelihoods, and a great extent of identifying the management and sustainability strategies in ensuring project sustainability.

Information and Communication Technologies have radically changed the modes of production and organization of work at global and national levels**.** And quite important is the fact that there is a direct correlation between access to ICTs and socio-economic development, and ICTs are no longer the consequence of development, but rather a necessary precondition for development (Net tel Africa ...). Developing countries have also come up to bridge the digital divide that exist between urban and rural as regards use of ICTs and in Uganda, the government adopted the telecentre model to ensure equitable access of ICT services in rural communities. It is therefore from this background that the study explored the role of ICT in Community Rural development and especially with focus on how the ICTs have been a vehicle to development.

The study findings are based on the analysis of the Buwama Multi media Community project in Mpigi district whose aim is to provide access and promote application of modern ICTs, learning resources and build local capacity for sustainable rural development. This study employed a case study design in exploring how ICTs in this rural community are implemented and sustained to meet community needs.

The telecentre project has been beneficial to the community especially to the ICT beneficiaries for example, many testified on how the project has transformed and empowered them; socially, politically and above all economically. This was possible with the strong government and donor support that was injected in the project right from its inception. However, presently, the funding ceased a year now and the project is totally sustaining its self although with many management and operational challenges.

Quite important is the fact that the people who benefited from the project are a generation in between 1999-2008 with strong support and facilitation; but the current generation might not be in position to equitably share the fruits of their predecessors because the telecentre is grappling with myriads of challenges. Therefore, there is need to revitalize the telecentre to reach out to the present and future generation for sustainable development, a shift in the mind set of the community to considering community projects as their own, and also the factor of clearly streaming proper management in the telecentre.

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I also wish to express my appreciation to the Buwama Multimedia Community centre staff and the Buwama Sub county administration for the support rendered during the entire field process. This team was in position to support me through the process of data collection and analysis and may your hospitality stay with you forever and also be given to others researchers who come in the project.

Many thanks also go to the community members especially the women groups who were in position to help me in mapping out the ICT beneficiaries and the ICT non users in the project. This would have been hard for an outsider like me but it was through their cooperation that I managed to get the study respondents I needed in answering the research questions of the study. May these strongly founded community groups last for the benefit of the present and future projects in the community.

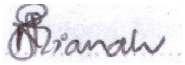
Finally, I extend my whole hearted appreciation to my family members: my mother, brothers, Jimmy spire and Bakhita for the unlimited support and encouragement throughout my education career. May the Almighty God reward you abundantly.

Declaration by Candidate

I Dianah Nampijja declare that this report entitled

The role of ICT in Community Rural Development: The case of Buwama multi-media community centre Mpigi district, Uganda

Is original and largely based on my field findings and has never been submitted to any other institution of learning for any type of academic qualification than the University of Agder, Norway



15th December 2010

Dianah Nampijja **Date**

Table of Contents

Lists of Tables

Lists of Figures

Lists of Appendices

List of Acronyms

CEEWA	Council for Economic Empowerment of Women of Acacia
CBT	Community Based Trainers
DBICs	District Business Information Centres
FM	Frequency Module
ICT	Information and Communication Technology
IT	Information Technology
ISP	Internet Service Provider
ICT4D	Information and Communication Technology for Development
LMC	Local Management Committee
MDGs	Millennium Development Goals
NCST	National Council of Science and Technology
NGO	Non Governmental Organisations
SL	Sustainable Livelihoods

Definition of Terms

ICT beneficiaries – These are community members who enrolled and registered for taking part in telecentre activities like sensitizations and trainings

ICT non-users – These are community members who did not take part in enrolling for telecentre activities.

CHAPTER ONE: General Introduction

1.1 Introduction

World over, there has been a remarkable significance in using Information and Communication Technologies in facilitating and accelerating the process of development and as a way of reducing poverty across the globe. In fact, as a common adage today without the usage of ICTs, a society will fall behind in the path of development (Mulira 2006). This has prompted Governments, donors, NGOs and other stakeholders alike, to further the impact of different ICTs given their ability to be used for policy advocacy, local governance and educational development, civic studies, etc and in Uganda; several of such initiatives have cropped up both in urban, semi-urban and in rural settings. As a way of understanding the in depth role of ICT especially in rural development given the challenges which move along with such settings, the thesis became opportune in unveiling the above assertion.

This research therefore explored the role of Information and Communication Technology (ICT) in community rural development with an emphasis on how ICT project meets rural community ICT related needs. The study targeted Buwama Multi-media community centre in Mpigi district: a rural community. The study premised on the fact that world over; ICTs have been identified as a tool to development and in particular fighting poverty especially in developing states. Governments and Non-Governmental organisations have spear-headed the spread of ICTs in many areas as a way to reach development. The report embodies the enunciation of the study objectives and research questions, the rationale for objective and research question selection, study area, literature review, theoretical findings, research methodology, data collection methods and instruments, data analysis, ethical considerations in the study, and the challenges/limitations of the study.

1.2 Main research objective and research questions.

1.2.1 Main Objective

The main objective was to explore the role of ICT in community rural development with a critical look at how the project is meeting community needs. Much focus analysed people's perception of the project and a great extent of identifying the management strategies to ensure

project sustainability. Also, the study included the non ICT users in the area to capture their perception as well and the impact they too feel as regards the project in the area.

1.2.2 Research Questions

1. What are the people's ICT related community needs in Buwama region?
2. What are the kinds of ICT activities engaged in by people in Buwama Multi-media community centre?
3. How are the local people involved in the design and implementation of the ICT project in the area?
4. What management strategies are adopted by the project to ensure project sustainability?
5. How has the Buwama ICT project contributed to social and economic development in the region?
6. What are people's perceptions (both project beneficiaries and non-project beneficiaries) as regards the ICT project in the region: as well as their views on project improvement?

1.2.3 Rationale for Objective and Questions selection

Despite the multi-million mega ICT projects in Uganda (mainly funded by donor projects like Carnegie), there is still unclear roles on how such ICTs are impacting on peoples' lives especially those in rural based communities. The main objective of the study became opportune in unveiling to us the role of ICT in community rural development in Buwama Multi-media community centre, Mpigi District. In so doing, research questions were paramount in getting us a clear insight on these differences. For example, finding out the ICT related community needs in the area was a number one step to whether the project addressed their needs. The kinds of ICT activities people engage in helped the study find out clearly from the target group the nature of ICT people use. These questions targeted both project users and non-project users in the community.

As regards the extent of local people involvement in the design and implementation of the project; this was a means to gauge whether the local people where consulted and involved right from the project inception to its implementation phase as this helped the study find out issues of project ownership in the region. Relatedily, understanding the management

strategies in place to ensuring project sustainability gave the study a clear insight on how such projects can survive despite the turbulent aid given in managing them. The impacts of the projects both economic social, political and cultural were analysed in wholly understanding the role of ICT in the region. Exploring the local people's perceptions (both project users and non-project users) as regards the project in the region and their views on how best the project can meet the local challenges gave the study a great vantage as these bred recommendations for future action as regards the use of ICT in community rural development.

1.3 Study Area.

1.3.1 Uganda

Figure 1: Map of Uganda showing Mpigi District

Uganda is located in East Africa and has a population of about 30 million at 2.69 with per capita income of about $300. Life expectancy at birth is 52.72 years; male: 51.66 years, female: 53.81 years. Religion is unevenly distributed with Roman catholic 41.9%, Anglican 35.9%, Pentecostal 4.6%, Seventh day Adventists 1.5%, Muslims 12.1%, other 3.1%, and Non 0.9% (Musisi in Rubanju 2008)s.Agriculture is the main stay of the economy with more than 76% of the population employed in the sector and poverty is still high especially in rural areas with limited access to social services. The level of literacy (people who can read and write) in the country above age 15 is 66.8% (Musisi in Rubanju 2008). The government among other newly enacted policies has recognised the integration of ICT in the economy. In 2005, the ministry of Information Technology was formed and the Act on ICT policy in the country enacted in 2006. The government and many Nongovernmental Organisations have initiated various ICT projects both in urban, semi-urban, and in rural areas as a way to mainstream ICT for development in the country, although many developments are witnessed in the urban and semi-urban areas. However,

with a newly founded department of District Business Information Centre in the ministry, ICT developments have also been extended to rural and semi urban areas.

1.3.2 Uganda's ICT Sector

Uganda's Information and Communications Technology sector is dynamic and vibrant given the registered double digit growth since 2000 and an increase by 33% in 2006/2007. Investment inflows have been very strong and in 2006, the sector attracted in excess of US $73 million. Direct employment stands at 6000 while over 350,000 people are indirectly employed (ICT 4 Uganda 2009). The sectoral dynamism and growth is a result of Uganda's good ICT legal and regulatory framework, a stable micro economic environment and economic reforms pursued since the early 1990s.

With a realisation that ICT can be effective especially in reaching the MDGs in developing countries, like the rest, Uganda initiated the ICT ministry to coordinate and lead the process of ICT for development in the country. Ministry of Information and Communication Technology was established in June 2006 with a mandate of providing strategic and technical leadership, overall coordination, support and advocacy on all matters of policy, laws, regulations and strategy for the ICT sector. It also ensures sustainable, efficient and effective development; harnessing and utilization of ICT in all spheres of life to enable the country achieve its national development goals. Three years down the lane, the Ministry is trying to find its standing among agencies like the Uganda Communications Commission (UCC), Uganda National Council for Science and Technology (UNCST), the Ministry of Works, Housing and Communications, Ministry of Finance and Economic Planning, Uganda Broadcasting Council, among others which were the erstwhile performing role that the ideal Ministry of ICT (Taki 2008). Most of the development traced back in ICT in the country are from the above agencies which indeed made such development un documented and that's why many writers in ICT found it hard do trace developments in ICT in the country. Apart from being an international requirement to form a fully independent ICT ministry in the country, having an ICT sector in the country would help in documentation of ICT related developments and researches and this is why today finding information of ICT in the country is easier.

The Ministry is headed by a Minister who is assisted by one Minister of State. There are two Directorates namely, the Directorate of Communications & Broadcasting Infrastructure and

the Directorate of Information Technology & Information Management Services. The Directorate of Communications and Broadcasting Infrastructure comprises the Departments of Telecommunications and Posts, and the one of Broadcasting Infrastructure. The Directorate of Information Technology & Information Management Services comprises the Department of Information Technology and the one of Information Management Services. The latter is has a sub department; District Business Information Centres (DBICs) which is in line with my study. The last decade has witnessed technological development at a scale and speed unprecedented in the history of humankind and the challenge is to ensure equitable access for all people to seize these new Information and Communication Technology opportunities.

Since information is central to development and essential for survival and sustainability; and a pathway to understanding and peace, DBICs has established projects with a mandate to respond to the current digital marginalisation and enhance production in the rural and semi urban areas. DBICs services contribute towards achievement of the United Nation Millennium Development Goals (MDGs) by bringing ICTs to the rural communities thus enabling individuals as well as Small Medium Enterprises in the surrounding areas to exploit the significant potentials of ICTs towards the creation of employment as a response to poverty reduction (Ministry of ICT Uganda, 2009).

The objective of the District Business Information Centres for development is to establish sustainable one-stop-centre to provide supply driven services for the community at large and specific demand driven services required by the surrounding business community. The centres operate and deliver services in business-like manner, thus achieving the objectives of impact, outreach, cost effectiveness and sustainability. It is envisaged that the DBIC shall improve Human Resource capacities in rural areas as well as build clean, transparent, and efficient local governments, and to utilize potential resources as much as possible in achieving a better economic condition in the surrounding areas (Ministry of ICT Uganda, 2009). The study: role if ICT in community rural development largely depends on DBICs policies as regards ICT for rural development. The Buwama Multimedia Community Centre is community driven project with government support. And the research focused on the project given its project life of ten years unlike the newly established governmental ICT centres with a life shelf of 2 years; which made the study fit in assessing the role of community rural development in ICT in Buwama multi media centre. From the field findings,

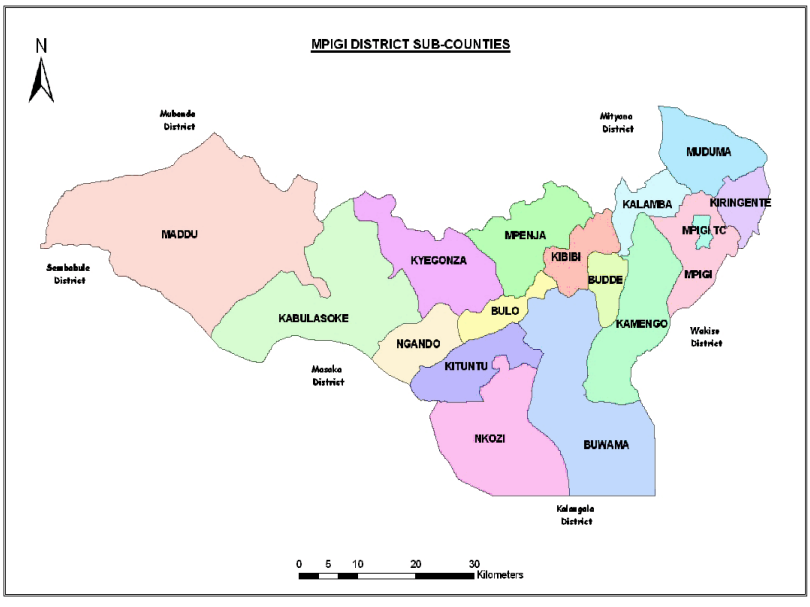
the new policies in the DBICs practically end on paper because there is less government intervention in such projects as everything is left in the hands of the donors.

1.3.3 Buwama Multimedia Community Centre

Buwama Multimedia Community Centre is a community ICT Accacia project in Uganda that was supported by the International Development Research Centre (IDRC) and implemented by the Council for Economic Empowerment of Women of Acacia CEEWA- Uganda; aimed at empowering poor rural communities to improve their socio-economic conditions and acquire capacity to address their local needs through the use of modern ICTs (Aswingire 2001). To contribute to development of communities and the sustainability of natural resources in the intensively cultivated highlands of Eastern Africa through application and management of ICTs and traditional communication, the overall project purpose is to help farmers increase their knowledge and understanding of technological options in order to make better decisions at household and community levels so that they can produce and market effectively and sustainably (Aswingire 2001). In the initial phases, the project aimed at undertaking an ICT Project that promoted women economic empowerment through use of ICTs and the overall programme objective was to enable women entrepreneurs and women Organization that promote enterprise development to explore ways and means of exploiting ICTs for community economic empowerment.

Buwama Multimedia Community Centre (BCMC) is located in central Uganda approximately 80 Km south off Kampala and off Buwama trading center. Buwama Sub County is located in Mpigi District a typical rural area with farming as the major economic activity. BCMC is one of the Acacia Community Multipurpose Pilot Telecentres started in

Figure 2: Buwama Sub County in Mpigi District



1999 to support and promote application of Information and Communication Technologies for economic empowerment of rural communities (CEEWA 2008). BCMC is aimed at fighting rural poverty through sharing, exchange,

and dissemination of information as a way to stimulate rural development. The project is missioned to providing access and promoting application of modern information communication technologies, learning resources and indigenous knowledge to stimulate and build local capacity for sustainable rural development; with a philosophy of building structures for information roads to un-reach grassroots rural person.

The Objectives of the project are:

i. To stimulate and accelerate capacity for the community to access local, national and global information resources
ii. To generate local information and knowledge from resources available within the community
iii. To utilize information and Telecentre databases for rural community development
iv. To Impart skills in information searching including the use of modern information technologies to rural communities
v. To provide accelerated methods of diagnosis problems and prescription of solution to rural communities in their activities using information and communication technology.

Buwama Multimedia Community Centre (BCMC) has numerous services it provides to the community. As point of notion, the centre targets women, farmers, youths and the marginalized groups, like the people with disabilities, the business community, local leaders, researchers, NGOs and CBOs and students in the catchment areas, and other organizations. Numerous services have been delivered to these different targets and benefits have been documented for supplementary references by new projects in the country (CEEWA 2008). Among the services offered, the project provides;
Community outreach where the centre takes ICTs to bridge the information gap between information sources and end users (people in their communities and markets) to be able to disseminate information as a way to increase access, use and application of ICTs for enterprise development. Also, the centre secretarial and other services at a user fee to ensure that telecentre can maintain the services and meet the operational costs. Content development is another service where the telecentre is involved in providing information services. Access to information is the overriding service in the project design, which communities must access without exclusion. An effort has been made to develop appropriate and relevant information to the community for use in entrepreneur development (CEEWA 2008). Buwama Community Radio donated by UNESCO in 2005 is a service provided; and being used as a platform to

disseminate information related to community information needs such as Agriculture, market information, Health, Education, Gender issues and other development programs in the community. Computer Training in office applications**,** binding, typing and printing, photocopy, video shows, Print library and information dissemination on community notice boards are among the other services the centre provides to enable the rural people access information to apprehend the process of community development.

Figure 3: Captions of the Buwama Community Multimedia Centre

CHAPTER TWO: Literature Review

2.0 Literature review:

2.1 Introduction

This chapter presents a review of literature related to Information Communication Technology and Rural development. The section places emphasis on the numerous researches being carried and how such knowledge can be a guiding tool in analysing the contribution of ICTs to rural development. This literature is also reviewed critically through identifying the gaps and also employing the lessons to inform the body of knowledge in ICT for development. This section analysis follows the guiding research questions the study employed.

Information and Communication Technologies have radically changed the modes of production and organization of work at global and national levels and precipitated the process of development. The Millennium Declaration of the United Nations view ICTs as tools with the potential to achieve the Millennium Development Goals set by the historic UN 2000 Summit. Target 18 of Goal 8 calls upon the UN member states to cooperate with the private sector to 'make available the benefits of new technologies, especially Information and Communications Technologies (UNDP 2003). In regard of the above, developing countries have been urged to harness the full potential of the information revolution to alleviate poverty and seek sustained growth. And as Jinqui et al (2006: 294) notes, the danger of not participating in the development of ICTs highlighted by the World Bank in addressing African issue is that:

> *'The information revolution offers Africa a dramatic opportunity to leapfrog into the future, breaking out of decades of stagnation or decline. Africa needs to seize this opportunity, quickly. If African countries cannot take advantage of the information revolution and surf this great wave of technological change, they may be crushed by it. (World Bank cited in* Jinqui et al (2006: 295)*)*

2.2 ICT and Development

During the 1980s, multinationals and other firms came to the fore and viewed IT as a tool for delivering economic growth (Heeks 2008:26). To date, many are optimistic that ICT has a role to play in national development and that there is no way a country can survive the global era without this digital platform. Of recent, we are greatly entangled in the world where ICT

has diffused into almost all spheres of human activity at an unprecedented rate; side by side with development. Joseph (2002) views ICT contribution as ICT growth and ICT diffusion where the former implies contribution in output, employment, export-earning, etc., resulting from the production of ICT related goods and services that are limited to just one segment of the economy. The latter is ICT induced growth through enhanced productivity, competitiveness, growth and human welfare resulting from the use of this technology by different sectors of the economy and society.

Conversely, Sein and Harindranath (2007) assert that 'the nature of the link between IT and development remains unclear due to lack of clarity on how ICT is conceptualised'. Personally, I believe ICT can play a central role in national development but there is need to identify contextual strategies that facilitate ICT being developmental and in this I agree with Heeks (2008:26) who believes that we cannot exclude ourselves from the digital age but there is need to ask the poor communities on what ICT can be developmental and how they spend the little they have on it. Many ICT projects have been top down, the industrialised thinking for the developing world on what can help to bridge the ever existing gap; which techno centric approach has led to multi failures in ICT4D.

2.2.1 ICT and Rural Development

Rural development is used to denote the actions and initiatives taken to improve the standard of living in non-Urban neighbourhoods, countryside and remote villages. Such communities are characterized by predominant agricultural activities and where economic activities relate to the primary sector, production of food stuffs and raw materials (Chamber 1983). South African Rural Development Framework defines rural development as helping rural people set the priorities in their own communities through effective and democratic bodies, by providing the local capacity; investment in basic infrastructure and social services. Justice, equity and security; dealing with the injustices of the past and ensuring safety and security of the rural population, especially that of women (Net tel Africa ...). In rural development the key principles are to; involve rural people in decisions that affect their lives through participation in rural local government, provide affordable infrastructure, ensure social sustainability in rural areas and increase employment and economic growth in rural areas (Net tel Africa ...). Also, Nettel Africa (…) believes that rural areas are sparsely populated areas in which people farm or depend on natural resources, including the villages and small towns that are dispersed, and some large settlements in some homelands. These areas are plagued by

poverty, with the most vulnerable sectors of the population being women, children and the elderly.

Heeks (2008:26) propounds the reasons as to why the world should give priority to ICT applications for the poor in developing countries and especially the poorer within these countries like those in semi-urban and in rural areas. Firstly, he explains the moral argument which encompasses the ethical dimensions in development. 'The world's poor live on the frontline of problems caused by informant professional from the wealthier countries; from climate change to conflict and terror, from disease to resource depletion, where the poorer in developing countries suffer the most' (Heeks 2008:26). All these call for wealthier communities to help the poor by designing technologies which will help in alleviating such mega problems; many times caused by the developed world. Second, that there is enlightened self-interest and being a globalized world, the problems of the poor today can, tomorrow through migration, terrorism, and disease epidemics become the problems of those at the pyramid's top and that, as the poorer get richer they consume goods for the industrialised countries which make everyone to benefit in the process of development (Heeks 2008:27). Heeks goes far in exploring the link of ICT that;

> *'At the macro level the economic, social, and political life in the 21st century will be increasingly digital, and those without ICTs will be increasingly excluded. We might also give a micro-level answer: Ask poor communities or look at how they spend what little money they have; not always, but sometimes, they prioritize the ICT option' (Heeks 2008:27).*

ICT is emerging as an important medium for communication and exchange as well as a tool for development, including at the local and community levels. However, this potential is yet to be effectively leveraged. In part this is the result of an ICTD "affordable infrastructure and related service delivery and capacity deficit" that many rural and peri-urban areas continue to experience and in part because of the "development-policy and experience divide" that hinders the effective mainstreaming of ICT in development interventions . However through a combination of research, policy support, advocacy partnerships, networking and capacity building, ICT projects can act as communication tools, development information and services hence the potential for strengthening community and local development (Mulira 2007).

Like other countries Uganda has recognized the potential and enabling element of information and communication technologies as a tool for social and economic development. The government has also enhanced the growth by introducing the ICT ministry and ICT subsidies especially to ICT providers. However, a large population of Ugandans live in the rural settings, where even ICT developments are untapped but the ministry has the

department that targets ICT centres especially at the local level with the decentralised setting already in place: a favourable aspect to extend ICT even to the rural poor in the country.

2.3 Nature of ICT in Rural Communities

To Alemna and Sam (2006), one of the ways of improving access to ICT in the rural areas in is through the promotion of community ICT Centres which provides the advantage of mass usage, maintenance, the security of both service and equipment and the easier collection of charges. This means that the nature of ICT in rural communities is especially geared through the creation of community centres which act as catchments for the community members to access ICT services. This implies that individual communities should be assisted to build their own knowledge centres where indigenous knowledge is combined with exogenous knowledge to improve livelihoods. As they further contend, developing countries' governments alone cannot carry out such programmes in rural areas hence support is needed from various nongovernmental organizations stakeholders in the struggle to reach development. If such aspects are not considered, ICTs are contributing to the urban-rural disparity hence rural areas need to be targeted as many programmes have concentrated in urban areas where there are lesser costs of implementation with people who are even literate to adapt the technology. Just like Heeks suggests, equating the poorer with illiteracy is a broke for such developments every community has at least members who can act as infomediaries, thus massively multiplying the accessibility of written materials, online or otherwise, although 'we require interface innovation to drive access to ICT-based information, services, and jobs in the fields of audiovisual interfaces and to create interfaces for all local languages' Heeks (2008: 28). Also, there is explosion in the use of mobile communications in rural areas; providing indications that ICTs are perceived as useful tools for both socio-economic development and business could attract much more revenues than previously seen and could also greatly impact the lives of rural inhabitants for good (Dymond and Oestmann 2002).

Community-driven ICT networks offer a potential solution for addressing rural connectivity taking advantage of new wireless and other technologies that enable cost-effective mechanisms for reaching out in areas with limited infrastructure. However, physical access alone is meaningless if a community cannot use the technology or is not in position to exploit the information accessible via the network. The type of information accessible via the network as well as the ICT skill set required are important elements to consider for

community-driven networks (Mulila 2007). Some common ICT in rural areas include community radios, community televisions, participatory video, Internet services, and secretarial bureaus.

2.4 Implementation and Delivery of ICT in Rural communities

In the global information society we now live in, there is a direct correlation between access to ICTs and socio-economic development, and ICTs are no longer the consequence of development, but rather a necessary precondition for development (Net tel Africa ...). If the thinking has changed globally, the implementation and delivery of such newer technologies especially to rural communities should be thought of with great consideration. However, harnessing digital technologies in the service of some of the world's most severe problems requires understanding the implementation and delivery of ICT especially in the rural communities and this is why most times such developments have neglected rural communities; well known for most challenges in ICT implementation.

Mulira (2007) argues that; although the new technologies are part of the necessities for development, the main ingredients of development are the people themselves who should state their development goals for their own communities, and how these development goals will be achieved. The implication here is that such technologies can be part of these strategic tools to be used towards the achievement of the development goals. In this regard, I agree with Muliras' believe that strong community involvement in the planning and implementation activities would yield better developmental results. But, understanding the context of ICTs especially in rural communities would limit strong community involvement given the technical issues involved and also putting in mind that most rural communities like those in Uganda, people do not have much expertise in getting involved in ICT projects; and if they do, just minimal participation is attained.

2.5 ICT Impacts to Rural Communities

Over the last two decades, much of the developed world has been transformed by what are now termed Information and Communication Technologies (ICTs). To date, developing countries have also followed suit in trying to catch-up in the development path. These technologies have exerted impacts on most aspects of our lives - in economic activities, education, entertainment, communication, travel, etc. They have also been inextricably linked with economic prosperity and power, as, through media such as the Internet, they are exerting

what Tarjanne (1998) refers to as a "revolutionary impact on the way the world does business and, more importantly, on the way the world and its citizens communicate" (Davison 2000). The impact of information and communication technology (ICT) on development has been amply charted in the last decade of the outgoing century as a multidimensional, multi-stakeholder and pervasive process. So significant is the impact to those that have the capacity to apply these technologies as they have witnessed “galloping” rates of development (Tarjanne 1998).

Dymond and Oestmann (2002: 48) explain some of the socio-economic impacts which can accrue as a result of ICT projects especially to the local communities. To them, the benefits from ICT projects are inform of ‘consumer surpluses’, over and above the price paid for such services. Such benefits can be in form of business development from both and large scales, farmers and micro-business proprietors often report that the phone enables them to gain timely and geographically specific knowledge of urban market prices that increase their bargaining power with ‘middlemen’ and enable them to earn more for their products or secure a better price for their inputs. On part of the Individuals – farmers, micro-business women, students - living in rural areas typically report that at least one third of their calls (e.g. from a public or shared phone) concern business matters that would have required them to travel to deliver a message, secure an answer, to a problem, etc. The amount of time and travel costs they save may amount to several times the cost of the call – the more remote the community, the higher this ‘opportunity cost’ saving. Other people report their impacts mainly on personal or family emergencies that would require travel or other costs if the call was not made. Sometimes people report their benefits in terms of lower health risks, a life saved, better family relationships, more opportunities. For youths, students and the other literates in the community who can learn to use computers, download teaching materials or business information and sign up for courses, securing major benefits and future career or business opportunities from so doing. As for the Institutions and government agencies – schools, clinics, council offices, NGOs and other development agencies - similarly report increased efficiencies and the ability to deliver services in a more timely, effective and less wasteful manner through use of the ICT community projects (Dymond and Oestmann 2002: 48). Focusing on the above impacts, from field findings, this being a rural community, not all benefits were observed given the challenges of equipment and other services used while applying different ICTs. NGOs and few institutions managed introducing and using these ICTs but this was for a short while given the costs which move along with ICTs and it being a rural setting, sticking to ICT standards was costly to many. But by and large, the

community felt the project was impacting on their lives positively but with the challenges the telecentre is currently facing, there is little hope for the present and future generation.

2.6 Theoretical Findings

2.6.1 Introduction

The theoretical framework constitutes the lens through which this research was carried out. This study was modelled on the social capital theory in relation to ICT together with the Sustainable Livelihoods Framework to development. Both of these combined will allow for understanding the critical role of ICT in especially rural development initiatives which demand a lot on both infrastructural and uptake capabilities.

2.6.2 Social Capital Theory and ICT

The Social capital Perspective

"it's not what you know, it's who you know" largely sums up the conventional view of social capital (Woolcock and Narayan in Madland 2008). In sociology, the concept of social capital has been referred to as to social cohesion, in political science referring to collective action, and in economics referring to well-being and economic growth (Staveren 2002). Arguably, the social capital concept is not new as it can be traced back to classic scholars in political philosophy, such as Aristotle, Thomas von Aquinas or Edmund Burke who considered empathy and trust as essential ingredients for good governance. The concept in its modern form has been popularized in the 1980s by the sociologists Pierre Bourdieu and James Coleman and their work on social ties and networks that help generate trust and social reciprocity (Zinnbauer 2007). Since this time, the concept has had many interpretations which have forced scholars to be analytical while interpreting the concept.

Woolcock (in Madland 2008) says that social capital has "become all things to all people, and hence nothing to anyone". Also Edvards and Foley, Arrow, Fine (in Madland 2008) have criticized the labelling of social phenomena by the term "social capital" calling them instead "social capabilities", "social cohesion" or "social infrastructure". While being aware of this contestation, in this text the term is applied in order to take part in the discourse around the concept. To Zinnbauer (2007) Social capital refers to the extent, nature and quality of social ties that individuals or communities can mobilize in conducting their affair encompassing a wide variety of connections and networks and that people maintain with family, friends,

neighbours, colleagues, and it also relates to the strength of social norms, such as trust, sense of commitment and reciprocity or shared understanding that can underpin these ties. Zinnbauer (2007) further classifies the concept into formal and informal ties. The former imply institutionalised linkages governed by fixed rules, such as formal membership in an organization, relationships established via work contracts; and, the latter more fluid, non-codified linkages between friends, like-minded people that are upheld and structured by mutual personal commitment.

Zinnbauer (2007) continues to explain three forms of Social capital which we can use in understanding the term better. For example Bonding social capital: involves tight, strong ties with the most immediate family members, closest friends and within closely-knit communities of like-minded people that are bound together by common features that they regard as fundamental to their identity, such as ethnicity or deep religious beliefs; Bridging social capital: is rather more loose, less committal connections to acquaintances, colleagues, and far-flung, weaker ties between diverse communities; and lastly, the Linking social capital: which encompass vertical interconnections between different levels of social aggregates, for example between small-scale community groups and state institutions.

However, all these have both positive and negative implications and in this, I agree with (Anderson and Gaved, 2006) who believe that although a high level of bonding capital is generally seen as a positive attribute of a neighbourhood, enabling support of individuals and the development of a community; too high levels, however, can be negative, reducing tolerance of outsiders, stifling innovation, supporting unhealthy norms, and causing people to reject alternatives. Putnam (2000) as well confirms the fact that social networks can be used for negative purposes. For example, networks can bind certain groups together in ways that are undesirable for society as a whole, through reinforcing the practices of nepotism or corruption and that: “bridging” networks are socially inclusive, thus promoting interactions between heterogeneous social groups with different backgrounds, and “bonding” networks can exclude outsiders. And as it goes without saying; where there positives, negatives have to crop up, I am still with the view that the positives of social capital can be used to enhance development and on this note, I concur with Dudvik et al. (in Madland 2008) who suggest that there is a growing body of empirical evidence that the density of social networks and institutions, and the nature of interpersonal interactions that underlie them, significantly affects and mediates development opportunities and outcomes. And given this study with a focus on ICT and rural community development where community ties are still strong, the

theory was of great relevance in mapping out how community behaviours can enhance development in the social capital perspective. And as Anderson and Gaved (2006) suggest, grassroots initiatives are often found in 'elective' communities where there has been a history of community cooperation and strong local social ties and in the Ugandan case, these are rural communities that are rich in social capital as a good way to draw citizens into a more active involvement in their communities. Practically, this social cohesion was observed in the community as well as the negative effects of social capital when especially the men felt the project was feminine and instilled in others the spirit of non participation.

Social capital in the lens of ICT

Increasing access to information technologies is increasingly recognized as a central mechanism for helping poor communities strengthen their voice in matters that affect their well-being and in this context, the rural community who seem to fall within this bracket.

World over, there has been an increasing realisation that ICT initiatives are part of the existing social interactions rather than separate purely on-line virtual communities. And more to the above, a wide variety of empirical studies, often using sophisticated econometric techniques to control for potentially intermediating variables, clearly establish the paramount role of social capital as a resource for improving quality in many areas, including the opportunities for active ageing. To Anderson and Gaved (2006) from 1970s, initiatives developed to extend ICT facilities to geographical localities were driven by a combination of communitarian ideals and economic concerns that segments of the population should not be 'left behind', unable to utilise the new communications technologies. Lave and Wenger in (Anderson and Gaved 2006) argue that participation through community interaction offers an effective method for individuals to learn new technologies and community ICT initiatives inclusive.

Zinnbauer (2007) identifies four grounds on which to understand Social capital in the lens of ICT; the conceptual, programme, operational and service design levels. At the conceptual level, social capital helps in understanding better how ICTs are adopted and ICT skills are learnt in social learning environments, thereby providing guidance for making ICT literacy and skill initiatives more effective. At the programme level, Social capital puts the support of social networking aided by ICT firmly there by emphasizing the significant opportunities offered by a new generation of increasingly popular ICT-led social networking tools and platforms, commonly labelled as Web 2.0, for fostering social capital formation and inclusion through making emerging online meeting spaces and tools accessible for all. The operational

level which stresses implementation strategies; social capital directs attention to the pivotal role of civil society and bottom-up community initiatives in reaching out to people at risk of exclusion in the design and implementation of ICTs in communities. And lastly, at the service design level, Social capital leads to the insight that individual citizens often interact with online public services via networks of intermediaries. As a consequence, the design of such online services needs to take into account the information needs of this additional client group of private or civil society-based intermediaries.

The potential impact of ICT and social capital to communities

The relationship between ICT and Social capital is two fold. Firstly, ICT can help in building of social capital through the strong established networks and secondly, Social capital can enhance stronger ICT relations given the nature of practical learning of skills inbuilt in ICT. This thesis therefore comes in to investigate the two-folded role of ICT and social capital.

ICT-enabled opportunities for social capital

There have been speculations that have viewed the impact of ICTs like internet in precipitating further erosion of social capital leading to a stronger digital divide (Zinnbauer 2007) especially in rural communities. On the contrary however, further analyses in the field of ICT and social capital have actually credited the role of ICTs in bridging and strengthening social ties in different communities (Balatti and Falk 2002). The case in point can be where ICTs are found to enable individuals to thicken existing ties and generate new ones; for example, the mobile phones or email, are used to stay better in touch with close friends and family members, making it possible to retain close communication while meeting increased demands for mobility, or, through enabling tele-working arrangements, reducing the need to spend time outside the family home in the first place (Zinnbauer 2007). Zinnbauer further suggests

> *"ICT in the form of interest-oriented online discussion groups or networking spaces come in handy to develop more new ties to like-minded people in what are looser, more fluid, differentiated, interest-based, elective and far-flung networks for a wide variety of purposes, including professional skill and career networks, common hobbies and socializing or self-help groups to cope with specific problems".*

Zinnbauer (2007) provides some more general dynamics and patterns in explaining how ICTs affect the building of social capital and its distribution within a community and below are the peculiar ways suggesting how ICTs are helping to expand, transform and diversify social capital.

- ICTs are tools for communication and collaborative information sharing, ranging from simple email to interactive publishing tools such as blogs and to sophisticated collaborative work platforms that allow jointly creating, annotating and sharing information items, such as wikis or social tagging applications.

- ICTs have the capacity in creating meeting spaces, where like-minded people can gather and socialize. These online spaces started with the bulletin boards of the early internet, then morphed into tens of thousands of thematic discussion groups carried by Usenet or on websites and are by now developing into sophisticated multimedia online social networking sites such as MySpace or Face book populated by well over hundred million users and their networks of friends, as well as increasingly popular virtual words such as Second Life that mimic ambient aspects of real environments and enable participants to develop sophisticated online alter-egos.

- Also, ICTs have collaborative projects that serve as attractors to bring together volunteers and seed networks around initiatives to share Internet connectivity, to jointly develop software (e.g. thousands of open source projects), or to build online content resources (e.g. the Wikipedia project to build an online encyclopaedia currently with 67,000 active contributors working on over 4,6 million articles in more than 100 languages.

- Also, Norris (2003) believes that the participation in online groups is likely to strengthen social bonds among those within homogeneous interests and backgrounds. This is because they share experience and even issues affecting them where every one is in position to provide an opinion.

Social capital-enabled opportunities for ICT.

Fundamental to social capital theory is the fact that networks of relationships are a resource that can facilitate access to other resources of value to individuals or groups for a specific purpose (Balatti and Falk 2002). In looking at social capital enabled opportunities for ICT, emphasis is on how the social capital perspective can be a bridge through which ICT skills and applications can cling on. And as Balatti and Falk (2002) put it, social capital describes the resources that are made available to individuals or groups by virtues of networks and associated norms and trust. Here, social networks which enhance interactions both individually and collectively in communities are considered to being knowledge resources which ICT can as well exploit.

Norris (2003) believes that the network of friends, colleagues and neighbours are commonly associated with norms of generalised reciprocity in the skein of mutual responsibility and obligations which in the end enhances coordination and collaboration. In here, shared understanding, agreed procedures and social trust generated by personal contact and friends are believed to make it easier for people to work together for mutual benefits. In this regard, since the ICT project understudy is a community facilitated initiate, the study established this essential role social capital can avail to ICT.
In the same light, Putman (2000) suggests that organisations in civil society like churches and community groups play a fundamental role by bridging diverse societal cleavages, integrating people from diverse backgrounds and values there by promoting the heart of tolerance, cooperation and reciprocity thus contributing towards a dense rich and vibrant social infrastructure.

Social capital treats learning not as a matter of individual acquisition of skills and knowledge but as a function of identifiable social relationships (Balatti and Falk 2002). And in this same light, since ICT involves skills acquisition and in this case to a rural community where ICT resources are not adequate, social capital composition in passing on knowledge to others can help the acquisition of such ICT skills and this was actually the case with the on-line discussion platform the ICT beneficiaries in the project engaged in.

Relating social capital to the study, I personally feel the avenues of using social capital for acquisition of skills is paramount and also ICT being a bridge through which social capital can base on is quite paramount. So the study used these avenues of the two-fold nature of social capital and ICT to really understand whether social capital play a role in helping the Buwama telecentre members gain skills and also where social capital was not emphasised and yet it can be strongly helpful, the study proposed aspects management can think of in continuing to serve the community.

The above models, coupled with literature review provide a lens through which the study analysed the role of ICT in community rural development in Buwama Multi-media community centre. And as ICT especially in rural areas have suffered from scalability and sustainability mechanisms, the study also used the sustainable livelihood theory which can also help in exploring the impacts of the project to the community. This is presented here under.

The Sustainable Livelihoods Frame work

The sustainable livelihoods framework developed from the pro-poor and participatory ideologies arising within the development field in the 1980s and 1990s contends that lives of the poor must be understood as the poor themselves understand their own lives (DFID 1999 in Heeks and Molla 2008). The framework also provides an embracing framework for assessing the impact of ICTs on individuals and communities: context, assets, institutions, strategies and outcomes (Heeks and Molla 2008). Sustainable Livelihoods (SL) is a way of thinking about the objectives, scope and priorities for development in order to enhance progress in rural poverty elimination. It is a holistic approach that tries to capture, and provide, a means of understanding the vital causes and dimensions of poverty without collapsing the focus onto just a few factors (economic issues, food security, and others).

SL approaches stem from concerns about the effectiveness of development interventions. While professing a commitment to poverty reduction, the immediate focus of much donor and government effort has been on resources and facilities (water, land, clinics, infrastructure) or on structures that provide services (education ministries, livestock services, ICT services, NGOs), rather than people themselves. The SL framework was more elaborately developed by the British Department for International Development (DFID).

The Sustainable Livelihoods theory's principles hold that any development oriented activity should be:

i. People-centred: sustainable poverty elimination will be achieved only if external support focuses on what matters to people's lives, understands the differences between people and works with them in a way that is congruent with their current livelihood strategies, social environments and ability to adapt;
ii. Responsive and participatory: poor people themselves must be key actors in identifying and addressing livelihood priorities, and 'outsiders' need to adopt processes that ensure they listen and respond;
iii. Multi-level: the scale of the challenge of poverty elimination is enormous, and can only be achieved by working at multiple levels, ensuring that micro level activity informs the development of policy and an effective enabling environment and that macro level structures and processes support people to build upon their own strengths;

iv. Conducted in partnership: with both the public and the private sector (including civil society/ non-governmental organisations);

v. Sustainable: there are four key dimensions to sustainability - economic, institutional, social and environmental sustainability. All are important - a balance must be found between them; and

vi. Dynamic: external support must recognise the dynamic nature of livelihood strategies, respond flexibly to changes in people's situation, and develop longer-term commitments of support.

vii. The approach eventually does away with pre-conceptions about what exactly people seek and how they are most likely to achieve their goals and it endeavours to develop an accurate and dynamic picture of how different groups of people operate within their environment. This provides the basis for the identification of constraints to livelihood development and poverty reduction[1] (Ssentongo 2007).

With due respect to human life and dignity, all development theories ought to be people centred especially for them to be sustainable.

The relationship of the study and the sustainability livelihood approach is based on the premise that all developmental projects need to employ at least some principles proposed in the SL framework. And ICTs being hard to maintain and support, focusing on the sustainability strategies for the Buwama telecentre project was quite paramount and especially putting in mind that this is a project being run in a rural community and understanding how it sustainably manages its activities could also be an avenue of assessing whether the project is helping the community to attain rural development through employing ICTs.

[1] *The Sustainable Livelihoods Approach.* Retrieved Jan 8, 2006, from http://www.ifad.org/sla/about/index.htms.

CHAPTER THREE: Research Methodology

3.1 Introduction

This section entails the strategies that the research adopted in attaining the information necessary to achieve the research objective, research questions, the projected sources of information and procedures of data analysis. The general approach to the research design was qualitative since the study aimed at understanding the role of ICT in community rural development. For example the qualitative approach helped in finding out project users and non- project users on the views and perception of ICT project in Buwama, Mpigi District; understanding the social and economic impacts of the project in the District as well as their views on whether they participated in the whole project cycle. Since Qualitative methods allow for triangulation other than mere fact presentation, completeness, credibility, and explanations, I am too optimistic that the findings represent the role of ICT in community rural development in Buwama Mpigi District.

3.2 Research Design

The research adopted the case study design. The study employed the case study design to allow for a holistic analysis of a case in sufficient breadth and width in order to get insight into the larger cases (Oso and Onen 2005: 32). Within a critical realism framework to be used in the study, the study undertook the qualitative methodology to enable access to respondents' experiences from their own perspective. And in this regard, the Buwama Multi media community centre was the case under investigation.

3.3 Study Population

This included Buwama Multimedia community centre managers and other officials, the local people (both beneficiaries and ICT non-users). It also targeted policy makers in the ICT ministry like those in the District Business Information Centre department, the local leaders in the area like LC III chairperson, LC I chairman and women leaders plus development committees in Buwama Mpigi District The above study respondents were thought of to be better placed in answering the role of ICT in the rural community as some have engaged with the project from that start and have knowledge as regards its operations and also provide a facilitation process and support for the ICT activities in the region.

3.4 Sample Selection

3.4.1 Sampling Methods

The main sampling method for the study was purposive – a non-probability form of sampling aiming at selecting interviewees in a strategic way depending on the research questions (Bryman 2008:415). Key informants like ICT officials both in the ministry and in Buwama Multi-media community centre, local leaders and other officials were purposively selected. With both project users and non-project users in the area, I selected purposively in identifying these factions and in each category, random sampling was used in order to select from which people to target.

3.4.2 Sample Size

The study was carried out in Buwama Sub County and here, the selection of the villages depended on how many project users and non project users were in such areas. In total, the study used forty (40) ICT beneficiaries and twenty (20) ICT non- users. Concern was mainly on the proximity to the community centre. The key informants were ten (10) in total inclusive of the both officials from ICT ministry, Buwama multimedia community project and local leaders in the region.

3.5 Data Collection Instruments and Methods

3.5.1 Semi-structured Interviews

The rationale for choosing to conduct one-to-one semi-structured interviews was to allow for addressing research questions properly and obtain in depth information from the interviewees on the issues addressed. Reference can be made to Bryman (2008:439), who states that 'if a researcher is beginning the investigation with a fairly clear focus, […] it is likely that the interviews will be semi structured ones, so that the more specific issues can be addressed'. The interview process is flexible and gives the interviewees a great deal of leeway in how to reply, but with an interview guide, the interview process is steered in a certain direction, even though there is also room for individual follow-up questions. When working in a group, semi-structured interviewing is also feasible in order to 'ensure a modicum of comparability of interviewing style' (Bryman, 2008:439).

3.5.2 Key-informant Interviews

Ten (10) key informants were interviewed in order to get deeper and wider information. This enabled triangulation of the findings across sources and test issues of reliability and validity. The key informants included District Business Information Centre officials from the ICT ministry, the local leaders in the area like LC III chairperson, LC I chairman and women leaders plus development committees in Buwama; Mpigi District.

3.5.3 Participant Observation

The study further employed some methodological elements from participant observation, to specifically analyse the nature of ICT activities engaged in by the community. In here, the study observed and analysed the situation at all times, which allowed for a broader understanding of the issues under investigation. However, this is a debated form of gaining information, which the study was aware of.

3.5.4 Focus Groups Discussion

To investigate the usability of ICT activities in Buwama, focus groups of only the local people (both ICT beneficiaries and ICT non- users) was used. This method is often used to 'emphasize a specific theme or topic that is explored in depth' (Bryman 2008:473). Additionally, the study was interested in observing how group members interact with each other, and whether or not they are able to come up with a joint statement on the issue. Moreover, the focus group method opens up for arguing, hence, ending up with more realistic accounts on the issues at hand (Bryman 2008:475). Both male and female members of the community were targeted and ICT being a non sensitive issue, there was little resistance as regards participation. While in the field, the ICT beneficiaries strongly opened up their thoughts about telecentre operations and the engaged in analytical debates which I managed to control.

3.5.5 Qualitative Analysis of Documents

Collection and qualitative analysis of documents was also an important part of this research. This has an advantage of being unobtrusive and non-reactive and therefore meets a basic degree of objectivity favourable for research and allowing for triangulation. Examining documents broadened perspective on issues such as statistics in ICT for rural development projects, the supporting policies in place and the rationale for ICT in rural development. And above all, I was analytical in using such sources.

3.6 Data Analysis

From the key-informant interviews, documentary review, and FGDs data, salient features, recurring ideas or language and patterns of belief that link people together were identified (Oso & Onen 2005). Through questioning the data and reflecting on the theoretical framework, the researcher subjected the ideas/ data to significant intellectual analysis. As patterns and categories emerge in the data, the study engaged in the critical act of challenging the very pattern that seems so apparent. In so doing, the researcher came out with other plausible explanations for the data and the linkages among them.

3.7 Ethical Considerations

Permission to conduct the study in the chosen project and locality was obtained from the authorities responsible at the respective locations. Before conducting interviews, the purpose of the study was clearly explained to the respondents and consent for participating in the interviews, and FGDs was sought from them. It was also emphasized that the information collected from them would be treated with due confidentiality. Additionally, respondents were at peace to answer or not to answer to the study questions.

3.8 Challenges/Limitations to the study

ICT being a new approach to gearing development especially to local communities as away in poverty reduction, getting resistance from the local population in answering some of the pertinent issues like whether the project has impacted on their lives and their view as regards the project in the area for fear of losing support from the project providers. Also, many people in local communities are quite expectant and once researchers get there, they hope to gain handouts in return of their information. To overcome this however a strong rapport from the start with community leaders and a clear introduction in the process of data collection was used which helped me reduce on such short comings.

More so, since ICTs goes along with technical aspects as support, understanding the equipment and software used was a challenge. But, the study restricted its self to the technical aspect and where technical issues needed analysis like statistics of using the technology at hand, I asked for assistance from those in charge. Additionally, the Buwama multi-media community centre changed name of recent from Buwama ICT project. But, I was in position to understand the follow the project trend from the start to where it is now.

CHAPTER FOUR: Presentation and Analysis of Field Findings

4.0 Introduction

The main objective of the study was to explore the role of ICT in community rural development with a critical look at how the project is meeting community needs. Much focus analysed people's perception of the project and a great extent of identifying the management strategies to ensure project sustainability. Also, the study included the non ICT users in the area to capture their perception as well and the impact they too feel as regards the project in the region. The data presented and analysed in this chapter is in line with the research questions, literature reviewed and the theoretical frameworks that is: sustainable livelihoods framework and the social capital theory.

This chapter is divided into four sections. The first section analyses the background characteristics of the respondents as a way to understand their social-economic background visa vie their relationship with ICT project in the region. The second section looks at Buwama Multi media Telecentre and the rural community where project rationale in the rural setting is explored thus answering research questions one and two. The third section explores the design, implementation and management aspects of the telecentre and aspects like people involvement in project design and sustainability issues in a rural community are identified and here, research questions three and four are answered. The last section looks at the project impact to rural community and here, the identified impacts are gauged socially, politically, and economically and in this way, research questions four and five are dwelt with.

Section 1: The Respondents

4.1 Background Characteristics of the Respondents

This section provides information about background characteristics of the respondents in Buwama Sub County. These characteristics include; Categories of residence, villages of residence, and gender of the respondents

Categories of the Respondents for the Study **n =70**

Categories	**Frequency**
Key Informants From ICT ministry	2
Key Informants from ICT project	10
Local leaders	4
ICT beneficiaries	34
ICT non users	20
Total	**70**

Source: Field Findings

In total, the study employed 70 respondents, two (2) officials from the ICT ministry especially from the District Business Information centre department, ten (10) key informants from the Buwama Telecentre project whom the study sought to have background information of the project and its activities and four (4) local leaders as whom the study sought would also be knowledgeable on how the project meets community needs. As a way of analysing how the project impacted on the lives of the community, the study employed thirty four (34) ICT beneficiaries and twenty (20) ICT non users in Buwama region.

Parishes of Residence of Community Respondents **n =70**

Parishes	**Frequency**
Mbizinnya	40
Sango	20
Katebo	5
Bongole	3
ICT ministry key informants	2
Total	**70**

Source: Field Findings

Buwama telecentre as the study area is located in Buwama sub County in Mpigi district. The Sub county is composed of ten (10) parishes that is; Sango, Mbizinnya, Kawumbe, Katebo, Bunjakko, Jjalamba, Nabitete, Lubugumu, Buyija, and Bongole. The selection of the four parishes that is Mbizinnya, Sango, Katebo and Bongole based on parishes closest to the telecentre and those far from the telecentre. For example, Mbizinnya and Sango, are parishes extremely close to the centre and the study sought to see how people in these areas access the telecentre services. For Katebo and Bongole, these were parishes identified to be at the

furthest location from the ICT project and the study sought to see how such communities cope with accessing ICT services at the telecentre. Bongole for example was estimated to be twenty five (25) miles from the telecentre.

Distribution of Respondents by Gender **n =70**

Gender	Frequency
Females	44
Males	26
Total	**70**

Source: Field Findings

This study put in mind the gender perspective not only in data collection but also in the interpretation of findings. Through observation in the above table, it can be deduced that almost 65 percent of the study composed of female respondents. In further analysis, at one point in time, the project encouraged women in rural areas develop through using ICT and this explains why majority of the ICT users in the parishes were females. Although men as respondents account for 35 percent, most of them where seen in technical fields. For example, among the ten key informants, only two were females and in the entire project, only one lady was on the project team. Also in the leadership positions, most of those interviewed where males and also the local management committees in the region were composed of men and few women. This gender aggregated data will later be explored in the aspect of project target and catchments in the region.

4.1.2 Summary

The study was carried out in Mpigi District, Buwama sub county region in the four parishes which were selected purposely to capture both respondents close to the telecentre premise and respondents quite far from the telecentre; that is Mbizinnya, Sango and Katebo, Bongole respectively in a view to collect different respondent attributes as regards telecentre provisions. The respondents were seventy (70) including forty-four (44) females and twenty-six males (26) who were selected systematically and purposefully. Among these, were two (2) key informants from the ICT ministry, ten (10) key informants from the ICT project, four (4) local leaders in the region, thirty-four (34) ICT users, and twenty (20) ICT non-users. However, this clear gender difference in the study point to the different project catchments in that; at particular points in time, CEEWA Uganda collaborated with the project to provide women empowerment in development through the use of ICTs. This therefore bred many

women active participants in telecentre activities and this gave the men in the region a different picture that the project was only for the women. And yet, from the start, the project was a community project implying that both men and women equally benefited from it; but the penetration of CEEWA in telecentre activities saw a turn to project target which view actually still prevails in the region up to date.

CEEWA Uganda can not be blamed because at its point of penetration, in the late 1990s world wide, most development projects were aimed at including women in the development process and the feeling was many had been left out and most of the current development initiates were in favour of the men; thus a u-turn in also Buwama telecentre catchment. However, later in time, after some years of implementation, from the field findings, it came out that some men were not providing a favourable climate for their women to participate in such activities which actually caused some drop outs by those women who had enrolled for trainings. This created a signal to telecentre management and they realised that also men needed to be included in such initiatives for equitable development. This saw some men joining telecentre activities although some still feel that such projects are for women who are interested in learning more because they have time to attend such gatherings but for the men; it is not the case. One male ICT user explained that *'we men do not participate in such activities because we are the family breadwinners. We have to look for money day and night to sustain our families including women; but for the women, they only go to dig in the morning, cook, which creates time for them to attend such activities. I personally attended because my profession as a teacher needed me update my knowledge in ICTs to ably help learners'*. This shows that such initiatives basically rely on women whom the community feels have the time for development work and that projects cannot be frustrated if women are a focus.

Section 2: Buwama Multi media Telecentre and the Rural Community

A study to look at the role of ICT in community rural development was interested in looking at how ICTs can be adopted in rural communities and in doing this, the study sought to look at the project rationale in the region. And as part of the investigation, the study found out what the project meant to rural lives and for this question, the ICT users, ICT non users and the local leadership in the region were key respondents.

4.2.1 Buwama Multimedia Telecentre; Meaning to Rural Lives

Acacia through UNESCO and IDRC was working on six (6) telecentre pilot projects in the country Buwama telecentre inclusive. The Buwama telecentre started a decade back in 1998 and this was one the presidential initiatives which he admired in Canada where the country was using ICT telecentre to reach out to rural communities. The government started these projects later in the country and Buwama telecentre was one of the pilot and benefited from the funding provided by IDRC; a Canadian agency. Through discussions with the community, one would assume that the telecentre was part of the Acacia initiatives but through analysis, I found out that Accacia, through CEEWA Uganda, penetrated the projects later as a way of empowering rural women through ICTs. According to one of the ICT private business owner in the area (Who was once a project manager of the Buwama telecentre project in its initial phases) had this to say;

> *Way back in 1997, there was a needs assessment in the region inform of a pilot. The study was at national level and geared by the National Council of Science and Technology (NCST). In these studies, the government identified pilot projects and even got funders for such projects. All these projects were called Acacia projects and Buwama was one of them. I personally attended a workshop intended to create leaders who had to come back to communities and mobilise a group to become ICT aware and those to find out whether ICT was a need in their communities*

This in principle implies that the project was a National pilot study extended to rural areas in a way to extend ICT in rural community development and just like the current project manger asserts, the study was a presidential initiative. Their views were however contrary to those from the ICT beneficiaries as majority were expounding the project to mean Ceewa Uganda that was basically for the women and development. A further analysis into this perspective made the study feature in the aspect of CEEWA Uganda and the Buwama Telecentre. The major key informant that is the project manger, the ICT private business owner and the LC 3 chairperson at the local government clearly showed how the telecentre was different from CEEWA Uganda. To project manger, CEEWA Uganda was a non profit Organisation that joined the telecentre and made a memorandum of understanding whose aim was to empower women through ICTs in the community. The organisation educated women and later men in business entrepneurship and farming and had a different project officer who also had a seat in the telecentre premise.

Later through indepth investigations, I found out that CEEWA Uganda was a different organisation that joined the telecentre project in 1999 with an objective of empowering women through the use of ICTs and with this mandate, it collaborated with the telecentre in reaching out to the rural poor: women in this case. This perspective brought in the aspect regarding project target in the region because, through literature and field observations, I realised that most of the ICT beneficiaries were women which later led to the study realise that most of the ICT non users were men. This again comes from CEEWA penetration through focusing on women which made the project appear feminine. The project manager however noted that because of the routes CEEWA was taking, they had to convince them on reaching out to men as well since the telecentre focus was also the entire community. CEEWA Uganda provided support to the entire telecentre and to date, its activities ceased which actually created a big gap in the project as regards sustainability issues. This will be explored later.

The other perspective that also portrayed the meaning of Buwama telecentre to rural lives came in the issue of location. The project is situated in the Buwama Multi Media Community Centre which is a trio composed of three sections that is; the community training centre, the community library and the Buwama telecentre project. The community training centre deals with organising trainings in different developmental aspects and this has a big and spacious training room with furniture and the residential rooms in case of residential training. The Community library has books and video tapes which communities after training can refer to in implementing their activities. Since 1998, the ICT project was named Buwama telecentre but after a donation of a community centre building from world vision Uganda, the project name ceased thus the Buwama multi media community centre. Even on the sign posts to the location, the telecentre post appears down and old and this explains why even the non ICT users thought the project was a community training centre, venue for community gatherings like school competitions and contractors who hire the location for residential purposes. This trio building is actually enclosed and fully furnished giving a total picture to the community that it is a location only for professionals and the educated.

The Buwama telecentre also has the aspect of the community radio: an idea that came in after its initiation. The Buwama Community Radio was part of the telecentre model with an aim of serving community needs and interests in the developmental perspective. This has coverage

of 60km in radius and was basically for Buwama Sub County covering all the ten (10) parishes in the region. The rationale for its establishment was to reach out to far stretched communities who could not access the telecentre and here as well, ICT awareness issues where broadcasted on air and also community mobilisation was also done using the radio to see that people who are in far locations could be helped.

Most of the activities on air are tailor made to meet community requirements and here, fellow community members speak on the programs like the famous farmers, business men and even managers as well as small organisations like SACCOS who pay for airtime which helps in radio maintenance.

The radio being a community initiative geared to serving community needs, it largely employs community youths and other members and also for sustainability issues, the radio largely relies on volunteers who are given a low commission in their operations. As a researcher interested in analysing the role of the radio, I tried investigating how the community radio relates to the ICT services although the radio aspect is an ICT in its self.

That there was an ICT program on the community radio and here, I personally used to educate the community on how ICTs can be related to their daily activities. I could focus on key professions like the teachers, business men, farmers, parents and guardians, youths plus students. The aim of all this was to help those who could not access the centre to also get knowledge of the ICTs. Actually some could get information over the radio and then come for further training at the telecentre.

But currently, I no longer broad cast the program but will continue when get time. This was so prominent when the funders and donors like CEEWA and UNESCO were still on board as they could also facilitate us in such initiatives.

The assistant manager had this to say;

This in a way depicts how the radio was availing ICT services to the people although now, the program was not running given the little or no facilitation provided for such services. Another aspect which was of interest is the aspect of how sure the project thought that people could listen to their broadcast but the manager and some radio presenters explained that they have feedback activities where they engage the community through telephoning to ask questions immediately after the programs. But they also said that the there was a challenge of the radio signals jumping from location to location which meant that some people in the region could not access the radio for example those in katebo parish.

4.2.2 Buwama Telecentre; Project Rationale

After establishing and understanding what the telecentre meant to people, an analysis of the project rationale in the region followed. This question basically targeted key informants like ICT project staff, the local leaders, and some people who seemed to know the project as well as those who saw it blossom. From field findings, all respondents indeed accepted that there was a strong need and demand for the ICT in their rural community and below are some of the testimonies some respondents had to put forward.

> *The LC 3 Chair person said that there was totally nothing like ICT in Buwama region. I have lived part of my life in this community (for over two decades) but I remember we had no mobile phones, telephones, pay phones, no printers and no photocopiers and actually at the sub county offices, once we needed printing and photo copying services, we had to move to the next town Mpigi (10 kilo meters from Buwama region) for the services which where too costly at that time.*
>
> *The ICT private business owner said that our people used to hear about computers and some thought it was a very big machine and some thought internet was a robot or a moving individual and in general, there was much ignorance and lack of knowledge about most ICTs in the region.*
>
> *One of the ICT beneficiary testified that my cousin in the city could lie to me that computers were sensible machines and hard to operate, and actually, I thought I would never operate nor see a computer in my life given our rural community. But currently, I greatly thank CEEWA for the teachings they brought in the region since I can now use a computers to type my letters and also search business deals on internet. I feel too confident also to mingle with the highly educated now.*

The above testimonies depict the extent to which the community was in need of these ICTs in their region and the former project manager in the region explained that the needs assessment in the region was more of sensitisations and ICT awareness creation. The National Council of Science and Technology (NCST) sent researchers in the community to collect data on the need for ICTs in the region as well as how feasible the project will be and later trained some people in the region who could became ICT aware to tailor the ICTs to rural communities. Not all respondents agreed with the aspect of being asked as to whether the project was vital to them, although some remembered the researchers and community gatherings which were arranged to create awareness to the communities on the ICTs and how the project would benefit them. In general, all respondents indeed accepted that the project was vital in the region and that it has changed lives. Critically looking at this, people had no option since the ICTs were new in the region, they really did not input much as many were eagerly waiting to seeing how computers could be demystified to suit local contexts.

2.3 Buwama Telecentre; ICT activities availed to the Community

All study respondents explained the different activities the project provides to the community although some activities were not tallying with what the project provides. The key informants like the ICT project staff identified numerous activities some of which did not feature in the eyes of the community. This can accrue from the fact that key informants knew much about telecentre services; them being insiders. These activities include;

Training the community in computer applications like Introducing the computers and its key components especially for the semi illiterates, training in MS windows, MS word, MS Excel as packages especially for the youths, and those in professional positions like the doctors, secretaries and the teachers, providing secretarial services to the community like typing, printing, scanning, photocopying, radio broadcasting which performs functions like advertising, educating, informing, marketing, training communities in developmental aspects using the digital content in making ICT meaningful to their lives, and digital content development done by capturing movie and photos in the field and passing on to the rest in educational format.

On the other hand, the ICT beneficiaries basically identified computer training as a key service the centre avails to the community as well as internet services. Also another feature was most of them citing CEEWA which helped them in business development training in creating and uplifting their businesses in the region. The ICT beneficiaries and the key informants also identified the community radio as another service to the community which bred from the telecentre and serving community needs.

As for the ICT non users, they had a completely different perception of what the project provides. Some of them managed citing training in computers and the business skills but majority thought it was a local sub county centre for community gatherings and formal functions and only fear to access it. This relates to the trio sections and location of the telecentre where some in the community have mistakenly thought it basically provides community trainings and nothing like ICT services to them.

Focusing on the above activities, as an objective, the telecentre provides digital content development and this did not surface any where in the eyes of the respondents. Apart from the project manager who explained that they once used to shot videos and develop clips to educate the community on good farming methods through ICTs but one of the former women

trainer in the project narrated that CEEWA Uganda provided the digital content which they could use in integrating ICTs and community activities like farming and animal husbandry, as well as business related aspects. The lack of identification of digital content development as a service by many might however depend on the fact that this was a technical field where it was basically the manager and the key people in CEEWA who could understand the aspect. Personally, through observations, the digital content available were actually from other parts of the country especially African states like Namibia and the manager claimed that those they had developed got a problem and were not opening at the moment as the computer they were stored on as back up had a mechanical problem.

4.2.4 ICT equipment in the Buwama Telecentre

Understanding the role of ICT in rural development requires a critical attention to the nature of ICT equipment used in rural areas and an identification of the support strategies used to make them operational. In finding out this, the study used key informants as respondents like the project manager, project technician and the assistant manager as these were sought of knowing such technical issues in the project. Also as methodology, I highly used observation to identify what was actually on ground.

To begin with, this analysis looked at the equipment which were availed to the project during its initial stages and the equipment which the project is currently using in providing ICT services to the community. Below are the ICT equipment in the Buwama Telecentre

ICT equipment in Buwama Telecentre

Equipment at the project Start	**Equipment available Now**
20 Desktop computers	4 functional computers
5 Laptops	None
Internet (modem, satellite dishes)	Modem, satellite dishes but no internet connection
Printer	printer
Scanner	Scanner
Photocopier	Photocopier
Fax machine	None
2 Digital cameras	None
Television	Available but not operational
Deck	Available
Recorders, microphones	None
Generator	Not operational

Source: Field Findings

The above equipment presuppose necessary support like electricity installation, technician, the sockets, the ICT lab or room and the necessary furniture which services are still in place. However, through observation, it is quite clear that the equipment which was availed during the project start in 1998 through funding and donation were currently not in use. Part of the explanations can be either management challenges or sustainability requirements which needed to be thought of right from the project start. The project manager noted that he has managed sustaining this project despite the management challenges ranging from technical, limited resources and to old technology for some of the equipment.

Inside the telecentre

4. 2.5 Summary

The telecentre design model

In the early 1990s, there was a considerable enthusiasm for the use of ICTs to foster local communities through education, job opportunities, encouraging community initiatives and increasing general ICT scalability in rural areas (Gaved and Anderson 2006). In order to achieve this rural or local access to the ICT services, different models and frameworks were employed and among others, the telecentre design model was largely adopted especially in developing states. The philosophy behind this telecentre model is that; telecentre were formed around 1990s with an aim of providing 'broadband' island for local communities. The purpose of the model was to 'provide computers and telecommunication facilities and support for local communities in remote, rural regions and in low income urban settlements' (Gaved and Anderson 2006), and for the case of Buwama telecentre focus was on the local or rural communities. Gaved and Anderson (2006) explain that such telecentre in these localities

relied more on external and public funding and as these ran out; such telecentre struggled to survive and also to opt for altering their priorities to survive.

The Buwama telecentre also being a birth of the telecentre model, most of the qualities explained above are clearly observed. For example, presently, the donors and the other external support ceased which created a problem in telecentre management as almost all earlier processes designed by the donors and government have been altered. This points to the lack of sustainabilities in the entire model and this actually explains why the telecentre presently with donor exit is not providing what it was intended for. There are many challenges it is facing and actually people are not in position to constantly uplift 'their' community initiative. And from the ICT personnel from the ICT Ministry, government only provided initial funding and sub counties were always encouraged to sustain such community projects but through observation, follow up is quite minimal by the ICT ministry and this explains the deteriorating services at the telecentre.

Section 3: Design, Implementation and Management of the Telecentre

ICTs in rural communities have always suffered from design, implementation and management challenges; and it is from this background that the study understanding ICT in rural communities sought to finding out the extent of local people involvement in the design and implementation of the project with regard to whether people where consulted and involved right from the project inception to its implementation. This in one way also points to the issues of project ownership in the region. Relatedily, critically looking at the management strategies in place to ensuring project sustainability gave the study a clear insight on how such projects can survive despite the turbulent aid given in managing them.

4.3.1 Local People Involvement in Telecentre Activities

To De Beer and Marais (2005), participation of community members in the design, implementation and execution of projects enables them to play an active role in the process of own community development. And in line with De Beer and Marais, I too have a belief that once people are involved in understanding and stating what they have can be an avenue through which projects can be meaningful to their live. For a study to understand the role of ICT in rural development, an analysis on whether the local people where involved in project activities was essential in finding out the results. Here, the local leadership, key informants in the ICT project and the ICT beneficiaries were respondents who provided aspect on what

they thought was community involvement. For the purposes of proper analysis, this local involvement will be divided into two; that is, pre project phase and during the project.

Community Involvement – Pre project phase

This section looks at the pre project phase; a period before the project started its activities that is (1997-1999). Here, focus was on whether the community was involved in informing decisions that were part of project establishment.

By and large, most of the study respondents believed that they were consulted during the project start. The LC3 chair person and sub county head noted that community sensitisation were carried out through community meetings and person to person interactions with researchers who had come from the NCST to introduce ICTs in the region. This was in form of a baseline study and to some, it was actually a pilot study where people were just consulted inform of awareness creation as regards the new project in the region. The regional head also claimed that people were consulted through a needs assessment to first see whether they will accept the project although in form of sensitisation. Here, researchers were sent to different localities asking people what they wanted in terms of ICT. The regional head also explained that this community involvement necessitated asking them what they wanted in terms of ICTs and what in particular they wanted the project to address and that whole process was participatory in nature. This I would say was basically for the leaders because this type of consultation from field findings only came from the leaders in the region. But for the ICT beneficiaries, the consultations or community involvement from the start was more of awareness creation and they did not have much stake in the ICTs as this was a new field in the region whose services where indeed lacking.

The local leadership in this case was highly involved in the initial process and just like the LC 3 chair person narrates, '*they first passed through us and then we gave them a platform to meet the masses in our locality. Even in parish demarcation, we played roles as leaders on which ones should be selected first in piloting the study'*.

Also CEEWA Uganda's penetration in the region through the ICT project created another consultation process. Through the extension of ICT services to women, consultations of the women groups were done quite for a while as many women ICT beneficiaries attested.

This strong community involvement was partly because NCST aimed at first strengthening local leadership then getting down on ground since the project was government founded;

although at the local sub county level line of administration. Also the local person involvement was basically in form of sensitisation on how the ICTs could be used in their daily activities and what CEEWA actually did on ground was an understanding of the community and the activities they do engage in for them to design programs which where tailored to community needs; it being a community project. This to some proponents would be passive participation which has implications on project ownership and sustainability. Another explanation that can explain the, limited local participation can be related to the technical nature of the ICTs and the fact that; two decades back, ICTs were new in the continent and also the fact that this was a pilot project to see how ICTs can work in rural communities.

Community Involvement –Project phase

This involvement entail periods when the project started operations in the area (1999-present). From the start, after the sensitisations in form of community awareness, the implementing project team (Government - NCST and IDRC) identified key influential figures in the community who where taken as leaders to be trained and become ICT literate to later come and spread the ICT knowledge to the community. At first before the training, they held seminars and chose few people from the community who could be early adopters. In my perspective, this was ideal community involvement and sustainable in a way because the trained people later become key trainers in the region whose role was to impart the ICT skills in their community and these where trained on how to demystify the computer to rural lives.
Also, during the project start, the implementers employed community people as staff in fields which were not too technical like mobilisation, and for educating people, the trainers where first trained and oriented in how to help the people in understanding and integrating ICTs through their different activities.

Another avenue for community involvement is their selection of local committees who are responsible for overseeing the telecentre and acting as a bridge between the community and the telecentre. This LMC is composed of members from each parish and here, it is the community that elects these people to represent them at the telecentre. On the radio, the community has a committee in place to feedback on what should be addressed in the community radio and such committees are elected by the community members especially those who are in the radio fans clubs. The radio also employs the suggestion box avenue as a way of collecting feedback on what people feel about the programs broadcasted.

4.3.2 Implementation and Management Strategies of Telecentre Activities

The implementation and delivery of such newer technologies especially to rural communities should be thought of with great consideration since such localities are known to be at a great disadvantage in terms of ICT delivery (Mulira 2007). It is there fore from this background that that study seeking to understand the role of ICT in community rural development would necessitate an analysis on how the ICT project implements and runs activities in a rural setting. The first analysis will explore the implementation strategies at the telecentre and thereafter, a look at the key management strategies used in availing the ICT services to the community will be addressed.

Buwama Telecentre Implementation Strategies

The ICT project key informants explained the various strategies the telecentre employs in reaching out and serving the community. Also for the purposes of counter checking; the ICT beneficiaries were also asked the different strategies the telecentre employs in its service delivery. In analysing such implementation strategies, the study used measures like project target group, recruitment process, media used, training services, d-groups, and follow up activities as avenues for proper delivery. These are explored here under;

Target Group

Initially the project targeted the entire community; men, women, youths and even children, educated and uneducated and this is why at the initial phases of the project, similar groups of interest where categorised to see how computers could be meaningful to their lives. But after some time, through CEEWA Uganda penetration in telecentre activities, the focus was more on women as they were trying to empower women in their activities but through using ICT as a media. From observation and the different study findings, most ICT beneficiaries (women mostly) proposed the aspect of the project being women targeted and even some men (ICT non users) gave this as the reason as to why they could not participate in such activities since the project was women focused. Ideas from the local leaders and the ICT management however differed. To them, the project was for the community including even the men and that at start, all people were welcomed but when CEEWA Uganda came on board, through its empowerment schemes, it decided to favour the female gender more and that is why the community still holds this perception. Currently, the telecentre targets the entire community especially the youths who are now in position to pay for the trainings and some few community members especially those in professional fields.

Recruitment Process

In this I mean which special skills the project required from individuals to qualify for telecentre ICT activities. From the ICT project team, the inception process was free for all. Whether educated or uneducated, for as long as one showed interest in appreciating how newer technologies like ICT can enhance development. The project manager in particular however, noted that they had never got totally illiterate people and to him, this was part of luck he thought and emphasised the issue of using local languages as media in communication since most aspects where tailored to what people understand. Some ICT beneficiaries also claimed that the project was free for all but few confessed that they joined in big numbers and during the training, the trainer could ask people to type their names on the computers and to some, with less skills, they failed attending the preceeding days. On the other hand, the other ICT beneficiaries claimed that that during the mobilisation process, the trainers could call upon only those with literacy skills at least people who could read and write. This therefore implies that although the literacy skills where not a criteria in target group selection, in one way or the other, those who felt had inadequate skills did not bother joining the project. In a focused group discussion at Katego, with the ICT beneficiaries, this is what they had to say;

> *During the start, we were quite a number and some of us who lacked the reading and writing skills and also were to old could not apprehend the concepts especially in working on internet. Even the trainer found it hard in helping such people and some got embarrassed during the sessions which caused them not to appear again. They too agree that largely, such trainings needed some one with basic literacy skills.*

Media Employed

By media, the study meant understanding some of the methodologies the ICT project employs in availing its services to the community. From the study respondents mainly the ICT project team and the ICT beneficiaries, various strategies where employed by the centre in reaching out to the community. From the ICT team, the radio, books, handouts, magazines, charts, notice boards in the rural centre points, face to face meetings, community gathering

and school assemblies and trainings at telecentre where some of the ways the project reached the community.

From the radio perspective, since the telecentre model incorporated radio services to reach out even to the far communities, the radio was cited the most media by the ICT beneficiaries in availing information as regards any trainings in the telecentre. Tailored announcement could be broadcasted to the different community groups like women, men and business people mobilising them to come for tailored trainings in their field and indeed majority appreciated such services.

> *There is a programme on the radio called telecenter where we broadcast telecentre activities to the public and mobilising those who wish to join. Even over the radio, we could tell people the importance of the computer, email addresses, how to search for markets such that those who cannot attend can at least learn over the air. Presently, I no longer talk about the centre because some machines are un functional but with time, I will try mobilising people again. At times we are frustrated with electricity and machine breakdowns which indeed de-motivates.*

Also, the assistant project manager noted that since all those sensitised and mobilised could not attend such training given the distance and other issues, the telecentre introduced a radio programme named telecentre and this was broadcasted twice a week. In this, she had this to say;

In practice, it can be observed that they used to avail telecentre activities through the radio as medium but currently, it is no longer an option and through further analysis, such programmes where broadcasted on air when CEEWA Uganda and UNESCO were still funding most initiatives as this also motivated the volunteers who were trying to reach out to the community using this channel.

Training Services

This training as a medium necessitated training of peer educators first in the region who could later train the others in the communities. These were named the Community Based Trainers (CBTs). In this approach, each parish got a representative who was interested in telecentre activities and these were some of the ICT beneficiaries at the start who appreciated the use of ICT in their activities, who were later inculcated into ways of how to help the communities and their fellow members on the grassroots. Their roles were basically mobilise communities in their locality and inform them about telecentre activities, following up the

After training, I trained a number of fellow women in issues like rearing local chicken, mixing chicken feeds, growing vegetable gardens, banana planting given my good farming practices had acquired in most trainings. Here, I integrated how the women could use ICT through searching for good markets on their phones, using the d-groups to find out more. But I testify that most of the content acquired was basically from telecentre services. However presently, we cannot engaged in the d-groups because of the no internet

notice boards and also sensitising those who could not access the telecentre as well as being resource persons to those communities. In the study, I got a chance to interview the CBTs and understand the ways of how they were training down on ground. One of them had this to say;

Most of them acknowledged the fact that they were training and mobilising the rest to appreciate the use of ICTs at the initial phases of the project but motivation kept on reducing. Presently, most of the CBTs were no longer carrying out these activities reason being, those in far localities could not have the equipment necessary and also people there found it hard to come to the telecentre and this meant that the CBTs roles here was limited to only availing the theoretical aspects of the ICT integrations. And fundamental is that the funders had stopped facilitating the CBTs and once most of them knew that they had left; most decided to abandon their roles to communities; as one CBT notes, *'Ever since CEEWA Uganda left, seven months back, the centre only trains youths in compute applications but no business visa vie local content and ICT integration'.*

Another avenue in this implementation process was the face to face trainings where the ICT team could reach out directly to the people. In this, telecentre training activities where taken to the far locations where the project team moved with laptops and other essential support to facilitate the process. This was basically in the initial phases of the project where the availed equipment was still new and functional. However, this was not sustainable like the manager says as often times; they could travel with generators in the field and this made the laptops weak which in the end spoilt them.

In this same light, the telecentre used to reach out to schools and here school management could avail time on assemblies to talk about the importance of ICTs to schools and the pupils. But because of the limited equipment available, this strategy ceased.

Community Notice Boards

These were and are still avenues which the telecentre employs in providing print information to the community. These were part of the outreach programme where the project availed print material to the community. These community notice boards were located at convenient places where members could access information from the telecentre which in a way could bridge the distance gap.

A notice board was placed in a home of the CEEWA member or ICT beneficiary and a place ought to have had security and accessible by all; even non members as information also tackled the general public. Information here ranged from ICTs, knowledge on what is happening in the d-grounds, any disease epidemic in the region and general knowledge charts. It was a role of the CBT in the region to be responsible for updating the notice board content who could get information from the telecentre management team. I personally observed two of the notice boards and where quite in good shape although there was still content of 2008 and mid 2009. This meant therefore that; although it was an avenue where the community could access information, the boards were not currently in use ever since the project funding ceased

d-groups

As an online medium of communication, the d-groups were online discussion groups for all the telecentre members where people could get on the platform and discuss issues of interest. The d-groups was a CEEWA Uganda initiative where all telecentre members in the different regions could log on and discuss with one another in their local language (specifically Luganda). This presupposed the creation of email addresses and password for a member to participate. In Buwama telecentre, this also took effect. In the initial phase of the project for example, people where trained on the use of internet in their development activities but most especially employing the **ceewauganda@d-groups.org** platform. With such online activities, most ICT beneficiaries confessed that they could chat with one another in the different sister centres like Jinja, Nakaseke, sharing experiences, opportunities and challenges. This made it possible for people to be helped especially those who had problems, could write and ask for assistance from the rest and in turn, feedback would be good and in abundance. There was also interactions going on and people used to enjoy such learning outcomes.

While the community employing the d-groups platform, CEEWA was still providing services freely to the members and to ensure strong participation, two days in a week had to be reserved for CEEWA members to access internet freely and this made people interested as they could attend in abundance.

Presently, during the time of data collection, internet was off in the telecentre for almost seven months. The ICT project team noted that the satellite dishes provided by the funders from the start got spoilt and repairing them necessitated purchasing new equipment from Canada which funds they did not have. This made them change to the mobile modems provided by the telecommunication companies and during this time, the two (mobile modems which were also a donation from CEEWA Uganda) had got spoilt and they were still awaiting for the telecommunication company to work on them. With this going on, there is no doubt that the d-groups are longer functional. For many ICT beneficiaries, they stated this as challenge of not using the telecentre since what most attracted them were these online interactions as many claimed to have learnt a lot.

Follow up Strategies

In a need to critically understand the role of ICT in rural development, analysing the different follow-up strategies the telecentre employs in making sure that the community uses the ICT knowledge gained was crucial. Here, the study largely depended on the ICT project team although the ICT beneficiaries were also used to act as a check to exactly understand some of

these strategies. By and large, there were no streamlined strategies of reaching out to these communities in understanding whether the ICT skills acquired are put to use. The project manager noted that before, CEEWA was engaged in such follow-up activities since facilitation in form of transport was available and that presently, with the limited funds, they cannot facilitate the process.

The possible follow ups are only for those ICT beneficiaries who prosper out of what they acquired from the centre. These are identified in different areas and later act as resources for the community to learn from as well as providing success stories in what they are doing. Also another way of observing them is by using the computers as many up to date come and type their letters print and pay for the services at a lesser cost. To the assistant manager, such people have reduced because of the lack of internet facilities which was available at the telecentre at a relatively cheap cost compared to the outside or private ICT providers.

Buwama Telecentre Management Strategies
Management structure at the Telecentre

During the project start, IDRC and the NCST in Uganda selected the early adopters as people they had trained to become part of management of the telecentre along side them; the assumption being 'community project'. Although the sub county management was also available, much powers were given to this management committee which brought in management challenges in the long run as people started asking who should be answerable to who and where should money be allocated. The ICT private business owner in the region was part of this first management committee and because of problems in managing the telecentre as a manager at that time, she felt uncomfortable thus resigning.

The sub county management and the local management at the telecentre were in constant conflicts and when the funders totally pulled out from supporting the centre, the sub county administration took over the entire telecentre operations including changing its management structure. In an interview with the sub county head in the region (LC 3 chair person), he explained that the telecentre management is now at sub county level since there is no funding or donor agency like UNESCO, Ugabits, and CEEWA Uganda as these had ceased their contracts. Since such agencies previously worked hand in hand with the local government, the sub county took this move because from the start, the sub county worked closely with the

funders and in this case, they were partners and stakeholders as they availed land, buildings and even personnel.

As management structure of the telecentre, the sub county executive is headed by political leader who is chairman LC 3. The senior administrative office technical side is responsible for accounting, followed by the senior executive office. Strong in this linage is the sub county chief in the region who is directly involved in the telecentre activities. There also other councillors who are elected by the people from the different sub parishes and some of these where the new local management committee who are in charge of monitoring the telecentre and also reporting back in the sub county executive.

At the telecentre level, the centre is managed by the project manager and assisted by the deputy manager (lady). These are responsible for overseeing of the day to day activities at the telecentre and also accountable for whatever happens. Their roles also involve managing even the community radio it being part of the telecentre. These are supposed to write monthly reports and forward to the LMCs who later present to the main sub county executive. The centre also has a technician who was trained by UNESCO during the project start but looking at the activities and the expertise involved, I would say that the technician (of senior four or ordinary level) was trained in basic computer maintenance services which makes him inefficient in some aspects as it shall be pointed out later in the discussions.

There is large use of volunteers at the telecentre for example the CBTs, the news reporters and hunkers and even those who help people in availing the secretarial services on the day to day basis. In principle therefore, the sub county hired three staff that manage the telecentre activities since this is what they can afford, and the rest who closely engage in its activities are volunteers who are given a commission in case they engage into money making activities.

In looking at the hierarchy of telecentre management, the study specifically picked key interest in understanding the role of the local management committees as these act as intermediaries between sub county management and the telecentre management. And also, these in one way mingle with the community the telecentre serves.

Local Management Committees (LMCs)

From the initial start of the project, there were LMCs in the region and these where none other than the officials selected from the ten parishes in Buwama sub county. The communities in these parishes could democratically elect members in their regions who would represent them on the telecentre board and also take their concerns. These in practice acted as intermediaries between the project on one hand and the people on the other. The

LMCs here were supposed to input into telecentre management by availing feedback from their respective communities and in doing this, in community or region gatherings, they could mobilise people and also share issues with regard to telecentre operations.

At the telecentre, these could meet monthly with facilitation in form of lunch and transport allowances for the funders and this process to the manager and one of the sub county LMCs was too efficient as they could feedback into telecentre operations with out fear or favor. With the ceasing of donor activities in the region, LMCs activities also stopped since facilitating them was a challenge. This therefore limited communities from participating in telecentre activities directly although the ICT project team availed the radio interaction platform as the only way they were engaging the community and the suggestion box at the community radio premise.

This lack of facilitation prompted the sub county management to elect part of its officials the region councillors to replace the roles of the former LMCs. These are political leaders elected by the people in the region to represent them on the different positions. These are supposed to directly monitor the telecentre management and report back to the top sub county executive. Quarterly reports are provided by the manager including a budget indicating the radio and telecentre revenues and expenditures, discussed by the LMCs and in case of any issues, these are raised in sub county executive meetings. This leaves the community not directly feeding back into telecentre operations as these modern LMCs are not concerned with collecting feedback from the people but rather interested in how the management responds to their demands at the sub county executive level. To one of them, a youth councillor in the region, he looks at this move as unhelpful and rather too destructive to the telecentre sustainability because as political heads, they can not be in a strong position even to question the entire sub county top leadership as regards issues pertaining to allocation of telecentre resources.

4.3.3 Telecentre Sustainability Strategies

By telecentre sustainability strategies, the study sought to look at the management strategies in which the telecentre is able to sustain its activities in rural communities. In this, concern was based on the fact that many ICT projects have failed to live to their expectations especially in the managerial ways they put in place to ensure project sustainability. Therefore, this ICT project being in a rural setting with milieus unfriendly to newer technologies; exploring the aspect would help me in understanding its operations in such a community.

The study largely used the ICT project team, the local leaders at the sub county level, and the ICT beneficiaries.

In the initial project phase, the project funders like UNESCO, Ugabits, and CEEWA Uganda used to provide most of the services essential for the day to day operations of the telecentre. For example, CEEWA provided papers, toner, and even sent technicians to work on the spoilt computers as well as providing mobile internet hardware and even paying monthly subscriptions, Uga bits helped trouble shooting and cleaning the computers and UNESCO on the other hand trained staff like the technician and also was responsible for paying staff working on the telecentre. This made telecentre provisions smooth and services were given to the people in abundance says the project team. This overly reliance on the donors was in reality unsustainable and this accounts for the many challenges the project currently faces.

The post donor period has however availed many challenges to the project team seen in telecentre availing few activities to the community. This has also prompted them adopt management ways that can make them continue with the project in the community.

The centre availed internet services in the entire region at the lower cost compared to the other ICT businesses in the region. This was the basic source of income as many people accessed but during the period of data collection, the internet service was unavailable as the modem provided by CEEWA Uganda had got a problem and the telecommunication company responsible (Zain) promised management that they will be worked on. The internet problem had lasted for approximately seven months. And to the assistant project manager, the lack of internet services in their provisions has accounted for the low returns from telecentre operations which has also reduced on their clients or customers.

Presently, the telecentre largely depends on availing secretarial services to the community including; printing, photocopying, scanning, typing, designing cards and banners as well as CD banning. These services are availed to the community at a lower cost; it being a community project.

Also another source of revenue for the project is training in computer application like MS word, excel, PowerPoint, database management and internet applications. This to the project manager targets mainly youths and the other community members in key professions which require them applying computer skills; although this source of revenue is also seasonal were youths will only be available in the holidays. I personally observed this because during data collection, the period was a vacation and here, many youths could converge at the centre to attend computer application sessions. This therefore implies that the training of the local

person on the grassroots is no longer effected ever since the post donor period which has now lasted for almost a year because CEEWA Uganda ceased contract late 2009.

As regards sustainability at the community radio, announcements, advertisements, and buying of air time by the politicians helps in terms of revenue collection. Although it is a community radio, a fee is charged to whoever wants to make an announcement on it. The radio also largely depends on volunteers who are community youths who help in gathering of information. The community radio also uses the radio funs club in the region which helps in mobilising for resources as well as providing feedback from the community to the radio. The club also helps in pooling resources in case of a noble cause. The management here is also able to organise some edutainment activities where they call upon the public to participate but with a fee. By and large, the community radio has managed to get good will from the politicians but only during campaign periods as these come and use the radio for election purposes.

All these have helped in radio operations and to the manager, the community radio has never stayed wanting as revenue is constant unlike the other telecentre activities where people still have the old mentality of all activities there being free. This points to lack of sustainability practices right from the project start because for the radio, people have it in mind that they have to pay for the services.

Commitment and hard work on part of the telecentre team is another way on how they ensure services delivery given their current status. The project manager and his assistant for example had not been paid for over five months due to lack of funds from the top administration. The little they collect from the centre is used to service the equipment and also buy some essential utilities responsible for the day to day operations of the telecentre.
Actually, three project team members said, part of the radio revenue is used also in managing other telecentre activities and the assistant manager testified that at one point when the photocopier had broken down (yet main source of income), it was money from the community radio that was used to service it.

As source of revenue, the sub county executive had instituted a fee to be allocated monthly on the telecentre but this attempt failed as the budget was not so supportive to this call said the sub county head. Most times in the council budgets, the telecentre is allocated some money but to manager, at times the money is signed out but does not reach the telecentre

which explains the corruption and embezzlement of public funds in many government departments in the country.

Understanding how the private ICT business sustains its activities, in an interview with the ICT private business owner in the region, she explained that it is only business commitment and sacrifice which has helped her continue providing ICT in rural community and also reducing the costs to fit the community. She also looks at the bureaucratic telecentre management as a block in it achieving its expected results and the lack of clear management from the top.

4.3.4 Summary

Community development projects depend on the wide range of government resources and donor aid where their strengths lie in strong administrative support. To Rondinell and Ruddle (1978), this commitment of administrative support even to clearly defined rural development programs has provided only passive support there by seriously delaying their progress. With this assertion, the proceeding discussion depicts this administrative support as the section outlines an analysis of the design, Implementation and management of telecentre activities; which are considered to be vital aspects in the success of any ICT project.

Local participation: Is it all about Awareness Creation?

Participatory projects are more sustainable and most likely to show progress than those implemented with little or no participation (Kleemeier 2000). For decades now, development thinking has focused on community participation in all kinds of poverty eradications with the belief that participation is the most effective means to deliver, but also sustain community benefits. The field findings demonstrated that participation was central right from project inception. The community in the pre project phase and implementation phase were consulted as regards the new development in the region. The nature of this ICT telecentre project being a pilot, participation of the community was more of community sensitisations: creating awareness as regards the need for ICT in rural development. To De Beer and Marais (2005), participation of community members in the design, implementation and execution of projects enables them to play an active role in the process of own community development. And in line with De Beer and Marais, I too have a belief that once people are involved in understanding and stating what they have can be an avenue through which projects can be meaningful to their lives.

Most study respondents especially the ICT beneficiaries attested to the fact that there was a needs assessment in the region although in form of community awareness. Researchers penetrated different parishes preaching the need of ICT inclusion in rural communities and to some of the participants, not much stake was put in on their part; this being a new and technical field in their area. One participant said that '*our role was actually to just accept and most of us were really anxious to having these newer technologies in our region'*. This highly shows that community involvement at such a critical point in time was limited and largely from the start, the role of the program team was to train trainers in different communities to go and create awareness to others in the community about the use of ICT in the region. This to some participation proponents would translate into passive participation where people participate by being told what is going to happen or participation by information giving as regards any new project in the region (Saterson n.d). Needful to note is the capability of the community to also participate at all level as this is not the case always. In the Buwama telecentre project, these were kinds of participation because may be the community did not know much about ICTs and also it being a pilot project, community involvement was transformed in to information giving. Also to Saterson (n.d), participation is not a "one size fits all" principle instead; the level and form of participation vary with the stakeholders' capacity to participate and this exactly was the case with this telecentre project because people; especially the rural poor were not in positions to ably inform decisions.

However, by and large this type of participant divorces the community to taking full responsibility on the project created in the region and this largely throws a challenges to project sustainability as people all the time will think about the project as foreign to their lives and yet; the sustainability livelihoods approach agitates for responsiveness and participatory approaches - where poor people themselves must be key actors in identifying and addressing livelihood priorities, and 'outsiders' need to adopt processes that ensure they listen and respond to their needs (DFID 1999 in Heeks and Molla 2008).

Political Involvement: a Gateway to Rural Projects

Political commitment is vital for rural development in that strong commitment to rural development policies at national level is required if impact on problems of priority is to be effected and broad based (Rondinell and Ruddle 1978). Further more; Rondinell and Ruddle explain that; such political commitments must involve a strong persuasive and sustained determination of the highest leadership in order to achieve goals of rural transformation. This in practice translates to the fact that local but also national leadership is quite crucial in the

success of most rural development projects. For the case of this telecentre project, the government of Uganda from the start initiated the pilot ICT project in six districts and here, different facilitations where provided by the NCST in reaching out to the different communities as regards researching about these localities. The government still was in position to identify project funders who could support it in delivering such newer technologies to the selected pilot regions. At least from the start, strong national commitment was observed although these I would conclude was largely not backed up by national policies which in way still affects rural development initiatives and yet; as Rondinell and Ruddle (1978) agitates, in most developing countries like Uganda, present policies are un favourable to rural development and therefore for such countries to achieve social and regional equity, a policy shift that also favours rural development projects is crucial in reaching meaningful development.

In this telecentre project, when Accacia came in, it first penetrated the political leadership of Buwama region as these needed to provide a favourable climate where such newer initiatives can blossom. The Buwama sub county head noted the project was with them from the start as different consultations were made with the local leadership especially regarding what would work well in their region since the initial intention of the project was a community project which meant that local leadership here was as well central. There was some minimal participation on part of the leaders since in decision making; they also took part although their minds were also tuned to rather accepting and not being critical to the new development in their region. These leaders worked well with the project team and this is why up to date, when the funders left, they had to handover the project to the community; local leadership in this case who are currently facing challenges especially those relating to financing the telecentre. Rondinell and Ruddle (1978) believes that its is not enough to only have policies that facilitate rural transformation but rather; an inclusion of the steady and reliable flow of national budget resources as best inputs for rural development. Also the financing support of rural project is quite paramount and that even with the administrative and political support, without the funds, rural projects will not survive. Presently, the sub county head who is in charge of the telecentre finds it hard even in apportioning money in their budgets to help in telecentre activities. The head testified that '*our national budgets do not favour support of such community initiatives and once funding is allocated to such provisions, as the head, I will be accountable which also at times makes me not plan for these financings'. The telecentre will only get some money in our sub county budget once we have surpluses but we rarely do with even the little we get from the national budget'*. To him, this is why the

telecentre is inefficient in terms of services delivery because it is rarely thought of even in sub county and district meetings and if it is catered for, it will be an appended where looking at it will imply first focusing on the key priority areas.

Necessity of Capacity building in Community projects

'Confidence in ones own ICT and familiarity with advanced skills like locating information online or using key software applications are prerequisites for effective ICT use (Zinnbauer 2007). And this is only possible with capacity building. To (UNDP, 2008), capacity building is a process through which 'individuals, organisations and society obtain, strengthen and maintain the capabilities to set and achieve their own development objectives'. And this is done through the trainings provided for communities to acquire knowledge, skills and change attitudes in ways of doing things. And today, developmental projects have focused more on capacity building as this will lead to sustainable projects and hence meaningful development. Also, apart from realising development, capacity building in ICTs helps to overcome the digital divide there by making ICT usage meaningful to rural livelihoods. In the Buwama telecentre project; capacity building entailed availing training opportunities to the communities right from the pre project phase. Here, key influential figures were selected by the NCST to be trained on how to become ICT aware and later train others in their respective communities. These trainings were both formal and informal and here, the trainees were given content on how to demystify a computer to rural settings. Later on, during the project implementation phase, community based trainers (CBTs) were trained and in this, all parishes in the region were represented. These had to provide informal trainings to communities and also represent the ICT beneficiaries to the telecentre management. This was quite essential as communities stayed with resources and whenever they needed consultations; a figure in the community was available and needful to note is the fact that the parishes took part in selecting CBTs to represent them. However, although CBTs were available, they lacked the equipment to facilitate efficiently as often times they relied on theories which to many was quite challenging and from field findings; some CBTs actually did not deliver as expected given the lack of equipment and facilitating environments to aid the entire training process.

This skills training in ICT initiatives sees the strengths in actively involving community members rather than seeing them as passive beneficiaries. Here, most of the current project staff, including the trainers and technicians are from within the community and this can also relate to the social capital perspective with its assertion that ICT skills are often learnt through networks of friends, relatives, groups and even colleagues. One CBT for example

attested that ‘ *when I could train fellow women on how to use the ICTs, not all could get whatever we were talking about; but with the help of their fellow women, many managed to get knowledge on the sue of these ICT and the gospel continued. Actually, I later realised that, even women in my region who did not register as ICT users at the telecentre learnt some of these ICT skills’.* This in practice implies that strong community bonds and networks highly facilitated the skills attaining process and just like Zinnbauer (2007) notes, social capital facilitates learning and acquisition of skills where learning is viewed as a social process; where social networks and communities of practices are indispensable opportunities for informal learning, there by providing opportunities for individuals to seek advice, discuss ideas and upgrade their knowledge. And this actually was the case in Buwama region where even some ICT non users were aware of some of the aspects the telecentre was availing as regards the integration of ICT in their rural setting; thus a strength to social capital.

Literacy; a prerequisite for ICT and Development?

Recognizing that people acquire and apply literacy for different purposes in different situations and that literacy is not uniform, but is culturally and linguistically diverse, UNESCO today views the concept of “literacy” as a plural notion (UNESCO 2007). UNESCO recognizes that skills for written expression and comprehension are related to particular contexts and languages, and that the value of these skills lies in the ability to apply them in a beneficial way. Literacy is being defined differently in different context and often times looked at as a vehicle to development; and because of this, in the Uganda case, literacy implies ones ability to read and write in their local languages. Today, literacy is believed to have both a direct and indirect effect no development and this is why this basic knowledge is even a priority in the Millennium development goals we are focusing on today. In Uganda for example the government has adopted functional adult literacy programmes in the different rural settings to help people attain the basic knowledge level especially with the ability to read and write and also considering the fact that rural populations are known for higher illiteracy levels in the country. And since there is this global assertion that literacy is vital to development work, in the ICTs, it might be a necessity. And since we also believe that capacity building in terms of skills attaining is a requirement in ICT usage, the aspect of whether literates or non-literates will surface.

Information and communication technologies (ICT) are often associated with high-tech devices, such as computers and software, but ICT also encompasses more “conventional” technologies such as radio, television and telephone technology (UNESCO 2007); which

aspect in away require literacy skills in proper usage although at times there is the notion of mastery. ICT and literacy are twofold. On one hand, ICTs can be vehicles to achieving a literate community and in the other perspective; literacy can really help people in ICT proper usage. For the purpose of this analysis, I focus on the role of literacy in ICT rural development projects because in one way or another, the literacy concept has a connotation in ICT usage. In the Buwama region for example, from the sub county head, 60 percent of the population is illiterate and to him this depicted a challenge as to why they still had ICT no users in the region. Field findings indicate that in the recruitment process, indirectly the concept of being literate was a condition for selection although some members felt this was not a condition and every one was called to participate. However just like some respondent noted, '*during the project initial periods, we were quite a number but after some time, slowly by slowly those who were uncomfortable with reading and writing on the computers became embarrassed at some point and decided to leave'*. Some CBTs also put the condition of ability to read and write in their recruitment process and this meant that those who could not; were rather discouraged from attending. This takes us to the aspect of ICT non users. Majority of these respondents felt that indeed such trainings were only for the educated and for those who have never attained basic education; this was rather a block to their participation. This largely depicts how ICT usage goes hand in hand with literacy.

The Need for distributed ICT Access Points

Clement and shade (in Gaved and Anderson 2006) believe that access to ICTs facilities by the community is one way to break the digital divide between rural and urban. These went ahead to classify thres issues which access has to focus on; first being access for what purpose, access for whom and access to what. Clement and shade (in Gaved and Anderson 2006) provided that access rainbow explaining layers for potential access, with focus from physical infrastructure and buildings to questions of governance. This access rain bow begins with focus on the carriage facilities (which are the infrastructure used for transporting data), Devices like computers, software tools including the browser, email client and other essential software, content/services include digital content used in ICT implementation, service provisions like local Internet Service Providers and community access points, literacy and social facilitation including text and computer literacy; training and support services, and governance which entail public consultation on policy issues.

Based on these issues, in the Buwama telecentre project, some of these access issues have been put into consideration. To begin with infrastructure, the telecentre has four functional computers, modem, printer, scanner, photocopier, electricity, and the laboratory as well as

community notice boards for accessing print information. These however are quite few compared to the equipment that was available during donor support. Most of these devices are unfunctional due to poor maintenance and lack of finances in aiding the regular checks. The community notice board also is rarely updated as information in it depicts older events that went on especially during donor support in 2008.

Also during the initial project phase, the project team created virtual offices where it could move with the ICT equipment in different parishes in order to train many in the use of ICT. Here, laptops, generator and other essential equipment were taken to communities on different days and quite a number could attend. This was a good access point especially for those members who in one reason or another could not access the telecentre but was rather unsustainable and hence the virtual offices ceased since computers were getting spoilt as well as the other equipment. This now limits community access to only using the telecentre since it is where computers and the other equipment are situated.

The d-groups were also platforms where telecentre members could log on and share experiences amongst them selves. And from the field findings, this was an interactive learning and sharing process which the community was pleased in. These on line interactions strengthened networks in societies as people could gather at the telecentre and discuss even other issues not at times related to d-groupings and just like one of them said, '*I used to enjoy gathering at the telecentre and even some of us formed other smaller groups and even created new friends physically and virtually'*. This relates to social capital in the sense that ICTs can serve as attractors to bring together volunteers and seed networks around initiatives to share common values; and participation online is likely to strengthen social bonds among those with homogenous interests and backgrounds (Zinnbauer 2007). But still, such strengths are hampered by the lack of internet connectivity, which is the case with the telecentre project presently; and this explains why few people access the telecentre.

Monitoring and Follow up Activities

For De Beer and Marais (2005), the hard work of making a project self-sustaining only starts at the stage when training sessions and constructions are completed, and all actors fully integrated from planning stage to evaluation. Therefore, to avoid failure of projects and thereby also waste of resources and loss of self-confidence in community members, more monitoring and joint evaluations could be conducted (Rogan 2009). Building of existing resources and institutions and practices requires involving the local people not only in the

planning phases of the project but also in implementations where monitoring, follow-up and evaluation activities are carried out. This notion stems from the fact that local people are the custodians of their communities and thus essential in identifying the scope in dimensions of local requirements and the most effective channels of change (Lynch 2005).

From the field findings, the Community based facilitators were responsible for monitoring activities in the different localities and these worked hand in hand with the local management committees to feed back into the telecentre activities. These follow-up activities were strongly mainstreamed especially during donor presence because the people who were involved where materially and financially motivated. To the manager, they no longer integrate such follow up activities given the little or no funding for such activities which indeed is a cost to the project; and once communication channels are blocked and development is seen a unilateral process, no relevant development will take place especially in rural areas. The project manager also realised the fact that when community representatives were still functional, critical feedback which informed telecentre provisions was got from the community and worked on but because this no longer exists, the manager largely relies on face to face interactions as way of feedback into the telecentre operations.
When CEEWA Uganda was still in telecentre operations, the management had field activities where they could follow-up their clients and see their progress as regards integrating ICT in daily activities but this also stopped ever since the project period ceased. The telecentre to date can not sustain such activities which again points to failures in identifying how such a project could sustain its activities irrespective of exogenous funding.

This points to the fact that although the CEEWA other donor management mentored the locals in the region to manage their community project; may be at time of handing over most of them were not competent enough to continue with such established activities which were quite community inclusive; and this has an implication to project sustainability. Another reason as to why proper follow up are not taking effect can be as a result of the lack of clarity on who should do what in terms of management; and this aspect is explored here under.

Un clarity on Leadership and Telecentre Management

Management and leadership are key administrative functions which are essential in sustaining established projects and in the rural communities, this is quite an essential function for sustainable rural projects. This administration support plays a vital role in achieving goals of rural transformation there by enhancing economic reorganisation and social equity (Rondinell

and Ruddle 1978). Since this is quite paramount in management of all developmental projects (rural projects inclusive), from the field findings; a different picture was portrayed and even those who seemed part of management felt there was un clarity in terms of telecentre management.

During the initial project phase, the funders established a management committee which was from within the community and these included people who were early adopters and benefited from the trainings NSTC provided. In this also, since the telecentre was also a community project, there was also leadership at sub county level who were also working hand in hand with the donors. At this point, all things seemed fine as most of the telecentre management was composed of few staff and the rest were volunteers who could also earn a commission for motivation. To strengthen leadership more, the donor and management at that time created Community Based facilitators and Local Management Committees who could reach out to the different communities they represented. But, when the project funding period elapsed, serious problems arose as regards who should continue with telecentre management. When the donors left, they handed over the project to Buwama Sub County since the overall philosophy of the project was a community project which meant leaving it in the hands of the leaders in the region. One of the former project manager (now a an ICT private business owner) said that; '*managing a project when the funders left was quite hard and the leaders at the sub county did not want us to continue with this management positions we had acquired and because things were moving on smoothly, this prompted me to resign to form a private ICT business centre to also provide similar services to the community'* This resignation according her resulted from the poor top administration at sub county level where each head wanted gains from telecentre returns and to her, this explains why the telecentre is no longer providing the basic ICT services to the community as planned.

Another avenue for unclarity in leadership is on the Local management Committees (LMCs). Before project handover to sub county administration, there were LMCs in the region who were elected in the different parishes to represent communities as regards ICT provisions and these could meet quarterly in a year. To the manager, these provided fruitful feedback but because they were facilitated by the project donors in terms of food and transport allowances, this motivated them to meeting communities and soliciting ideas as regards better service delivery. But, problems came in when the donors left, these started pulling out from such activities and to the manager, because they did not have funds to facilitate them like the donors did, there activities also ceased. This situation prompted the new sub county

management to form another LMC, but this time, formed within sub county administration. Here the politicians who are region heads like councillors are now the new LMCs and since they are paid centrally by the administration, these do not ask for facilitation money said the sub county head. But the question one can think of is whether they can really be effective like the earlier LMCs who were selected by the communities they belonged to and were in position to meet people on regular basis.

Actually, the modern LMCs, do not reach on ground, but rather, carry out a supervisory role as regards telecentre management and these then feedback into the central sub county meetings. From the field findings, one of the LMC said that '*I really see our roles as un clear and un realistic. The old LMC to me could work well but because I am a politician who would even be interested in more votes later on, I cannot stay in a strong position to question the sub county head who indeed at times accounts for telecentre mismanagement'*.
In an interview with one of the LMCs, this resistance in terms of LMC roles was observed. This LMC (member) during the interaction could not even listen to me because he did not want to hear anything about the telecentre activities. Further analysis found out that, since the modern LMCs are in charge of the telecentre and responsible for overseeing these activities, this to one of them was on paper and rather un practical. A case in point is when the project manager does not submit weekly reports to the new LMCs and even fails to account for the different finance allocations. The manager reports directly to the sub county head who one Local committee member said he does embezzle the telecentre funds. From the manager him self, the management on top at times is un considerate because at one point, money was passed into the sub county budget for telecentre maintenance and signed out but this did not reach the telecentre. The manager says he cannot also question his boss since he is just an employee in the project. The corruption and funds embezzlement is an issue here where it is those who stay in leading positions who use public funds for their personal gains. Because of un failure to account for this 'virtual money', the telecentre is no longer thought of and if it is, it will rather be an appendix. This is a big challenge and to the 'resistant' LMC, '*the manager and the sub county head embezzle telecentre finances which is rather killing it and we are soon burrying it'*. This depicts how once a strong and vibrant community project will soon tear into pieces and yet; the donors have just handed over the project to the sub county.

Also in telecentre operations, there is the manager and the assistant manger, and the rest are volunteers and interns who come and help in day to day operations of the telecentre. During the process of data collection, I realised that there was little self motivation and commitment

on part of these staff as they could open the telecentre late, the manger was off and on, and even the volunteers could come in and do their own things on the computers. But largely this might have been due to failures of the top administration in paying these workers and from the sub county head, the staff here were almost offering free services as these were not paid salaries for over six months; which really explains why the limited motivation. The assistant manager who used to broadcast telecentre activities on radio decided to stop because of lack of motivation which was indeed an issue during donor period. This unfavourable working climate also explains why the manager and his assistant are in most targeting the radio section because for the radio, people buy airtime which helps in its maintenance and also paying off some workers; but largely, the focus of most staff in telecentre is diverted more to the community radio because there at least some motivation. All this points to one thing; sustainability of the telecentre. This is analysed here under.

Funding and Support: a threat to Telecentre Sustainability?

'Telecentres' in the 1990s were formed on the basis of many publicly funded local ICT initiatives in providing "broadband islands" for local communities (Day and Harris in Gaved and Anderson 2006). As a characteristic feature, most of these telecentres reflected their local circumstances and in doing this, many were funded externally, and as public funding ran out, a large number struggled to survive or were forced to alter their priorities to survive (Gaved and Anderson 2006). This actually was the case with the Buwama Telecentre project and I conquer with Gaved and Anderson assertion that when exotic funding ceased, many were forced to alter their priorities in order to survive. By and large, such exogenous ICT funding have been criticised for providing only short term benefits to recipient communities; and yet, long term strategies are required to ensure rural transformation and the quality of life of participants (Devins, Darlow, Petrie and Burden 2003 in Gaved and Anderson 2006).

In the Buwama telecentre projects, government provided the funding from the start and later, the funders but this cannot sustainably continue because no project can be funded for ever; there has to be a clear exit strategy especially once funders fell people will be in position to manage their projects rightly. But as still Gaved and Anderson (2006) notes, considerable government funding available for the implementation of community initiatives usually is short term and here, the general expectation appears to be that the new community networks will somehow become self-supporting. And may be for the case of this telecentre, also the

funders felt that those communities will manage their projects and for a year exit, things in the telecentre are going astray. Key to note is the fact that in such external funding, for the case of Buwama telecentre project; some processes used by the funders depicted a degree of sustainability although the other rather killed the sustainability spirit. For example, the use of CBTs, LMCs, working hand in hand with local leadership, including the community as well as reliance on good will and volunteers from communities were sustainable aspects. Although ICT initiatives often depend on goodwill and volunteer support, and over exploitation of these resources may negatively impact upon a community (Simpson in Gaved and Anderson 2006). For example, most of the groomed volunteers have now set up private businesses and some have got highly paying jobs in city centres which indeed posses a challenge to man power sustainability.

Foth (in Gaved and Anderson 2006) assert that 'maintaining complex funding partnerships after the key funding has been withdrawn may require careful examination of what resources can be brought in to replace the key partner, and a critical consideration of whether enough social capital in terms of voluntary or in-kind support can replace capital funding: and that for an initiative to be sustained, the external initiators must aim to gradually withdraw and make themselves progressively redundant and encourage local activists to take over'. This is what Foth calls a 'devolutionary approach' that requires local engagement or alternate resourcing: where such initiatives require building local capacity and leadership and the development of social capital (Gaved and Anderson 2006). This step by step as emphasised by Foth is quite essential but the funders in this project did not consider this devolutionary approach and that is why when they left, even one including in the communities knew about it as every thing went on the stand still. This funding and support provided seemed helpful but the only challenge came in communities being in position to sustain such activities. And also some processes still depicted dependence like the provision of free internet services, provision of free secretarial services especially for the ICT project users and the constant facilitation of the CBTs and LMCs. For such a project to continue delivering, it requires extensive community awareness and local engagement in restating its intended plans and actions; if it has to continue being a community project.

Section 4: Telecentre Impact to the Rural Community

The basic aim of the study is to have an understanding of how the ICT project has impacted on rural lives. This impact is analysed in the broadest sense possible; in terms of social, economic and political. All this in view of ICT project; ever since its inception on how it has

changed rural communities and transformed peoples' lives. Also, for purposes of critical interpretation, the study here also got interested in the ICT non users and understanding whether there might be a difference between those who had acquired ICT related information and those who did not. An analysis of the community perception of the entire project could also state the project worth in the region as well as the challenges it faces.

4.4.1 Project Impact to rural livelihoods

By project impact; the study meant to find out ways in which the telecentre project in the region has changed peoples' livelihoods in the economic, social, and political circles. In the, tangible and intangible impacts were collected and basically, all the study respondents had myriads of ways in which they think the telecentre project has led to development in their rural community. As a way of capturing this information, the study found out that some beneficiaries were currently using the ICT knowledge in execution of their daily activities. Interviews and observation checklist were some of the instruments used in collecting this information as well as reviewing documentation in the ICT project as regards client participation.

The Economic Impacts

These economic impacts lie mostly at personal levels although the community at large also benefited from these newer technologies in the region. Such impacts entail aspects of business development, marketing and poverty eradication; which are in line with economic empowerment of rural people; a telecentre mission from the start. Almost all project funders and pioneers aimed at raising the economic status of the region through employing ICTs. The National Council of Science and Technology for example was interested in piloting the project as a way to reducing the poverty levels in the region. CEEWA Uganda through the Acacia projects focused on economic empowerment of rural women through ICTs which in principle imply that the key focus was economic upliftment. This therefore meant a different approach to economic development where the earlier practitioners thought it were basically the lack of integration of newer technologies in the region that led to underdevelopment especially for the case of rural communities; thus the need to pilot ICTs in Buwama region.

To begin with, most study respondents especially the ICT users/ beneficiaries acknowledged the economic upliftment accruing from telecentre activities at both individual and community levels. For example, many claimed that the telecentre activities have led to creation of employment opportunities right from its initial stages as all telecentre activities were basically targeting the locals in the region. The radio station staff, the telecentre staff and

even volunteers are from within the community and this to the sub county head was a great initiative in the region. This also points to project sustainability issues as the locals are trained and ably in position to manage telecentre activities. Also, from this engagement with telecentre activities, many locals have been in position to getting employment in other

> *With the trainings I acquired in the telecentre, I can now open a computer, type a letter and even print it. I can now place my self in the society of the knowledgeable now and in this modern society. Thanks to CEEWA Uganda*

modern city centres and to the telecentre manager, this is all because of their exposure in telecentre activities where they gained experience. So far, over seven former radio presenters and telecentre staff have been hired by other bigger firms in the city centres which he claimed was a result of the telecentre project in the region. Looking at this critically however, it can be deduced that these are getting employment else where may be because of the low motivation at the telecentre project in terms of poor remuneration and this to a smaller extent is not good for the project as it cannot sustain its staff in the region.

Also, the trainings acquired from the telecentre right from the start have increased on peoples understanding of the use of these ICTs. In this regard, the women thought it was a great achievement in their lives and in way, this has led to life transformation in their ways of doings things as they had hands on in using the computers. A woman in Mbizinnya parish felt the hands on in using the ICTs have led to great achievement in life and she had this to testify;

Because at the point of interview I did not have a computer to prove to her competence in doing this, I theoretically asked her the process of opening a computer and indeed she had knowledge about it. However, I later realised that the lady had literacy skills and ability to read and write even in English and that is why may be the process was a bit easier for her. This I would say was a rare case in the many I interviewed.

Through observation however, I found out that many had the knowledge but were not putting the knowledge to use in terms of applicability as regards to what they acquired in the telecentre. Few women for example were in position to explicitly state how they were applying the ICTs skills they had previously acquired; as for the rest, they just thought the knowledge and the exposure of using these ICTs was enough in their lives. Asking many why not the applicability; many claimed the lack of equipment in the telecentre, long distance especially those in far locations, congestion at telecentre premise, no internet present and

many felt the exit of CEEWA Uganda from telecentre activities led to them not using such skills. Most respondents attested to the fact that CEEWA Uganda was facilitating and when they left, telecentre activities became costly which meant them also stop using the ICT skills acquired. This in a way also point to the lack of sustainability thought by CEEWA Uganda as their services were in form of handouts to communities and this explains the slackness in service delivery the telecentre is currently facing.

Another impact where the community felt it was also resulting from telecentre activities was the business creation in the region. A decade back, it was only the telecentre providing the ICT activities in the region as well as in the neighbouring counties. But with piloting the ICT project in Buwama and also people understanding its importance to rural communities, many ICT related businesses have cropped up from ICT training centres to ICT shops selling computer related equipment. This to some people has improved on service delivery as the private businesses can manage their activities well compared to the telecentre. For example, the telecentre has spent months without internet but at least it is provided for by other ICT service providers in the region; thus a great vantage. This to a small extent, although an avenue for strengthening the ICT services in the region, it was another challenge the telecentre is currently facing. The manager for example noted that the creation of these newer businesses in the region has bred stiff competition as regards service delivery and he was relating their set back in terms of progress to the many ICT providers who have taken away their customers. However, the community on the other hand claimed that private ICT businesses are expensive and only for those who can afford but this to many; was also a challenge as they cannot sustain such ICT activities in milieus full of exploitations.

Also, another avenue of business creation is where some ICT beneficiaries through the training CEEWA Uganda provided managed to improve and create businesses. Many women have set up small scale businesses like cattle and poultry rearing, small restaurants and some retail shops and asking them the ICTs they basically used in managing these; they identified aspects of record keeping, use of mobile phones in searching for markets and also the radio which they use in advertising their products. But largely, they claimed only using the knowledge acquired through telecentre trainings as away to integrating ICT in development.
With the telecentre activities like the set up of the community radio and training in business development, many beneficiaries and even non ICT beneficiaries are now better placed in marketing their businesses. The training CEEWA Uganda provided led to many women gain confidence in marketing their products and they have learnt how to erase middlemen in their activities says the project manager. This search for markets has been facilitated by the use of

the community radio. The telecentre training helped them change attitudes to producing even for sell and the telecentre has a marketing programmes on radio where all those with products can advertise free of charge and this has also helped many women farm for markets. Also, those who were engaged in small businesses claimed the use of the community radio and also the mobile phones in finding better markets for their produce locally. This was a result of change of attitudes given the training provided which also encompassed attitudinal change on genetically modified products since majority thought such crops were dangerous to the soil nutrients and even lacked market. The telecentre trainings with the integration of ICT videos helped people change attitudes and this in way contributed to their improved farming methods and here, I personally observed some farms of the CEEWA members and how they had opted for modern farming methods. Before, when CEEWA Uganda was still on board, the d-grounps were also another avenue where CEEWA members could find out the different markets for their produce even amongst them selves but this to some women was not possible as many claimed the higher internet costs in the ICT private businesses which they could not afford.

The Social Impacts

By social impacts, the study meant looking at how the ICT project has enhanced improved social relations as regards interactions in communities and the whole aspect of social inclusion. From the study respondents, few of them managed to state the ways on how they feel the telecentre has impacted on their lives socially. By and large, majority claimed that the telecentre from the start led to improvement in the status of the rural community. In Mpigi district with its three counties, the Buwama region in Mawookota County managed to house the telecentre project and this in away boosted other economic activities in the region. The LC 3 chairperson claims that even the community centre offer from World vision was a result of the pilot project which attracted even tourists to see how the ICTs are integrated in rural communities. This also led to development of the centre where even lodging, accommodation and training facilities developed. So people started viewing the region in terms of growth compared to how it was before and the teacher in one of the schools said '*ICT services have come nearer to us in the region and cheaper for us the rural people*' which indeed is development'.

With the internet services provided for by the telecentre, on-line interactions where enhanced. CEEWA Uganda d-groups platform aided the process of virtual interactions where CEEWA members in the world and abroad could log on and interact with one another. This to many made learning interesting and to the Mbizinnya counsellor, this internet service helped people

learn as majority got interested. Here, people were able to get friends and even share opportunities and challenges online. This helped them getting new friends whom even came from far to looking at Buwama CEEWA members projects and too some, such bonds continued despite the no internet connectivity at the telecentre. This internet service engaged the youths in the region who would otherwise be idle. Many youths are always at the centre searching for new knowledge, chatting with others which helps in socialisation process. This has reduced the rudeness and permissiveness which would have been a problem in society.

- After training, I trained fellow women in issues like rearing local chicken, mixing chicken feeds, growing vegetable gardens, banana planting which knowledge I acquired at the telecentre and because of my good farming practices, CEEWA Uganda took me to train the public in good farming methods even Buwama radio. As also a prominent farmer, I was also taken to the city radio to pass on this knowledge to the public which in a way created confidence and even boosted my ways of doing things.

- Since togetherness is really a bond in such a rural community and communtarism high here unlike in towns as a CBT, I managed training groups of farmers in the region as regards better use of modern farming methods and in this, I gained confidence in what I was doing over time

- From these trainings, I am now a FAL instructor in the village and I also train people inmates in entrepreneurship skills. Being CBT was voluntary but I managed getting on ground to training people in the skills we had acquired. Training was basically in groups for my case.

The telecentre has also managed employing many youths which indeed is a great vantage. Parents especially those who were CEEWA members are taking their children to be trained in ICT skills at the telecentre at lower costs and those who cannot afford the high charges are helped.

Confidence building was also another opportunity that bred from telecentre trainings. Many study respondents acknowledge this that the knowledge acquisition took them a step ahead compared to those who did not attend such trainings. This to majority helped them ably mingle well in society and some claimed that such ICTs helped them gain experience and vast knowledge. To those who prospered and were chosen as good practices for communities to emulate the practices felt much more confident than ever before. Many Community Based Trainers and ICT beneficiaries had this to say;

- *Before project I had mud house, but now, I have a roofed house with bricks. In the trainings, they integrated animal rearing, and coffee growing. I use the acquired knowledge in managing my business like book keeping.*
- *Actually CEEWA helped me to reach where I am today. I am the only woman in the village to build a cemented house with bricks and the only one to own a boat in the region'. I can now pay school fees for my children…I am a single parent but all my children are studying*

Relatedily, some respondents claimed that this training was a platform for life long learning and for some women, the knowledge acquired here opened their eyes to attending further trainings in the region. Some newly cropping projects in the name of development mainly target the telecentre beneficiaries as these are already organised in groups and have some basic knowledge regarding development in their region. As a learning platform, schools have integrated the use of ICT in their routine activities like introducing it in the curriculum. Presently, some schools like Mitalamaria, Kawanda, Kanjako now own computers and integrate them in their teaching as a way to help the young generation also access the use of computers at an early age.

This view that trainings offered led to life long learning, to some respondents, their status have changed in the region. Life testimonies were given by some people and among others, the two respondents in Katebo parish had this to say;

Socially, the radio has contributed tremendously to the development of the region. The programmes broadcasted on air are all tailored to community needs. People are able to get news updates as regards what is happening in their region but also outside their locality. The radio has also been a platform where many business people have advertised and marketed their products; schools have also used the radio to reach to the community regarding particular events happening at lower costs. For strong social bonds, the community radio introduced a fans club where radio listeners come together to share ideas and even solicit finances to maintain the activities of the radio which also indirectly affect the centre as those who are fans the other side in one way or another are telecentre users. This has contributed to socialisation processes in the region as social gatherings are organised in form of parties and edutainments.

The Political Impacts

In the political impacts, the study identified ways on how the community feels the project has impacted on political activities in the region, ranging from leadership positions including elections activities.

By and large, most people agreed that in one way or another project had impacted on the community politically although not all people where in position to be political heads in the community. This however was a case with the trained community based facilitators by the telecentre project stood for councillorship positions where many managed win to the elections. This to the chairperson was as a result of the telecentre activities which has built capacities and strengthened their activities as CBTs in their respective communities. In the one of the FGDs, I managed to interact with some two CBTs who were currently political heads in the region. These felt that the telecentre trainings complemented their enlightenment and confidence in standing for the leadership positions because they were already exposed to the community.

Additionally, the trained CBTs by the telecentre have acted as focal persons in the region where newer development projects first target them given their exposure to development activities. The National Agriculture Advisory Department coordinator in kateebo parish was a former CBT in the region and still serves as the member of the Beach Management Committee in the region. This to him was as a result of the basic grounding provided in the telecentre by CEEWA Uganda activities.

The radio as an ICT has facilitated politicisation activities in the region. In here, during the elections periods for example; political leaders use the community radio to pass on their manifestos to the community which increases awareness in terms of information access. The political leaders who also want elections use the radio as campaigning medium which in a way makes the radio gain from such activities as all programmes aired out are paid for which helps in its sustainability. Also, the radio is also a good tool for civic education where the public are informed about current affairs and concerns and this keeps them abreast with relevant and current information: a crucial aspect in development communication.

4.4.2 Non ICT Users in the region

In understanding the impact of the project to rural livelihoods, the study thought to seek an understanding of those who were not using and the project facilities. This was to act as a control regarding whether those without the ICT skills are better off than those with the skills or the reverse.

- *I have no money to attend the classes since those who attend have money for trainings.*
- *I did not know what was going on in the community centre because the place is fenced and quite enclosed; I just got to enter the place on the youth day. The place is indeed scaring; only for the educated I think*
- *We men have busy schedules and this makes us unable to attend*
- *When the project started, focus was on women and this left me out*
- *I am un educated without basic literacy skills*
- *Access to the telecentre is only by a few individuals and leaders*
- *Thought this was an avenue for only community gathering and at that note, only for leaders and the educated ones in the region.*
- *Community awareness for these trainings did not reach all locations in the region especially us in far parishes*

From the study findings, twenty respondents were interviewed of which fifteen were men and five women and this unequal distribution was as a result of the first project target when especially women were motivated to join project activities and were highly motivated. To the project manager therefore, men although later called upon to joining the telecentre activities, most of them still did not join. This therefore takes us to the issue of why the non participation. In answering this question, the study equally distributed people including those in parishes nearest to the telecentre and those from parishes far away from the telecentre. Below is the summary of the findings regarding non participation in ICT activities.

But, quite majority acknowledged that those who had attended the ICT skills were far better off than them as these are now competent and even society recognises them as knowledgeable. Many asked for the second chance in case the opportunity comes back again for being trained freely. However, there people who claimed the lack of time for attending such activities like for men in private businesses felt that they needed to provide for their families and that it were basically women who had that time since men provided for them; but them as men cannot afford to sparing time for such trainings. Also some women

especially those with children felt they would be interested in attending but their family chaos could not allow them in attending such training and that even the training were scheduled on days un convenient to them. But, by and large, they claimed to also understand the importance of these ICT trainings and that other women who had been trained are far better than them. Some women also claimed the lack of favourable training climate especially at their home since some men cannot allow them leave homes and that if they leave, no money will be given to them for up keep.

4.4.3 Project Perception in the region.

The biggest percentage of the respondents especially the ICT beneficiaries claimed the project to have helped the community greatly especially with the provision of the community radio and the cheaper computer services and facilities provided compared to the private businesses. Even the ICT non users claimed the telecentre services to being tailored to community needs and requirements. People in this case perceive the project as a community initiative geared to helping all. But, some men felt it was unfair for the project in the name of CEEWA Uganda; to take on a different twist to only supporting women which suffocated men minds. Also, many claimed that the project was beneficial to the entire community especially with regard to the provision of cheaper services but this is no longer the case as most equipment is un functional and also, the introduction of charges for telecentre services showed many the exit door for not using the telecentre again.

4.4.4 Project Challenges

It being a rural setting, there are myriads of challenges the telecentre experiences and some of these accrue from the telecentre management while as the rest are operational challenges partly responsible for why the centre activities are deteriorating in the community and the private businesses taking on the lead in providing such services to the communities.

Management Challenges

These are challenges accruing from telecentre mismanagement and often time it is the people in controlling positions that bring about some of these challenges.

Firstly, the un clear hierarchy at the telecentre from the start has presented a big challenge to its management. From one of the ICT business owner; the former telecentre manager, the lack of clear structure at the sub county level led to the down fall of the telecentre. The sub county for example has a management committees, the telecentre also has a management committee. These keep having deviant demands on the telecentre staff which cause frequent commotions says the project manager.

Operational Challenges

These are challenges which include aspects which stop the telecentre form operating successful although some are part and parcel of the management challenges. First and fore most, the challenges here are largely resulting from the overly dependence of the project on donations and funding from organisations within and outside the country. This support was not largely unhelpful but; the providers and project management failed to think about project sustainability details and this meant that; in all their provisions, less focus was not put on the future life of the project. This to date is a biggest challenge and said the manager that also just co-opted the trends as he was not part of the first project management team. This failure to focus on sustainability of the project is partly responsible for the many operations problems the project is currently facing. The lack of new equipment and failure to repair the spoilt ones, the electricity problems where road shedding is constant, lack of the generator, frequent servicing of the machines like photocopiers, no internet, the learners keep spoiling the equipment, few customers because people fear the centre, few Computers, TV no longer works for now two years, donors completely left the project, low people and staff motivation in the project.

4.5 Summary

This study to understand the role of ICT in community rural development was premised on the fact that ICT is a panacea to development and not development in its self. In this I meant that ICT can be used as a tool to fostering economic-social development and just like Harindranath and Sein (2007) asserts, ICT can be viewed as a tool and vehicle to development where ICT is conceptualised as a technical entity, and a means to achieving something. And largely in this view of ICT as a tool, ICTs become drivers in the economy in achieving development.

The findings demonstrated in this section depict the extent to which communities felt the ICT project has impacted and changed their lives. These impacts were categorised socially, politically, and economically. Dymond and Oestmann (2002: 48) explain some of the socio-economic impacts which accrue as a result of ICT projects especially to the local communities to include the benefits from ICT projects inform of ‘consumer surpluses’, over and above the price paid for ICT services. Also, Mulira (2007) asserts that Community-driven ICT projects offer a potential solution for addressing rural connectivity taking advantage of new wireless and other technologies that enable cost-effective mechanisms for

reaching out in areas with limited infrastructure; the case with Buwama telecentre. All this is in view of ICT availing positive impacts to rural livelihoods.

Applicability of ICT to Daily Activities

The findings demonstrated that all the ICT beneficiaries from the telecentre project at one point acquired the knowledge and skills in using these ICTs. Different avenues were used by the project team to avail such knowledge to the community. For such a study to understand the meaningfulness of the project to their lives, interest was also put in what ICTs specifically they were employing in their daily activities. And to a large extent, few people were really putting the acquired knowledge to use and even those who could state for example using the knowledge and skills gains, superficial integration was observed. And yet for ICTs to really be meaningful and developmental, people have to be in position to using the acquired skills. This is what Heeks (2008) calls uptake: the ability of the people implementing and applying the ICTs to make it meaningful in their lives.

By and large, the mobile phones, and the radio were the key things majority felt they were employing in their businesses and these where convinced that this was really helping. But quite majority also acknowledged the costs involved in putting the ICT knowledge to use as many claimed the lack of electricity and even money to buy the necessary equipment. Those who were also trained in business development on how ICT can help them are no longer using the knowledge because of lack of capital for business start up, but also sustaining these businesses. This poses a challenge to such ICT projects which indeed require mega investing in such communities but when people cannot cope up in especially appreciating and implementing the ideas development, it throw a big challenge to development work and an issue of resource wastage.

Strength of the Community Radio

Lynch (2005) believes that spread of mass media has resulted in to further blurring of the difference between towns and country side and even; development of small scale broadcasting equipment has resulted into proliferation of many the FM stations, the case with Buwama community radio.

The birth of the community radio as one of the telecentre project was really a serious venture the project team thought of. Field findings demonstrated that the community radio was the most reknowned and used ICT in the region where at least majority could access, both project beneficiaries and non project beneficiaries; as this reaches out to the entire sub county. This might be the case because for long, the radio as a medium of broadcasting has been widely

adopted even in rural communities given its affordability and accessibility which has led to the integration of local content in the different provisions (Lynch 2005). In line with this, in Buwama region for example, the programs on this community radio are tailor made and inclusive where there is high community involvement at all levels right from information collection to broadcasting.

The radio has helped the community through advertising, educating, entertaining and informing. Business development, religion, cultural and political platforms are aspect the radio targets. This can relate to the issues of affordability of ICT especially for rural communities because, many people had radios and them being cheap on market; majority can access unlike the other ICTs in the project where to access you have to come to the community centre. However, although accessibility has been made possible with the provision of the cheaper technologies as Lynch asserts, the community radio in the region still had challenges with especially the lack unclear and absence of signals in some parishes, threats for other city radio stations for blocking their frequencies in the region; but by and large, the community appreciated the service provided by the community radio.

The Vantage of online Interactions

Social capital puts the support of social networking aided by ICT family there by emphasizing the significant opportunities offered by a new generation of increasingly popular ICT-led social networking tools and platforms. For example, to Zinnbauer (2007), ICTs are found to enable individuals to thicken existing ties and generate new ones; for example, the mobile phones or email, are used to stay better in touch with close friends and family members, making it possible to retain close communication while meeting increased demands for mobility, and through enabling tele-working arrangements. From the findings, the community appreciated the use of d-groups an online platform which was availed by the telecentre in especially connecting telecentre projects and even individuals with in each project. This to the participant was rather an interesting learning process and many acknowledged its strengths in connecting people in various locations. One participant for example said that ‘the d-groups were really interesting. And to Zinnbauer (2007),

> *“ICT in the form of interest-oriented online discussion groups or networking spaces come in handy to develop more new ties to like-minded people in what are looser, more fluid, differentiated, interest-based, elective and far-flung networks for a wide variety of purposes, including professional skill and career networks, common hobbies and socializing or self-help groups to cope with specific problems”.*

In line with this thinking, Norris (2003) also believes that the participation in online groups is likely to strengthen social bonds among those within homogeneous interests and backgrounds. The above quotation highly depict what was in the telecentre as communities where really amused by the d-group platform with especially the Buwama telecentre ICT users. However, since such platforms require constant support and updating of the different fora; this service is no longer provided at the telecentre because the modems used as internet were no longer functioning and even the cost in maintaining such services was rather high. The women started getting demotivated with no internet connectivity and many felt learning and consultation was now impossible.

Community spirit: A cost to the Telecentre

Rural communities are known for their strong bonds and ties and to Gaved & Anderson (2006), such grass root communities with the history of community cooperation and strong local ties are communities that are rich in strong bonding capital. This is because; a high level of bonding capital is viewed as a strong attribute to healthy neighbourhoods enabling support of individuals and the development of the entire community. For this case, the Buwama region being a rural area still presents bonds which social capital agitates for as essential component in reaching a common goal in such communities. From the study findings, because the telecentre management basically employs staff and volunteers from with in the community, this aspect of community togetherness was rather destructive to the telecentre. Although such relationships are vital in communities, for ICTs maintenance and sustainability; this becomes a challenge. The finding demonstrated that the project team at particular points over compromised with the ICT users in just providing the services for free. And from the respondents them selves, many claimed that the manager and some staff were good in that, whenever you could not afford the services on the humanitarian basis, they would just freely help in whether trainings or doing secretarial services. This point to the aspect of sustainability because since the funders left, the telecentre relies on its little gains from the community but with this community spirit sweeping across, it puts the telecentre at stake in especially sustainability arrangements. This also shows how social capital can really provide unhealthy practices and over tolerance in the case of this ICT project.

Telecentre and the Multiplier Effect

By telecentre and the multiplier effect I mean, the initiation of the telecentre project and the effects it avails to the entire community. From its inception, the telecentre has led to growth, establishment and performance of numerous activities in the region. The basic role of the telecentre was to reach out to fighting rural poverty through sharing, exchange, and dissemination of information as a way to stimulate rural development. This was through providing access and promoting application of modern information communication technologies, learning resources and indigenous knowledge to stimulate and build local capacity for sustainable rural development. Here the telecentre bred the creation of the community centre structure which houses the community library, accommodation facilities and the training room as well as the telecentre. From the manager, it was a result of the telecentre that World vision Uganda the donor provided a building which counts to infrastructural growth in the region which has attracted many agencies in hiring the premise. From the LC 3 chairperson, this community centre turned the Buwama region from a completely rural area to now a semi rural-urban region. This has helped in the upliftment of the region since this building is strategic and meets the basic intellectual standards.

Relatedily, from the trainings provided by the ICT beneficiaries, quite many managed to set up small business although some failed along the way due to limited and dwindling capital. Many women are managing small businesses, poultry keeping, growing for sale, as well being able to market their produce using mobile phones and the radio; but also social bonds that were created in the trainings. This again depicts another avenue where social capital is viewed as an enabled opportunity for ICTs because, such people in marketing their produce not only rely on the ICTs, but rather on the social ties created. And as Balatti and Falk (2002) put it, social capital describes the resources that are made available to individuals or groups by virtues of networks and associated norms and trust.

Another effect the telecentre bred was the creation of many other ICT related business in the region. This from the manager was a challenge as it led to competition in service delivery but on the other continuum, quite a development in the region. Currently, there are many businesses that have evolved like ICT business centres, internet kiosks, mobile money centres, computer selling maintenance and repair, as well as electronics shops.

This to some people has improved on service delivery as the private businesses can manage their activities well compared to the telecentre. For example, the telecentre has spent months without internet but at least it is provided for by other ICT service providers in the region;

thus a great vantage. This to a small extent, although an avenue for strengthening the ICT services in the region, it becomes a threat to the telecentre. The manager for example noted that the creation of these newer businesses in the region has bred stiff competition.

Diverse Telecentre Perceptions

For such a community project that has been in existence for a decade now, one might assume that all people understand what the telecentre provides. From the study findings, some people in the region (especially those closer) to the telecentre did not really understand what the centre was doing in the community. For some, it was basically a community radio as this is what they listen to and does not require moving to the telecentre premise. The non ICT users for example knew the aspect of the community centre but not the telecentre and here, many thought it was a rather a place of community gatherings, trainings and functions. This aspect relates to the trio-location of the telecentre where the community centre is a three in one (telecentre, community library and training centre). This also limits those who would access the technologies to miss out and yet; for such a rural community, one would feel that the presence of community ties could be of help. However, some ICT non users surprising knew what ever the telecentre was providing and related the un participation to the costs involved and also the time to take on such trainings, and yet some of them claimed that the CBTs did not reach them and even some pointed to the issue of lack of literacy skills; as criteria for selection.

Another different opinion stems from the aspect of target group as the men in the region especially felt that the telecentre was for the women with motivational packages given to them by CEEWA Uganda. This unclarity on part of the community is a threat to social capital and actually created groups like the men who have chose to leave the project activities exclusively for women. Gaved and Anderson (2006) assert that bonding social capita can provide a platform where some groups in the region can intentionally block the selves in the indulgence for some developmental activities in the region; the case with men in Buwama region who believe that despite the telecenter project providing developmental opportunities, they still feel that such activities are feminine and that they do not really have time to attend even to trainings organised. This in away blocks even sustainability issues of the project which the sustainability livelihood frames agitates for that; holistic development involving all in societies is key to sustainable projects.

CHAPTER FIVE: Conclusions and Recommendations

6.1 Introduction

This chapter presents the Conclusions and Recommendations, which are based on the findings of the study in line with the research objectives. The conclusions involve a summary of the most significant issues and their perceived implications as found out in the study. The recommendations on the other hand are proposed purposely for enhancing the role of ICT in Buwama Multimedia Community project in Buwama region; Mpigi District.

6.2 Conclusions

Community rural development has been at the heart of many Developing countries in trying to close the divides that exist between rural and urban populations. And among the many strategies used to reach out to such communities is the use of ICT in service delivery to achieving equitable development. In this regard, the Uganda government adopted the telecentre model in reaching out to such communities since the centre had to work like a satellite to extending the ICT services availed to various communities like the case with Buwama Community development project in Mpigi district. For this study, the main objective was to explore the role of ICT in community rural development with a critical look at how the project is meeting community needs. Much focus analysed people's perception of the project and a great extent of identifying the management strategies to ensure project sustainability. This conclusive section largely looks at the ICT project and community involvement, the management and sustainability strategies in the ICT project and the benefits of the project to the rural community.

ICT project and Community Involvement

Developmental projects become sustainable when they involve communities at all levels with out segregation based on ranks in societies. In the ICT project initiation and implementation phase, community involvement was minimal to some categories of the population like the lay community members without ranks in societies. But, the local leaders where highly involved in the different project activities. Most study respondents acknowledged that their involvement was limited to awareness creation and in this; the project initiators used the leaders who had been inculcated in the ways the project operate and how to help communities accept the project in the region. This can result from the fact that ICTs are technical fields and especially to rural communities with limited specialities where they did not have capacity

to input and, I personally feel that although ICTs have some technicalities in them, we cannot desist from the factor of involving all stakeholders in the design and implementation of the project. Here, I am in support of Heeks (2008) view that we need a different view of the world poor to also participate in their own development be it technical. But by and large, this ICT project involved few people and most consultations were in form of awareness creation and the region being composed of the rural poor, they had no option to choosing from but rather accepting whatever the leaders were proposing will lead to development in the region which actually throws a big challenge to future development work.

Management and sustainability strategies in the ICT project

Management of any development project is quite important for the success of all development projects. In the Buwama ICT project, there were management challenges some of which bred from lack of clear telecentre management structures. At several occasions, most leaders in the telecentre had wrangles within and amongst them selves which signalled a challenge to telecentre operations. The chains of leadership were not clearly streamlined right from the project inception phase where the funders relegated much power to the community and yet after their exit, the project was handed over to the Sub County administration.

Also, the community reliance on donor support threw a challenge to sustainability of the telecentre. For example, most installed equipment are defunct and management is not in position to rectify the problems because the funders availed all the necessary support which was quite paramount for such a rural project. But, I largely desist from the approach they used to winning community participation in the project. For example, they provided free services to the community like using internet, printing, photocopying as well as type setting. This ‘handout spirit’ the funders initiated in the community is currently a challenge to the present management as it is trying to change that dependence spirit the funders initiated in the community. As discussed in the previous chapter, the present management have limited catchments because they are changing the service delivery approaches which were rather unsustainable for the community given the limited resources currently available in managing the telecentre.

Even the community outreach centres and notice boards are not operational because of the lack of motivation for both staff and local leaders who used to be facilitated during project funding. This explains why the currently ICT project management is grappling on how to continue with telecentre operations in the region because almost everything went on the stand

still when donor support ceased. This therefore calls for proper mainstreaming of sustianabilities in such rural project because at present, even the ICT beneficiaries got to know that their funder left and that nothing is going on in the telecentre unlike the well installed infrastructures for the telecentre.

Mutual project benefits to the community

The findings and discussions in the previous section has highlighted how the ICT project has impacted on the community despite the management and sustainability challenges the project is currently facing. Among the key impacts is the ability of some community members being in position to use the ICT skills acquired from the project. For example, some respondents acknowledged the role of CEEWA Uganda in teaching them ICT on how to create and manage their businesses. The ICT beneficiaries (although not all) cited the aspect of being in position to using computers and even using mobile phones, and the use radio in finding out markets details. Also d-groups platform where the community could access internet and share amongst themselves was a good avenue that helped not only in learning but also in socialising: which is social capital where informal interactions whether on line or direct face to face facilitated the process of learning as well as socialisation.

Also various ICT centres have been introduced in the region where those who formally worked and were trained in the telecentre project copied the good practices herein and are now extending the similar services to the community and quite important here is that since the telecentre has challenges presently where most equipment are not functional, such ICT points have extended services to the community which in general gives the community members opportunities to choose from and through observations, such private centres were well equipped with all the necessary equipment installed and actually attracted many community members.

Key in this impact is the ability of the telecentre project collaborating and networking with other organisations in the region. For example, CEEWA Uganda joined the telecentre project in the need to extend ICTs to rural women for economic empowerment and it was only through collaboration that this was accomplished. This strong network can be witnessed by project beneficiaries' narrations as discussed in the previous section. But, such networks need to be streamlined well for host organisation not to lose focus; for example, because CEEWA Uganda targeted women, it used massive sensitisation to involving these women which was a challenge to the telecentre because its mandate was to reach out to the whole community but CEEWA brought in another perspective on how the community perceive the project and to

some non participants in the project especially the men; they felt the project only targeted women and not them.

6.3 Recommendations

Research findings and discussion indicate that there are efforts by the sub county administration and the telecentre project to continue with its mandate of reaching out to all people in the Buwama region through employing ICTs, but there are aspects I feel can be worked on which will require immediate action if the telecentre project is to stick to its rationale in the community. These recommendations here under are critically reflective of the literature reviewed, theoretical concepts, development management concerns and the research findings.

By and large, despite the challenges the telecentre is currently facing, to some extent, the community has benefited from the telecentre observed in the life testimonies of ICT beneficiaries being in position to market their products, set up and manage businesses, and more importantly the benefits of the community radio whose catchments stretches even further to other communities. To many community members, this radio has helped in broadcasting news, advertising their products, socialising the community through the radio fans club, educating and creating awareness on civic and other relevant development going on not only in their region but also in the country at large. More importantly is the confidence attained by the ICT beneficiaries in the project; majority being women who were strongly empowered especially with the support of CEEWA Uganda. Important to note is the fact that the generation that witnessed the above benefits from the telecentre was a generation that used the telecentre services in between 1998 – 2006 when especially the donors were still funding the project. But when their contract ceased, the project started witnessing several challenges from management to sustainability of telecentre activities and this explains the fact that the present generation has not yet benefited from the telecentre operations and yet development projects need to be sustainable to even reaching out to the future generation.

Today, the sustainable development agenda gives us an insight to not only looking at development projects with short term benefits but rather focusing on the longer term benefits as the latter becomes sustainable and even reduces on wastage of resources. In here, there is also an aspect of not only focusing on the present generation but also on the future. In Buwama region, there are many ICT non users most of which are in the youthful age brackets (17-28) and presently, majority are willing to participate in telecentre provisions but with the

dwindling support and constrain of resources, this might be a nightmare for them. It is therefore from this background that I strongly advocate for revitalising telecentre activities to also reach out to the present generation in the region but this will require a transformative approach to be adopted by the officials right from management to change of community perception and attitudes on how they view their own development in the region.

In terms of telecentre management, there was a clear disagreement over the management of the telecentre project since the chains and lines of administration are not clear. The sub county top administration in charge of telecentre management has gaps where officials them selves fail to account for telecentre financial position and even the present local management committee in charge of telecentre operations at sub county level is not in good terms with telecentre administration like the managers; which actually throws a big challenge to telecentre operations. Therefore, there is need for clearly streamlining roles of all those involved in telecentre management and administration to avoid clash of interests as this will reduce on commotions and also smoothen proper working relations in the entire project.

Close attention should be put on how to sustainably manage the telecentre and revitalise all the installed equipment to ensure that the centre also reaches out to the current generation. Presently, most equipment installed during donor support are defunct due to the lack of finances in servicing them and also the lack of competent technician to manage centre equipment. Even the internet installed is no longer functional and yet communities often times access such ICT centre to get on line and research on key areas of interest. The services at the centre actually frustrates even the community because at times they come from far to access such services but when they reach; most services are unavailable which has actually made many people go in for private ICT providers who are too costly for the community as many claimed. Therefore, there is need to apportion some money by the sub county administration and adhere to what they propose in the budgets to aid such activities. Often times the sub county plans for telecentre finances in budgets but when it comes to funds distributions, telecentre activities are appended and not considered as paramount for the community.

Also, writing fundable proposals to organisations that can help in providing and servicing the equipment can be of great help and actually this was a proposition by many telecentre officials on how to solicit for more support and funding. Although this seem a dependence strategy which can actually lead to telecentre collapse once again; I highly feel that such

support is necessary to support such a rural ICT centre but there is need to plan the donor exit strategy in a step by step progression for host communities to learn coping . And important to note is the fact that the telecentre is situated in a rural community where people cannot revitalise the telecentre on their own as they need some support to cling on.

Also as revenue, there is need to charge a fee from those members currently using the telecentre to ensure sustainability in its provisions. But this will not be obvious as stated in writing for such a rural community where past donor support created the atmosphere of giving 'handouts' to this community. Adquate sensitisation has to be carried out by informing the community about the different services at the telecentre and also instilling in people the spirit of project ownership. This can be done through massive sensitisation and here, the community radio can be of great use since its catchments is quite big and here; programs can be organised to help people appreciate their own community project and even be in position to supporting it.

There is need to strongly emphasise social capital platforms since such a rural community is a good resource to informal networks which the telecentre can employ in extending the services to many. This is because the telecentre being far from most villages in the parish, putting emphasis on avenues were people can get together is paramount as this can support the community in acquisition of skills. And also social capital is known for being an avenue where people can informally meet and learn new knowledge. This therefore calls for the revitalisation of online interactions to allow communities share resources within and amongst them selves.

Relatedily, for such ICT projects to ensure that communities are really coping follow-up strategies need to be adopted and also ways of outreach to the communities far from the telecentre premise need to be thought of. Here, a clear strategy has to be laid that incorporates key local centres where those trained with ICT skills can continue practicing to ensure applicability of the attained skills. This actually was a thought of many ICT users in far locations who had challenges in practicing what was taught.

Also as another strategy to reach out to many in the parish, there is need to incorporating ICT programs on Buwama community radio especially for those in far locations to benefit. Through observation, many people in the region where listeners of the community radio and this makes it a suited avenue to also reaching the community as regards ICT sensitisations. But since the community radio has challenges of signal apportioning, management can also

think of ways of way on how to strengthen the transmitter in order to get constant radio signals especially for those extremely far from the telecentre. This will also allow them to access information as regards ICTs and other issues broadcasted.

Networking and collaborations are quite paramount especially for projects carrying out similar agendas as this limits duplication of services availed to communities as well as reducing costs. The telecentre project has networked with several of these organisations but at one point, it failed to stick to its mandate in the community and the collaborating organisation seemingly emphasised their agenda at the cost of the telecentre. This was a case where CEEWA Uganda came in with women emancipation through ICTs and because of its strength and finance, the telecentre in away lost is focus and continued preaching women emancipation. This actually explains why the community feels the telecentre was for only women in the region and not the entire community; and this calls for proper sensitisation to changing this perception. Therefore, future collaborations need to be clearly thought of to avoid shadowing the mandates of the host organisation.

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Appendices

A. Semi structured interview Guides

General Questions

1. What are the ICT community related needs in the area?
2. What is your understanding of ICT in general?
3. What kinds of ICTs do people engage in the area?
4. What kinds of ICTs does the Buwama ICT project provide to the people in the area?
5. What management strategies are in place to ensure project sustainability?
6. What is the role of ICT in rural community development (social, political, economic, etc)
7. What is your view as regards the project in the area? And in your opinion is it leading to development in the region? If so, what kind of development?

Key Informants from ICT Ministry or ICT department at district level

1. Are you aware of the role of ICT in community rural development? If so, explain this role
2. How has the ministry/local government tried to integrate ICT facilities especially in rural areas?
3. Are you aware of any organisational initiatives in your region (both government and non-government) spearheading the ICT integration activities in rural communities? If so, what are some of these organisations and what ICTs do they provide to such communities?
4. Are you aware of the Buwama multi media community ICT project? If so, what specific activities do you feel it provides to such a community?
5. What is this project relationship with your office?
6. What services is your office availing to such organisations to ensure that it strategically addresses peoples' needs?
7. Are there any policy/services in place (both at local and national levels) which are in place to ensure that such projects reaches out to its beneficiaries?
8. Do you feel such projects are helping people to improve on their livelihoods (socially, politically, economically, etc)?
9. Are there any suggestions you would like to put forward for government, people and ICT organisations to reach a national goals of rural development? If so, state them

10. In general, how do you feel ICT can successfully be implemented in rural communities?

Key Informants from ICT project

1. What is/was the rationale behind this project establishment in such a rural community?
2. Which ICTs do you specifically avail to these people and why?
3. What is the coverage and scope of the project?
4. How are the local people involved/participate in the design and management plus implementation of this project in the area?
5. What categories of people do you recruit in the project and how is this recruitment process?
6. How do you manage to sustain and continue with the project in this rural community?
7. Are there any management strategies you face in availing ICTs in such a community?
8. What mechanisms are used by the project to avail, train and sensitise people as regards ICT related issues?
9. How do you feel the project has impacted on the lives of the rural people? Socially, politically, economically, etc)?
10. Are there any project strategies to follow up people in their activities to see whether the ICTs are implemented in their daily lives?
11. Are there non-ICT project beneficiaries in the area? And if so, why do you think such people never joined the project?

Local Leaders

1. Do you feel the project is helping the community in your area: why?
2. How do you meet the people to get their ideas as regards any new development in the area (ICT project inclusive)?
3. Have you ever been consulted by the project officials as regards this development? And consultation in which way?
4. To what extent where/are the local people involved in the design and implementation of this project in the area? And specifically which groups of people?
5. What do you feel other people view the project in the area?
6. Do all people participate in this ICT project? If so, how many and if no, why?

7. What tangible impact do you feel the project has brought in your area?

8. What nature of relationship do you have between the project officials and the local leadership in the area?

ICT project Users

1. How do you understand ICT and the Buwama ICT project in the area?

2. What are the ICT related community needs in this area?

3. What ICT activities do you engage in, and how are they meaningful to your lives?

4. Where you involved in the project design and implementation process? And if so, how?

5. What contributions do you make towards the project to ensure that it moves on sustainabily with its activities?

6. What project activities to do you engage in, and how have that improved your lives?

7. What change have you witnessed in your lives ever since you became a project beneficiaries?

8. Are there any people who are not in the project and yet; they are your neighbours, friends and relatives? And why do you think they are not part of the ICT project?

9. Are there any challenges you face in trying to implement ICT related activities availed by the ICT project?

10. Are there any suggestions you would live to put forward as regards this development in the region?

ICT non-project users

1. What is your understanding of ICT in general incase you have ever heard about the concept?

2. Are there any ICT related needs you have in this region?

3. What activities do you engage in to sustain your lives daily?

4. Do you have any knowledge as regards the Buwama multi media ICT project in this area?

5. Do you know of any activities the project avails to the people in the region; and if so, what are these activities?

6. Why are you a non-project beneficiary?

7. Are you aware of any management criteria the project uses to select those to benefit from it?

8. Are you aware of any ICT related activities people in the project engage in? If so, what are these activities?

9. In case of any second chance, would you become a project beneficiary? If yes, why and if no, why?

10. In terms of improvement in livelihoods, is there a difference between you the non-project users and the project beneficiary?

11. What do you feel are the general perception of the local people as regards this project in the region?

12. Are there any challenges you feel both the project and its users are facing in the area?

B. Focused Group Discussion Guides

ICT project beneficiaries

1. How do you understand ICT and the Buwama ICT project in the area?

2. What are the ICT related community needs in this area?

3. What ICT activities do you engage in, and how are they meaningful to your lives?

4. Where you involved in the project design and implementation process? And if so, how?

5. What contributions do you make towards the project to ensure that it moves on sustainabily with its activities?

6. What project activities to do you engage in, and how have that improved your lives?

7. What change have you witnessed in your lives ever since you became a project beneficiaries?

8. Are there any people who are not in the project and yet; they are your neighbours, friends and relatives? And why do you think they are not part of the ICT project?

9. Are there any challenges you face in trying to implement ICT related activities availed by the ICT project?

10. Are there any suggestions you would live to put forward as regards this development in the region?

Key Informants from ICT project

1. What is/was the rationale behind this project establishment in such a rural community?

2. Which ICTs do you specifically avail to these people and why?

3. What is the coverage and scope of the project?

4. How are the local people involved/participate in the design and management plus implementation of this project in the area?

5. What categories of people do you recruit in the project and how is this recruitment process?

6. How do you manage to sustain and continue with the project in this rural community?

7. Are there any management strategies you face in availing ICTs in such a community?

8. What mechanisms are used by the project to avail, train and sensitise people as regards ICT related issues?

9. How do you feel the project has impacted on the lives of the rural people? Socially, politically, economically, etc)?

10. Are there any project strategies to follow up people in their activities to see whether the ICTs are implemented in their daily lives?

11. Are there non-ICT project beneficiaries in the area? And if so, why do you think such people never joined the project?

ICT non-project users

1. What is your understanding of ICT in general incase you have ever heard about the concept?

2. Are there any ICT related needs you have in this region?

3. What activities do you engage in to sustain your lives daily?

4. Do you have any knowledge as regards the Buwama multi media ICT project in this area?

5. Do you know of any activities the project avails to the people in the region; and if so, what are these activities?

6. Why are you a non-project beneficiary?

7. Are you aware of any management criteria the project uses to select those to benefit from it?

8. Are you aware of any ICT related activities people in the project engage in? If so, what are these activities?

9. In case of any second chance, would you become a project beneficiary? If yes, why and if no, why?

10. In terms of improvement in livelihoods, is there a difference between you the non-project users and the project beneficiary?

11. What do you feel are the general perception of the local people as regards this project in the region?

12. Are there any challenges you feel both the project and its users are facing in the area?

C. Observation checklist

1. ICT facilities in the project
2. People using the ICT facilities
3. Nature of ICT activities
4. Economic activities in the region
5. Methods on how the project ensures its sustainability
6. Nature of literacy levels in the region
7. Peoples' attitudes towards the project
8. Challenges facing the project in the region
9. Local infrastructures available

D. The Buwama Telecentre Design Model