

ASSESSMENT OF ICT APPLICATIONS IN SAVINGS AND CREDIT CO-OPERATIVE SOCIETIES (SACCOS): A CASE OF SELECTED SACCOS IN DODOMA AND SINGIDA REGIONS

By Athuman Mustapha, Zainabu Komba and George Sizya



Abstract

A Co-operative society is a community organization formed by joint effort voluntarily by people of the same objectives. Its agenda is usually based on locally determined proposals whose aims are to empower citizens to realize their socio-cultural and economic capacities using locally available resources.

Information and Communication Technology (ICT) is used to refer to infrastructure and product development that facilitate the collecting, storing and analysis of information that may be transmitted electronically.

The viability of ICT for the improvement of human livelihoods is an idea that needs no overemphasis. The potential of ICT in the enhancement of co-operative societies' lives is human-given and is yet to be fully realized generally in developing countries' co-operatives and Tanzania in particular. This being the case, this study has identified the problem in the realization of the power of ICT in co-operative societies, like savings and credit co-operative societies (SACCOS), being the inability of the majority of the leaders and members to realize the roles they need to play in promoting co-operative development.

This research is primarily concerned with the discovery and analysis of the effects of ICT applications in Tanzania's co-operative societies. It is specifically

concerned with the question of what has been the contribution of ICT to SACCOS' development.

The research was conducted in Singida and Dodoma regions as the case study basing on nine (9) SACCOS. Focus group discussion, interview, observation and documentary review were the methodologies used to gather data. Both qualitative and quantitative approach methods of data analysis were used in order to increase clear understanding of different variables. The data obtained became the bases for analysis.

The uses of ICT in co-operative management practices are essential for 'entry ticket' to promoting co-operative development in Tanzania, Singida and Dodoma in particular. Restructuring co-operative plans to have updated information, reduced duplication work, dependence on manual information processing and storage can largely accelerate the SACCOS development. ICT can facilitate the development of co-operatives by providing easy access to market, understanding of distribution system, exposure to global market, improved information flows and communication services, and improved strategy for education and training.

The research shows that there is misuse and/or underutilization of ICT equipment and services regardless its availability. This has led to many SACCOS to underperform in some critical areas which have caused their development stagnancy.

The study has shown the importance of ICT as a powerful tool in the development of co-operative institutions (SACCOS) in order to enhance performance.

Lastly, the study recommends co-operatives to consider making ICT as cross-cutting issue in different interventions of co-operative promotion. This should be in parallel with capacity building to management and other staff of the SACCOS. On the other side, there is a need to review co-operative laws of Tanzania and make ICT as a national agenda for co-operatives development.

Keywords: Co-operatives, ICT Applications, SACCOS

1. Introduction

1.1 *Background of the Co-operatives (SACCOS) and ICT in Tanzania*

The International Co-operative Alliance (ICA) defines a co-operative as “...an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise” (ICA, 2004). ICA identifies seven principles that ought to guide the formation, organization and activities of co-operatives. The principles are:

- (a) Voluntary and open membership
- (b) Democratic member control
- (c) Member economic participation
- (d) Autonomy and independence
- (e) Education, training and information
- (f) Cooperation among Co-operatives
- (g) Concern for Community

Co-operatives in Tanzania, savings and credit co-operative societies (SACCOS) in particular, have a considerable history dating back to the late 1930s when the Ismailia communities established SACCOS in Moshi, Dar es Salaam, Mwanza, Dodoma, and Tanga. In the past, they played a vital role in rural and urban economic and social development of the country.

A ‘savings and credit co-operative society’ is defined as a credit society solely dedicated to the promotion of thrift among members and a creation of a source of credit for them at competitive rates of interest through financial intermediation (URT 2004).

These institutions have formal status, usually backed-up by a specific legislation which distinguishes them from other organisations in the autonomous sector. SACCOS were inspired by a historical model created in the 19th century by Raiffeisen in Germany and Desjardin in Canada, which was disseminated in various forms to most countries.

What distinguishes SACCOS from other non-bank financial entities that offer microfinance services is their ability to mobilize large numbers of small, voluntary savings account (Klaehn 2004). In SACCOS, all members are encouraged to save (Liheta 1998). All members have savings in some form resulting in a “saving-first” focus; a characteristic that differentiates credit unions from a growing number of “credit-first” (Graham 1994) programmes throughout the world that do not emphasize or offer savings facilities.

To achieve their goals, co-operatives need to be commercially viable enterprises like SACCOS, able to survive and prosper in the marketplace. To be sustainable,

co-operatives have to be run on a business-like footing. In contrast to other businesses, however, the rewards from their trading activity are available to be shared between all the members on a collective basis. In this regard, the need for ICT arises.

Information and communication Technology (ICT) is used to refer to infrastructure, hardware and software that facilitate the collecting, storing, manipulating and analysis of information that may be transmitted electronically. The importance of ICT lies in its ability to create greater access to information and communication by the underserved populations (O'Farrell, C. *et. al.* (1999). This ability, if well utilized as in other sectors, can boost the performance of the SACCOS tremendously. ICT includes equipment like computers, telephones, communication lines used to enhance communication between employers and employees, businesses and customers, and business and business across physical boundaries.

Many countries around the world have established organizations for the promotion of ICTs because it is feared that unless less technologically-advanced areas have a chance to catch up, the increasing technological advances in developed nations will only serve to exacerbate the already-existing economic gap between technological “have” and “have not” areas (O'Farrell, C. *et. al.* (1999)). Internationally, the United Nations actively promote ICTs for development as a means of bridging the digital divide¹.

1.2 Statement of the Problem

Recently, the co-operative sector in Tanzania has been experiencing more and more SACCOS being formed all over the country. These SACCOS have been struggling to assist the majority of Tanzanians in their efforts to eradicate poverty. These communities are always denied the right to access information, right to own property, health services, and the right to education, capital and other life necessities. The most affected are the poor, living in the rural and urban areas where social, economic and political infrastructures are hardly accessible.

A SACCOS, as any other co-operative society, is member-based entity and solely depends on its members for its operations. A good or bad performance of any SACCOS will largely depend on how members are satisfied by the products and services offered to them by their organization. Data capturing, information processing, information sharing, records keeping and information dissemination are vital to any business entity as well as savings society.

¹ The **digital divide** refers to the gap between people with effective access to digital and information technology and those with very limited or no access at all. It includes the imbalance both in physical access to technology and the resources and skills needed to effectively participate as a digital citizen.

Since ICTs are defined as technologies that facilitate the processing, transmission and storing of information by electronic means, they have an enormous potential as tools for increasing information flows and empowerment of poor people. They are emerging as important media for communication and exchange as well as tools for development. ICTs, whether older ICTs such as telephone, radio and television, or the newer ICTs such as VCDs, computers or the Internet, can help in several dynamic ways to bridge gaps in livelihood opportunities by providing localized and relevant information to the co-operative community.

In Tanzania, Dodoma and Singida in particular, many SACCOS have been not utilizing the ICT opportunity to improve their performance in product and service delivery. It is a normal tendency to ask for certain information from the SACCOS leaders and be given simple answers like “the information is unavailable for now”. For the above reasons, the researchers were encouraged to conduct this research with the conviction that with the current ICT development, these SACCOS have no choice but to seize the opportunity for better performance.

1.3 Objectives of the study

1.3.1 The general objective

The research aimed at assessing the status of ICT systems in Savings and Credit Co-operative Societies of Tanzania in order to build the basis for enabling high speed information processing, reliable and secure records keeping, equitable access to various information to members and other stakeholders, and to propose the mechanism for change that would, if implemented, help to achieve better performance of the SACCOS.

1.3.2 The specific objectives

The specific objectives of the study included the following:

- To identify ICT infrastructure available in SACCOS of Dodoma and Singida regions: Computers, televisions, radios, telephones, networks and other means of communication are the entities that make up ICT. For ICT to be employed effectively, the organization using it needs to be well equipped in terms of infrastructure. Without good infrastructure ICT can't be seen as a tool that can produce desired and valuable outputs.
- To assess how the ICTs are being applied in SACCOS of Dodoma and Singida regions:

ICT should assist in various activities performed by SACCOS which involves data processing, storage (secured storage), sharing and dissemination of information. It

was the aim of the researchers to find out if the ICTs were used to serve the co-operative societies in performing their activities. The attention was paid to computer applications software and hardware.

1.4 Research questions

This research was guided by the following questions:

- a) What are the ICT infrastructures available and how do they affect the performance of the SACCOS in service delivery to members and other stakeholders?
- b) What is the availability of common system of ICT application for co-operative societies and how does it help in performance of SACCOS' operations?

1.5 Conceptual framework

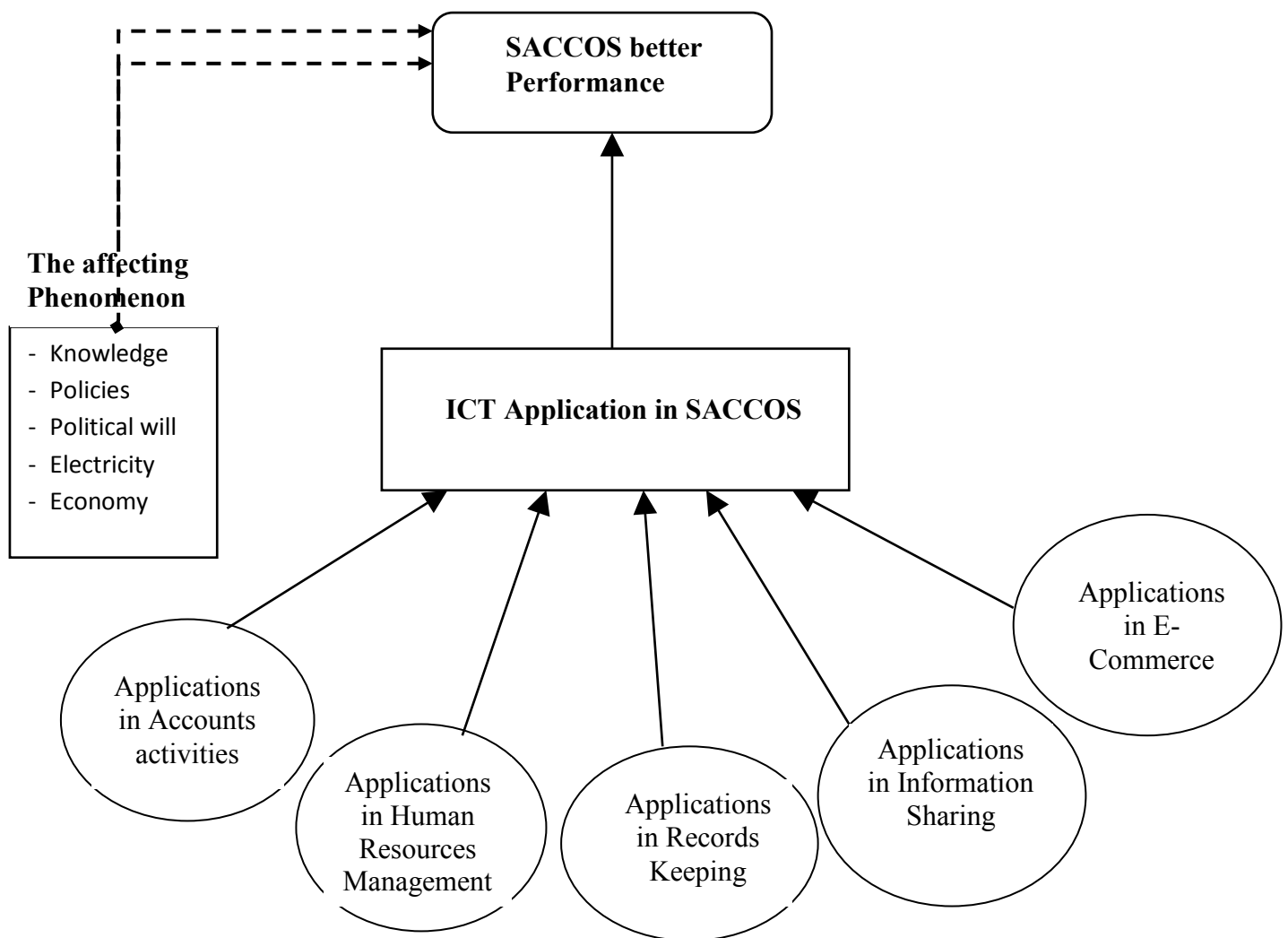


Figure 1: Conceptual framework showing relationship of variables

2. Methodology

This study was done qualitatively and quantitatively. The report is based on the facts collected from primary and secondary data sources. The purposive sampling of four members from each visited SACCOS was chosen for interview and open discussion. Amongst the members, there were at least a manager, an accountant, a member and chairperson. This helped to collect clean data because the management and members were directly involved.

Also, the observation method was used to gather information as ICT equipment installations were visited and tested to see their status. This was due to the fact that the researchers are ICT experts. Moreover, in some places the SACCOS provided the researchers with some helpful documents which helped us review in details their conditions and how ICT activities were being carried out. Data were analyzed by using SPSS 16 and Microsoft Excel 2010 software.

3. The Review of Literature

3.1 Introduction

Co-operative self-help institutions were originally founded because of the need to optimize the economic position of the individual members. This was carried through joint business activities, based on solidarity in line with the economic principles of self-help, individual responsibility and self-governance - as a result of better access to financial services and markets, while maintaining the member's own capability to operate and compete in the markets.

To understand the role and impact of SACCOS in economic development, it is worthwhile to consider the economic theory. The theory postulates that appropriate financial services will, in the long-run, lead to national economic growth and, in the short-run, improve incomes and food consumption at the household level.

Bennett and Cuevas (1996) summarize the importance of building sustainable financial service institutions such as SACCOS from three perspectives: 1) *financial sector development* to reduce the cost and risks of providing financial services to those who are not integrated into the formal financial sector because of low income, gender, or remote location, 2) *enterprise formation and growth* resulting from access to credit and deposit services, and 3) *poverty reduction* as a result of access to reliable monetized savings facilities that help the poor smooth consumption over cyclical and unexpected crisis and, once some degree of economic security is attained, access to credit to improve productivity of their enterprises and new sources of livelihood.

So far, there is no literature which directly reviews ICT application in SACCOS' development in Tanzania. However, there are some literature reviews which relate to the overall situation of poverty with ICT application. Since one of the major goals of SACCOS is to help the society fight poverty, the following has been reviewed:

3.2 The Concept of ICT and Co-operatives

3.2.1 ICTs for Organizational/Co-operative development

In most case studies of ICTs and development, there are no studies that openly acknowledge failures. Most are disguised under the cover of the phrase, 'lessons learnt'. Therefore, in evaluating these studies, it is important to take a 'cautionary' perspective as there is the danger that some of the sources romanticize the potential of ICTs in areas such as poverty alleviation which is the main goal of any co-operative society (Heeks - 1999).

Heeks (1999) asked: "Can information and communication technologies (ICTs) help to alleviate poverty in low-income countries?" His study attempts to answer that question and provides a theoretical framework for empirical studies in this area. Heeks suggests that ICTs play a role mainly as communications technologies rather than as information-processing or production technologies. Among his priorities for the development agenda are: the poor need knowledge to access, assess and apply existing information and need resources for action more than they need access to new information; the poor need access to new, locally-contextualized information more than access to existing information from an alien context; the information needs of the poor may be met by more informal information systems than by formal ICT-based systems; the poor will reap the fullest benefits of ICTs only when they know and control both the technology and its related know-how.

O'Farrell (2001) shares Heeks' (*ibid*) belief that before one can advocate for the development of ICTs among the poor, one must understand the existing information systems of the poor, how they interact with more formal information and the best way to strengthen them before intervening with new information sources and means of access to sources. Access to information and knowledge are considered key enablers in poverty reduction. Although O'Farrell (2001) focuses on some of the general debates around information and knowledge in relation to development interventions, her paper is set in the context of the expanding interest in ICTs. She explores the existing information and communication needs and constraints facing the rural and urban poor.

It appears that the slow development of some aspects of ICTs in many African countries has largely been a consequence of poor technical and financial management (and other inefficiencies) on the part of the telecommunications

sector (Lefebvre & Lefebvre, 1996). These authors noted that it might, therefore, be important to assess the adoption and diffusion of ICTs in key sectors of the economies of African countries.

However, prior to this, it is important to collate basic information about the actual and potential applications of ICTs and also to have a clear understanding of the specific policy environments. Adoption and diffusion issues need some kind of measurement. Considering the fact that ICT environments in most African countries are still developing, diffusions may be difficult to measure without proper awareness of the current realities on the ground. As Lefebvre and Lefebvre (*ibid*) said from their research conducted in the Organisation for Economic Co-operation and Development (OECD) countries, 'reaping the full benefits of IT adoption and diffusion requires full understanding of IT applications, their potential and a readiness to change'.

It is only with this full understanding that one can then ask the following questions:

- How can we promote and facilitate the introduction and implementation of ICTs in SACCOS?
- How can we accelerate ICT diffusion in co-operatives and other sectors of the economy?
- How can we assess the impacts of ICTs in SACCOS?

Therefore, there should first be an effort to collect basic data on the existence of quite simple applications in the first phase of any ICT development, and an investigation into how skills involved in the use of such simple applications might be developed to facilitate more sophisticated use of ICTs in SACCOS' development.

3.2.2 The relationship between ICTs and SACCOS' development

The relationship between ICTs and SACCOS' development does not come out clearly in most literature sources. However, the empirical evidence obtained from the visited SACCOS suggests that there is a positive relationship between ICT and SACCOS' development. As its major role is concerned, ICTs can be used in maintaining finance and accounting records of the SACCOS, membership data, market searching, and providing training to members of the saving society. Moreover, ICTs can be used to provide education (new technology gained), information dissemination and can help produce relevant information that can help in decision-making by the managers.

However, the efforts to make ICT play its role have been hindered by the pattern of utilization, ownership and affordability of ICTs within co-operative societies. The visited SACCOS under-utilize ICTs. For instance, as the findings suggests, there are a few number of SACCOS which are using accounting

packages like “QuickBooks”. Also, they cannot afford to purchase all ICT equipments due to various reasons; one being lack of funds. There are ways through which ICTs can best be used in SACCOS’ development strategies as it has been the case in:

Facilitating public and private sector activities in areas such as in:

a) Co-operative development

The co-operative movement, as with other industries, has been positively influenced by ICT applications. The use of Financial and Accounting packages has been helpful in many financial service providers. It is used for record keeping, membership data keeping, processing of data, report writing, training and information dissemination. A co-operative society with internet connection and computer or mobile handsets capable of accessing GPRS, 3G or EDGE networks, for example, can receive information about markets of their products; encourage price competition, development of their group, and any other valuable information in a simplified and very fast manner. The SACCOS office with network installed can save cost by sharing various resources like printer, internet and information, and still produce the outstanding performance.

With all these ICTs applications in various industries, ICT remain a major concern in SACCOS’ development and any other co-operative society. A significant advancement in the improvement of management and service delivery in co-operatives will require a major shift in the use of Information Technology.

b) Public Administration

Public administration is a key aspect of any civil society and it includes a range of services to citizens. It provides various functions that enhance the social, economic and political developments of the citizenry. Most importantly, it provides public information that is useful to the community at large. ICTs facilitate these public administration activities. For instance, ‘e-Government’ is a concept that defines a situation where government activities and public information can be made available using ICTs (Matsepe-Casaburri, 2000). In Tanzania, for example, the Government has expressed the intention of transforming itself into an e-government where information can be accessed at any time by phone or by Internet, with public Internet kiosks provided for universal access.

c) Urban and Rural Development

ICT applications are useful in facilitating development programmes in many countries. These technologies help in supporting economic and social

developments. Note that "*diverse current and historical data sets on health, education, water supplies, sanitation, and population growth and movement can be captured, collated, manipulated, and presented*" Also "*economic development can be fostered by tele-working and tele-services in some of the developing countries*" (Mansell &When, 1998: 83).

The establishment of tele-centres in co-operative communities can facilitate economic empowerment. Mobile telephones can also help rural entrepreneurs (co-operative societies) in keeping in touch with their market outside their communities.

d) Education

The education sector is arguably one major area that ICTs are playing remarkable a role. These technologies help in facilitating learning and exchange of educational materials. ICTs are helping library professionals store and manage academic information. Libraries have migrated from the traditional Dewey cataloguing system to an on-line system which is a web-based cataloguing and search application. The online learning system is another web-based application that is revolutionizing the learning platform of education. This system compliments the traditional face-to-face teaching and learning format. In the on-line system, learners can access training materials, submit assignments and also join a discussion group with other learners.

e) Agriculture

At the micro-level, ICT applications can be used to impart information directly to farmers and the farming community. There are expert systems designed to handle agricultural issues such as water utilization and management, pest control, harvest management and so forth.

Sharing knowledge and improving access to Information

Sharing knowledge and improving access to Information has been one of the most recognized uses of the ICTs. Various communication technologies, ranging from broadcasting to telecommunications and to the Internet are playing effective roles in the acquisition and sharing of information. The concepts of the 'information revolution' and 'information society' are driven by enormous advancements in ICTs and their application. The Internet, for example, has provided platforms for sharing information in applications such as the E-Mail and The World Wide Web (www).



Figure 2: A notice board used by SACCOS to disseminate information to members

We sincerely believe that ICTs have the potential to lift SACCOS higher and foster sustainable development of co-operative societies. However, this can only be achieved if ICTs are appropriately deployed and made to address the different needs of the SACCOS. The successful ICT interventions can only be achieved if there is an enabling environment by the Government, the full participation of the Government, private sectors and NGOs, the free flow of information, easy access by all members of the co-operative society, and capacity building to all members of the society.

ICTs are simply a channel for information exchange and dissemination. Hence, the principal focus should be directed at 'information' *per se*. However, the availability of information sources for the SACCOS is an area that needs to be addressed because even when information is available, on many occasions, the members do not get access to it either due to poor infrastructure, ignorance or illiteracy.

4. Findings and Discussion

The study was based on the central zone's regions of Dodoma and Singida. During the field trip, a total of nine (9) SACCOS were visited. These were: two (2) from Singida region in Singida Rural and Manyoni districts and seven (7) from Dodoma region in Chamwino, Kongwa and Dodoma Municipal districts. The following table shows the visited SACCOS and their locations. The table

also provides the overall picture of whether each SACCOS has, at least, one ICT equipment.

ICT'S EQUIPMENT STATUS AT SINGIDA AND DODOMA'S SACCOS									
SN	REGION	DISTRICT	SACCOS NAME	ICT EQUIPMENTS					
				No. of COMP	Teleph one	Telev ision	Inter net	LAN	*Other
1	Singida	Singida Rural	ILONGERO	2	√	X	X	X	X
2		Manyoni	KAMILU	2	√	X	X	X	√
3	Dodoma	Chamwino	CHAWIMA	1	√	X	X	X	X
4		Kongwa	CHAMBASHO	1	X	X	X	X	X
5			KIFISACO	3	√	X	√	√	√
6			UMAKISO	1	√	X	X	X	√
7		Dodoma manicipal	HOZEM	0	X	X	X	X	X
8			KIU	0	X	X	X	X	X
9			KKKT	4	√	√	√	√	√

NOTE: * Other devices includes printer, storage devices, UPS

KEYS: √ Present
 X Not present

Table 1: SACCOS visited in Dodoma and Singida regions showing ICT equipments

Source: Observation during Field Visit,

4.1 ICT infrastructure

4.1.1 Computers

The visited SACCOS have no good ICT infrastructure. For an organization to fully utilize ICT, it needs to be equipped with computers, modems, networks (LAN, Internet), printers, storage devices, televisions and database systems; which in combination make the ICT. Computers are 'the mother' of ICT. Yes, you can have telephone lines but still can't fully utilize ICT. That means the computer is a device that facilitates the full utilization of ICT. Without computer there is no such thing like "full ICT utilization".

The study shows that 78% of the visited SACCOS (as shown in the *Table 1* had managed to purchase at least one computer. However, two of them (22%) (HOZEM and KIU SACCOS) do not have a computer. Other components that make up a "fully ICT" includes networks (LAN, WAN, and Internet), telephone lines, radios, televisions, databases, software and hardware, Operating Systems (OS) and Application Software (AS). These computers have standard operating system (Windows XP) and storage capacity.

4.1.2 Internet connection (the backbone of the global market)

Regardless of internet being the backbone of the global market in the 21st century, only two (2) SACCOS (KIFISACO and KKKT) have connection to the “world”. This makes only 22.2% of all SACCOS to be connected to the internet. Despite the fact that the two SACCOS are connected to the internet, the observation showed that its utilization is still non essential and beneficial to them since there is a great misuse of the service.

SACCOS Name Vs Internet Usage

			Internet		Total
			NO	YES	
SACCOS Name	CAMILU	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	CHAMBASHO	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	CHAWIMA	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	HOZEM	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	ILONGELO	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	KIFISACO	Count	0	1	1
		% of Total	.0%	11.1%	11.1%
	KIU	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
	KKKT-SACCOS	Count	0	1	1
		% of Total	.0%	11.1%	11.1%
	UMAKISO	Count	1	0	1
		% of Total	11.1%	.0%	11.1%
Total		Count	7	2	9
		% of Total	77.8%	22.2%	100.0%

Table 2: Internet usage by SACCOS

Without internet connectivity, the SACCOS miss many opportunities for their business growth and better service delivery to their customers. For instance, marketing of their services and products locally and globally would be made possible. The remote information sharing (market information, social and cultural information), easy and cheap communication through emails and chats would also be possible. There would be also the possibility to conduct meetings using video conferencing, increasing price competition, and selling products in a global market, etc. The internet also supports other services like access to various important updates for the system. Without internet you can't keep the system secured as protection mechanisms like antivirus updates are available online.

4.1.3 Networking (the simplest and cheapest means to share resources)

Computer network, often simply referred to as a network, is a group of computers and devices interconnected by communications channels that facilitate communications among users and allows users to share resources.

As it can be observed from *Figure 3*, the study shows that only two (2) SACCOS (22.2%) have networked computers. This enables them to share resources like printer and files, though they still have a long way to go. The rest of the SACCOS (77.8%) computers are either working individually or they have one computer which can't be in a network. The figure below shows the results of the analysis for LAN usage.

LAN Usege

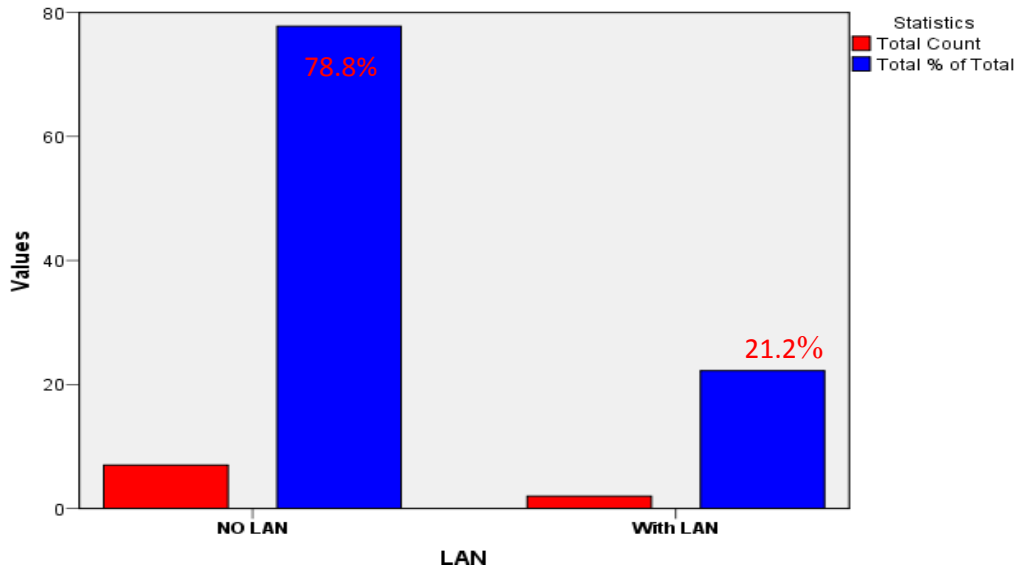


Figure 3: LAN usage for all SACCOS

4.1.4 Website

Despite its paramount importance in today’s business, the study shows that 100% (*fig. 4*) of the SACCOS do not own a website. This narrows the SACCOS’s efforts from growing and achieving their goals because they miss the so called “a world of opportunity”.

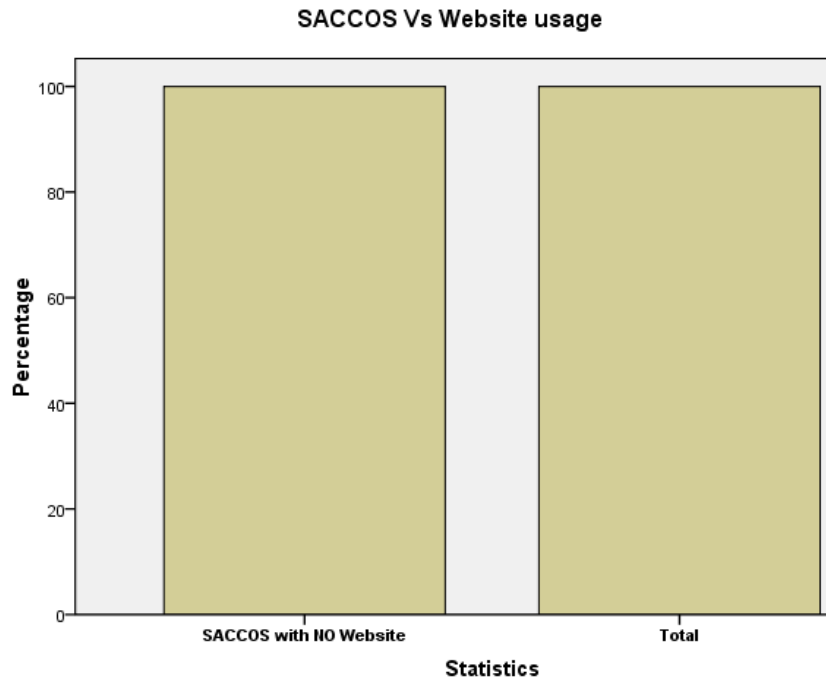


Figure 4: A graph showing the SACCOS which owns a website

A website (also spelled Web site) is a collection of related web pages, images, videos or other digital assets that are addressed relative to a common Uniform Resource Locator (URL). Websites can offer many advantages to any SACCOS. Among others, it can be used to:

- Disseminate business information (hence market expansion);
- Disseminate SACCOS Information (advertising);
- Build credibility (hence, add value and satisfaction)
- Provide growth opportunity;
- Collect information (cheap market research);
- Sell product Online (e-business); etc.

4.1.5 Data security (the present future)

Backup systems seem to be of less importance to the SACCOS. This is risk because whenever there is a computer failure all data and information could be lost and there would be no way to recover them. This way, there won't be a "present future". Having lost all the data and information means there is nothing like a better performance. Worries and doubts about the SACCOS performance rise. To avoid these worries, data should be backed up to prevent information loss which could lead to discouraging members and, if not well dealt with, a death to the organization.

In simple terms, data security is the practice of keeping data protected from corruption and unauthorized access. The focus behind data security is to ensure privacy while protecting personal or corporate data. Data security can be achieved by making timely backups, using user authentication methods like passwords and /or encryption methods.

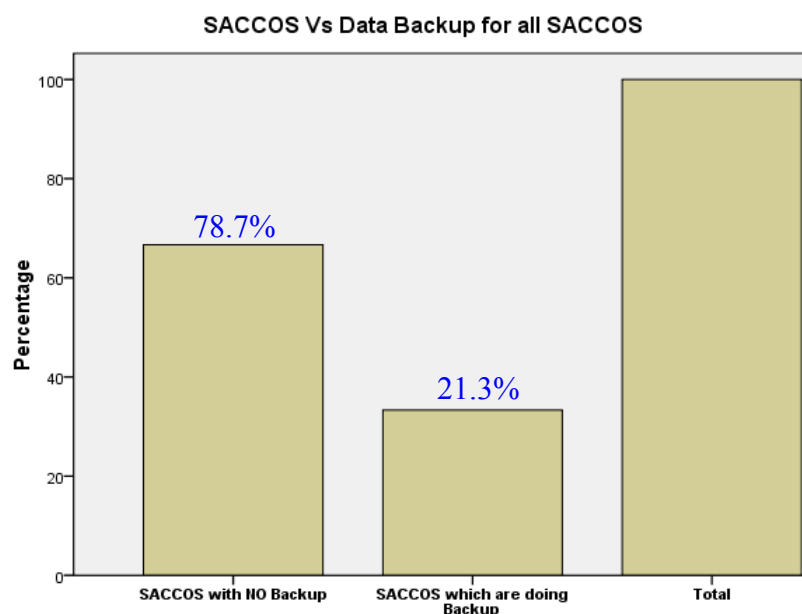


Figure 5: Data backup for all SACCOS

The study shows, from *fig. 5*, that only KIFISACO and KKKT SACCOS (21.3%) are at least performing data/information backup. The remaining SACCOS (78.7%) are not doing backups. However, the backups are not well employed as they are not performed regularly. The backup devices are only flash disks and external hard disks which are sometimes left in house instead of keeping them off site. This can cause the SACCOS to miss the backed-up data and/or information when the incidences like fire happen and the whole computer (system) together with the backup device are destroyed.

4.1.6 Television, telephone and database usage

The study shows that other ICT resources like television are not owned by the SACCOS because of lack of awareness about how they can help in their business. Only one (1) SACCOS (11.1%) owns the television set. The remaining eight (8) SACCOS (88.9%) do not own the infrastructure. However, the one that owns it uses the service only for accessing general news and Television programmes. They could use this infrastructure for business purpose like showing various videos of the activities they perform and testimonials of what other members have achieved because of joining the SACCOS.

Table 3(a): Television usage

Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NO	8	88.9	88.9	88.9
YES	1	11.1	11.1	100.0
Total	9	100.0	100.0	

The research also shows that the telephone use is still not at 100%. As shown in *Table 3(a)*, there are three (3) SACCOS (33.3%) which do not own telephone line for the office. However, there are members who own their own handset which makes it difficult for the SACCOS to communicate to external business partners.

(b) Telephone usage

Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NO	3	33.3	33.3	33.3
YES	6	66.7	66.7	100.0
Total	9	100.0	100.0	

Database is an organized collection of data. The data is typically organized to model aspects of reality in a way that supports processes requiring information. For example, modelling the savings and credits of members in a way that supports finding how much is the savings a particular member has deposited, how the loan repayment trend is, etc.

(c) Database usage

Status	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NO	8	88.9	88.9	88.9
YES	1	11.1	11.1	100.0
Total	9	100.0	100.0	

Table 3: The above tables (a-c) showing usage of Televisions, Telephones and Database

The findings show that only eight (8) SACCOS (88.9%) are not using database system. This makes it uneasy and slows them the process to perform various tasks. The members don't get opportunity to enjoy the service as they don't get what they need in speed with easy access (current status of savings, loan repayment, shares, etc) in a very short time. Nevertheless, one (1) SACCOS (11.1%) is using database systems. This guarantees the members of the SACCOS a speedy and easy access to their information, hence quick service delivery.

4.2 Uses of modern finance software

The visited SACCOS in Singida and Dodoma regions are working in cooperation with CRDB bank which promotes the use of modern finance software. Finance Solution is an accounting package encouraged by the bank to be used by these SACCOS for data processing and record storing. However, the study shows that only two (2) SACCOS (CAMILU and KKKT) which have adapted using the package. These packages are of vital importance as they help them in accounts matters, monitoring and evaluation, and report generation. Despite admitting that the package helps them, most of the staff or members of the SACCOS are not competent with the software and sometimes when problem arises it becomes very difficult to solve as they have no instant support. Rather they will call CRDB bank tactician and wait for the help. This can take up a week since the availability of CRDB technician is not guaranteed.

Also the study shows that all of the financial software are complex to use as they are not developed according to SACCOS requirements. They are general

software which makes them difficult to customize according to requirements. Also these software are not user friendly since they are developed by using English language which makes again difficult to use.

4.3 Access to ICT knowledge for SACCOS members

The research shows that the importance of knowledge and the ability of ICT to improve work performance and efficiency seemed to be not well known by the members. However, it was noted that this was conceived by the fact that only managers and chairpersons were the ones who seem to have the rights to attend any ICT training offered for the SACCOS. That is why in all SACCOS which use computers the managers and chairpersons are the ones who use the devices.

4.4 ICT Training for members (the key to knowledge door)

We all know the importance of training. It gives us the knowledge and skills of the world around us. It develops in us a perspective of looking at life in a positive way. Training is important because it equips us with new knowledge and skills that make our performance easy.

The study shows that the members and staff of the SACCOS need ICT training to build their capacity in using the technology. Nevertheless, they don't get these opportunities frequently. And when there is an opportunity, it is only the managers and/or chairpersons who would be proposed to receive the training. Other members of the SACCOS are ineligible for ICT training.

5. Conclusion and Recommendations

5.1 Conclusion

The overall impact of ICT on SACCOS, as revealed through this study and as reflected in intended and unintended outcomes, is to some extent positive and heartening. The study demonstrated that the majority of SACCOS seek to obtain ICT infrastructure and training with the intention to enhance the quality of their activities and hence their lives.

The study also shows that the application of ICT in SACCOS is still not taken seriously. This has been caused by the relative lack of appropriate skills of the co-operatives society to this technology. The SACCOS have tried to own some of ICT infrastructure like computers but they are inadequate and still they are underutilized. This has caused the SACCOS not to benefit from the technology. As a result, this can be directly linked with the under-performance of the SACCOS.

ICT can be of great use in helping to achieve SACCOS' goals and lifelong learning in developing countries like Tanzania, Dodoma and Singida regions in particular. Its priority focus should be on reducing the digital divide on the SACCOS.

The application of ICT for SACCOS should be developed within the overall framework of SACCOS and lifelong learning in each region. There should be a particular focus on improving access and quality of service for the SACCOS. Current initiatives and experiences at the grass root level can be the basis for consolidating and formulating new strategies. SACCOS can take the lead in achieving their own goals by mobilizing the available human, material and financial resources through their unions. ICTs are powerful tools for assisting SACCOS towards their development.

5.2 Recommendations

Based on the above conclusion, the study recommends the following in which the SACCOS leaders, the government and co-operative institutions in collaboration with other stakeholders may opt to take the co-operatives to another level and therefore have great benefit to the members especially in their effort to reduce poverty:

- ICT capacity building of co-operative society (SACCOS leaders and members in particular) through training so that they can acquire required basic skills in the technology and the role it can play for their organization's development and have ability to use it. Development of ICT training programmes to SACCOS' members should be of high priority as it will help them expand their knowledge and make a beneficial implementation of ICT resources. Training should be provided to all groups of co-operative society and the emphasis be given to operational staff who provide daily services. The training could be in house with a good schedule in order not to interfere with other activities.
- SACCOS' management should continue investing in ICT since it is the source of wealth if well utilized. Buying of various equipments like computers should go in-hand with proper implementation and utilization of ICT components like networks, software, etc. It is known that these equipments are expensive, therefore if purchased and not properly utilized it would obviously bring loss to the organization.
- National ICT policy should be disseminated to co-operative society and members are educated about the policy. Where necessary the governing bodies, such as Tanzania Federation of Co-operatives (TFC) and the Savings and Credit Co-operatives Union League of Tanzania (SCCULT), should develop and use their own ICT policy if the current national ICT policy does not suit their working environment. This will enable the

government to provide a framework of implementing ICT to co-operative society and hence play part in their development.

- There should be increased intervention of various institutions providing ICT technical services in helping co-operative society cope with the current development of technology. Institutions like MoCU could use her technical personnel who are expert in the field of ICT to develop various programmes/software which would be based on the requirements of the co-operative society rather than leaving them to use software which are developed for general purpose use. These institutions should also start assisting the co-operative society in provision of technical services most of who are at country side.

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