

**THE ROLE OF COMMUNICATION ON PERFORMANCE OF DONOR FUNDED
AGRICULTURAL PROJECT: A CASE OF RESEARCH, COMMUNITY AND
ORGANIZATIONAL DEVELOPMENT ASSOCIATES**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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ABSTRACT

The main aim of this study was to assess the role of communication in the performance of agricultural donor funded projects using Research, Community and Organizational Development Associates (RECODA) as a case study. Generally, the study established the types of project information shared by various actors in the RECODA donor funded agricultural projects; examined the effectiveness of various communication channels; assessed the relationship between communication and performance of RECODA agricultural projects; and identified barriers to effective communication among actors in RECODA donor funded agricultural projects. A cross-sectional research design was adopted whereby primary data were collected using a questionnaire administered to 120 randomly selected respondents. Primary data were also collected through key informants interviews and Focus Group Discussions (FGDs). In addition, secondary data were collected through evaluation of reports. The analysis of data was done using the International Business Machine Statistical Package for Social Sciences (IBM SPSS). The key findings of the research envisaged that communication in RECODA project was meetings and communication channels effectiveness had a linear relationship with the result and information stakeholders' satisfaction. Furthermore, all the four communication indicators that are communication flow, communication channels, communication management tools and quality of the information had a positive linear statistical relationship with the performance indicators' thus, stakeholders' satisfaction on the information provided and stakeholders' satisfactions on the results of the project. The barriers of communication were not highly rated. Conclusively, communication has been observed as having relationship with the performance. That is, all the communication elements those are communication flow, communication channels, communication management tools and quality of the information had a role in the performance of

RECODA project. It is therefore, recommended that project planners should invest on their project's communication process in the project for better performance of the same.

DECLARATION

I, SIA WILLY MACHANGE, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own work done within the period of registration and that it has neither been submitted nor being concurrently submitted for a degree award at any other institution.

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DEDICATION

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LIST OF ACRONYMS

ACT	African Conservation Tillage
ALT	Alliance Leadership Team
ANGONET	Arusha NGOs Network
CASARD	Conservation Agriculture for Sustainable Agriculture and Rural Development
CA-SARD	Conservation Agriculture Project
CDT	Communication development theory
CIT	Compassion International–Tanzania,
DPFP	Development Partner funded project
DT	Diffusion theory
ET	Exhaustive Theory
F	Frequency
FAO	Food and Agriculture organization
FCSOs	Foundation for Civil Society Organizations
FFS	Farmer Field Schools
FGD	Focus Group Discussion
HIV/AIDS	Human Immune Virus/Acquired Immuno Deficiency Syndrome
HORTI	Horticultural Research and Training Institute
KIWAKKUKI	<i>(Kikundi cha Wanawake Kilimanjaro Kupambana na Ukimwi)</i>
KPI	Key Performance Indicator
LGA	Local Government Authorities
LITI	Livestock Training Institute
NGO	Non-governmental Organization

ODA	Overseas Development Assistance
OVC	Orphans and Vulnerable Children
OVCs	Orphans and Vulnerable Children
PDS	Project Delivery System
PELUM	Participatory Ecological Land Use Management
PLHAs	People Living with HIV/AIDS
PULS	Help to Self Help
RECODA	Research, Community and Organizational Development Associates
RF	Rockwool Foundation
RIPAT	Rural Initiatives for Participatory Agricultural Transformation
SADC	Southern African Development Community
SARI)	Selian Agricultural Research Institute
SSP	Stakeholder Satisfaction Performance
SUA	Sokoine University of Agriculture
TAREA	Tanzania Renewable Energy Association
UNICEF	The United Nations Children's Fund
USD	United States Dollar
WVT	World Vision Tanzania

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Communication is an essential process in our day-to-day life, and the entire world revolves around it. It has been said that 90% of a project manager's time is spent communicating what is going to be done (Sima, 2017). Surprisingly, it has been found that most Development Partner Funded Projects (DPFPs) experience a breakdown in communications (Jaki and Mikuła, 2017). Today in this globalized world, communication between diverse groups is a major challenge. One can never take for granted that the receiver will interpret the message the same way as the sender intended. Communication is not an absolute, finite thing. To do this effectively, the project manager needs to consider all the factors i.e. the different realities, the space the communication takes place in, verbal as well as non-verbal messages, and the intended meaning versus the perceived meaning (Rajkumar, 2010).

Communication is the exchange of project-specific information with the emphasis on creating an understanding between the sender and the receiver (Caltrans, 2007). According to Husain (2013), the objective of communication in DPFP is mainly communicating for and about results. The former takes place from the outset of the project design thus, it plays an important role in setting up goals and agreeing on targets and strategies. It also influences the allocation of resources, a portion of which are dedicated to results communication. Furthermore, communication for results works throughout DP project service delivery, acting both as a means of gathering intermediate results and a tool for ensuring effective project delivery (Costa, 2009). In this study, communication is the exchange of information among the DPFP actors. Communication in DPFPs requires a

clear understanding of the communication objectives and the skills to create messages to the right people, at the right time and with the right information in the right format (Bourne, 2010). Furthermore, DPFPs communication aims at drawing the stakeholder closer to the intervention; in this study stakeholders are the community members that are affected by the intervention either positively or negatively, directly or indirectly. The study is based on DPFPs because in most governmental projects are mainly top-down communication-oriented, unlike DPFPs communication which is a two-way process whereas good practices in communication and awareness-raising are transferred from donors to recipients while local knowledge is transmitted to donors (Organisation for Economic Co-operation and Development (OECD), 2014).

According to Dhilsharth (2014), stakeholder satisfaction is an utmost important factor in DPFPs especially local governance improvement projects. Stakeholders are generally satisfied when their expectations are met having an impact on the performance of a project. DPFPs can bring positive changes if implemented properly; generally, this is possible with effective communication (Husain, 2013). Effective communication in project management requires careful planning and setting of the right expectations with all project stakeholders. In Tanzania, many projects aiming at enhancing development and accelerating economic growth have been implemented. These projects deal directly with the stakeholders. As part of this effort, the country has received external assistance from bilateral and multilateral sources to create infrastructure and broaden the delivery of public services (Shao, 2011). Development partners funded organizations have been supporting various sectors including the social, political, economic, cultural, environmental and development of communities through funding various projects.

Generally, increased DP funded projects/programme (DPFPs) use different portfolio approaches in meeting their objectives hence, the need for studies to investigate the factors that influence their performance (Ojie, 2016). In 1998, a bull project survey conducted in France revealed that breakdown in communication, lack of planning, and poor-quality control were the major causes of project performance failure (Johnson, 2008). A 2002 survey of 1,104 employees of organizations in the USA showed that while managers spend 60 to 80 percent of their time on operational communication, only 17 percent said their managers communicated effectively (Odine, 2015). The statistics illustrate clearly the degree of communication disregard. In Tanzania, inadequate communication mechanisms among actors (government, civil society organizations, private sector and communities), have been pointed out to hinder growth and anti-poverty efforts at the macro and micro levels (URT, 2010).

Performance in a project generally considers time, cost and stakeholders' satisfaction. In this study, DPFPs performance means stakeholder satisfaction (information satisfaction and result satisfaction) thus, they are fulfilled with the project's outcome. This is because time and cost performance can be compromised however, stakeholders' satisfaction is mandatory and has no compromise (Ollows, 2012). According to Wahdan *et al.* (2015), low communication between the project parties has been pointed out as one among the main causes of cost overrun in DPFPs (Wahdan *et al.*, 2015). Saeed (2009) argues that, 70 percent of the delays in project completion occur due to the absence of timely and sufficient communication. Furthermore, it has been argued that the fundamental transaction of a message sent and received does not presuppose that communication has occurred (Pfeiffer, 1998). Many DPFPs in Tanzania simply ignore communication, underestimate it or use it out of habit creating little to no improvement of communication methods such as communication plan, pattern and system hindering project effectiveness

(Ferreira, 2013). Done right, communication engages everyone who touches the project, from executives, end-users to project managers and their teams (Pulse of the Profession, 2013). For example, Leonardo (2012) argues that lack of good communication leads to catastrophic crisis especially when a company's top management is not properly engaged. According to Mnkandla (2014), the final product of a project can be greatly compromised by the way communication is done. Based on the above description the current study aimed at determining the role of communication in the context of DPFs project in order to clearly establish the association between communication and perceived stakeholder satisfaction performance of projects.

1.2 Statement of the Problem

In DPFs, communication has been give least attention unlike other factors such as, project collaboration, management competences, design cost, as well as monitoring and evaluation towards project performance. Several studies (Lofgren, 2009; Ollows, 2012; Phiri, 2015; Shrestha, and Mani, 2013) have been conducted on the later factors. However, information on communication relationship with project stakeholder satisfaction performance particularly on stakeholder's satisfaction is lacking (Jin and Lin, 2012) especially in the Tanzanian DFP context. According to Project Management Institute (2015), poor communication is the number one reason for projects failure at a rate of 67% or more for larger projects. The actors affected by ineffective communications are the stakeholders, the human resources/project team, and the project management, which ultimately leads to the demise of the project. The above explanation negates the crucial importance of communication (both formal and informal) to the overall functioning and performance of projects and the endeavours with which they are involved (Dainty, 2012). For instance, according to a research conducted in Tanzania by Kikwasi (2012), among the identified factors lack of communication between parties was the second common rated

reason for delays of project deliverance. Communication is the element of project management that is often neglected in the project cycle (Hurt, 2018). Nonetheless, the reasons for the above remain speculative. However, it may be a result of social communication exchange and the patterns of interaction that occur within organizations being taken for granted despite the advantages that understanding an organization's communication dynamics can provide (Dainty, 2012). Ultimately, neglecting communication leads to in coordination of project activities, un-sustainability of the projects, de-motivated project teams, design errors, slowdown in the entire project thus, failure in DPF (Project Management Institute, 2015). Therefore, this study set out to determine the role of communication in the performance of DPFs in Tanzania, using the RECODA donor-funded projects as a case study.

1.3 Justification for the Study

As pointed out in sub-section 1.2, effective communication is crucial for the success of DPFs. According to Odine (2015), communication is based on dialogue. Despite the above, there is a lack of readily available information on the role of communication in the success or failure of DPF in Tanzania. Despite efforts directed towards the performance of the DPF, communication, as a factor of success or failure, has received little to no attention. Ramsing (2009) argues that organizational experience in planning communication strategies seem to be lacking in project management. Therefore, the study aimed at providing a better understanding of the role of effective communication in the success or failure of DPFs so as to entice sufficient investment in good project communication. Moreover, the study aims to create an understanding of the role of communication in projects so that more deliberate efforts can be made to improve the communication aspect within DPFs, based on lessons learnt.

1.4 Research Objectives

1.4.1 General objective

To determine the role of communication in the performance of RECODA donor funded agricultural projects.

1.4.2 Specific objectives

- i. To establish the kind of project information shared by various actors in the RECODA donor funded agricultural projects.
- ii. To examine the effectiveness of various communication channels to the performance of RECODA agricultural projects.
- iii. To assess the relationship between communication and performance of RECODA agricultural projects.
- iv. To identify barriers to effective communication among actors in RECODA donor funded agricultural projects.

1.5 Research Questions

- i. What information is shared among RECODA donor funded agricultural project stakeholders?
- ii. How effective are the established communication channels in RECODA donor funded agricultural projects?
- iii. Is communication one of the performance indicators of RECODA donor funded agricultural projects?
- iv. What are the barriers to effective communication in RECODA donor funded agricultural projects?

1.6 Hypothesis

There is no significant association between communication and the performance of the RECODA DPFs project.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptualization of Key Concepts/Terms

2.1.1 Project communication

When discussing project performance, communication is a vital topic to be covered. A good communication process keeps stakeholders engaged and project teams motivated (Pulse of the Profession, 2013). That is to say, communication has to be stable for proper coordination within the project. Effective communication requires a clear understanding of the objectives of the communication and the skills to create messages that are focused: on the right people, at the right time and with the right information in the right format (Bourne, 2010). Furthermore, in project management, communication should be seen both as a resource and a tool in order to effectively exploit other resources. If the management struggles with communication, they will probably struggle with the project as well (Koivula, 2009). The communication processes of projects are characterized by performance reports, requested changes, forecasts, organizational process and updates (Olsson and Johansson, 2011). Conversely, low communication between the project parties is one of the main causes of cost overrun (Wahdan *et al.*, 2015).

For many people the term communication is traditionally associated with either boosting an institutional profile or facilitating information flows within an organization (Owusu, 2015). Furthermore, communication has been perceived to be a cyclic system and each of the elements in the cycle has to be effective and proper for communication to be precise and effective. The deliverer of the message has to formulate the message that is relevant, precise and clear using a relevant medium of communication to the intended receiver.

Figure 1 reflects Lunenburg's definition of communication and identifies the important elements of the communication process (Lunenburg, 2010).

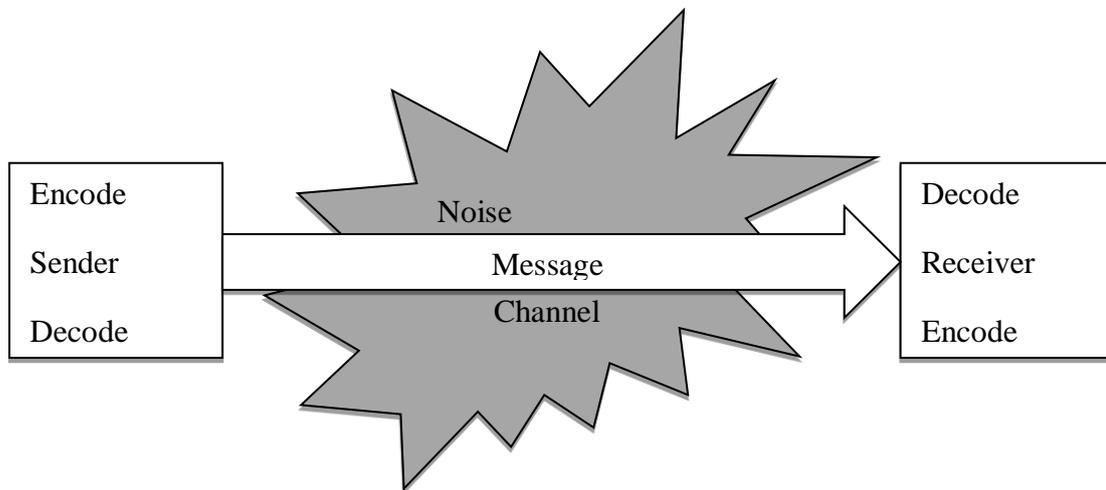


Figure 1: Communication process (Source: Lunenburg, 2010)

Communication in projects is often treated as a background or underpinning variable in determining project performance, conceptually related to the structure, culture, leadership and rewards of a project. Such a definition belies the central importance of communication as an enabler of other project activities (Dainty *et al.*, 2012). Communication is the element of project management that is often neglected in the project cycle (Hurt, 2018) even when its importance is highlighted for the obvious reasons. Generally, project communication has two objectives; the primary objective being to inform the workforce about their tasks and the policy issues of the organization and secondly to construct a community within the organization (Husain, 2013). Indeed, given its influence over the efficacy of the project's processes and practices, the lack of attention to the communication aspects within many project management is somewhat surprising (Dainty *et al.*, 2012).

Therefore, studying the communication pattern of the RECODA donor funded projects through research provides a better understanding of the communication and its importance and how it can be managed more effectively in the future.

2.2 Effective Communication in Project

Effective communication is about more than just exchanging information. It's about understanding the emotion and intentions behind the information. Being able to clearly convey a message, you need to also listen in a way that gains the full meaning of what's being said and make the other person feel heard and understood (Robinson, 2017). Effective communication combines a set of skills such as non-verbal communication that involves body language, sign and symbols where active listening, ability of presentations confidently and efficiently to the receivers (Dainty *et al.*, 2012). The message has to be decoded by the receiver as intended by the sender in order for communication to be effective. Feedback is also an important element that plays a very important part in this aspect. The average worker spends 50 percent of the day communicating, and one-fourth of all workplace mistakes are the result of poor communication (FEMA, 2014). Trust among the project actors can be conveyed through effective communication thus, communication is no longer a 'soft' function. Generally, sincere and effective communication among project members enables them to integrate the project through internalization of the project's objectives and rules (Husan, 2013).

2.2.1 The importance of effective communication

The importance of effective communication to individuals, teams and organisations cannot be overstated especially in projects. In any organisation the success of teamwork mainly relies on proper coordination and effective communication. It is a fact that the quality of the relationship is directly dependent on quality of communication. Effective communication can enhance our understanding of people and ourselves which in turn allows our relations to flourish and prosper. Similarly, the management of organisational processes also demands that robust and effective communication channels are developed which enable their various components to be conjoined appropriately (Dainty *et al.*, 2012).

The need for effective communication tends to be increasing due to globalization. Because of enormous competency in the digital world, it is essential for the next generation to be well equipped with the basic skills of communication. The most important communication skills that are essential for effective communication are good speaking skills, good listening skills, good writing skills, good reading skills and perfect body language.

2.3 DPFs and Socio-Economic Development in Tanzania

According to Gibson (2013), DPFs are defined as those projects sponsored by external donors normally provided by international aid or development agencies. During the 1970s aid was largely delivered in terms of project aid. However, due to the unsatisfactory performance of project aid, donors shifted emphasis from project to programme aid in the 1980s. After experiencing years of declining economic growth and the financial crisis in the early 1980s, Tanzania agreed to adopt an economic recovery programmes. However, the programmes and the conditionalities attached to the same created tensions between Tanzania and its donors thus, forcing donors into reconsidering their aid relationship (Lynge, 2009).

Tanzania has for many years been characterised as the “darling” of the international donor community thus, DPFs have played a large role in improving the socio-economic conditions in Tanzania. The table below shows Tanzania’s total Overseas Development Assistance (ODA). All amounts are in USD ‘(000)’ (Lynge, 2009).

Modality	2003/04	2004/05	2005/06	2006/07	2007/08
Project Funds	385.86	269.06	604.60	421.79	526.87

Source: Tanzania Ministry of Finance (2008)

The projects supported by the development partners mainly aimed at social and economic context such as improving the school conditions, promoting gender equality, improving agricultural productivity, better environmental conditions, improving the infrastructure as well as health conditions.

2.4 Communication Key Performance Indicators (KPI)

The current study aimed at measuring the role of communication in the performance of donor funded projects thus, using the following indicators, communication flow, communication management tool, media and channel and quality of information and communication (Forcada, 2017). These KPI illustrate the condition of communication in the project as well as the role played by communication in the performance of the project. The above were used as important criteria for evaluating the communication to the success of donor funded projects.

2.4.1 Communication flow

The communication flow is a vertical, one-way flow either downwards or upwards, or as a horizontal, two-way or multi-way flow with all the members of the organization communicating with each other (Bergman and Skagert, 2016). The flow structures for communication among partners can be divided into central, informal, hierarchical, and mixed. A central structure is a kind of formal partnership in which a central unit serves all parts of the project and creates channels of communication. An informal structure is a kind of informal association with a virtual, dynamic structure that facilitates the exchange and sharing of information because all parties are coordinated horizontally and communication is transmitted in all directions. The mixed structure includes a central element through which key parties control the work of other parties using the necessary communication channel that is attached to it (Forcada, 2017).

2.4.2 Communication management tool

Another aspect to consider in communication management is the implementation of tools, such as quality management systems, communication manuals, communication plans, a head of communication, and a budget for communication management. Communication management promotes communication among all members of an organization, helps to bring corporate goals in line with staff objectives, increases the cohesion of team members, and reduces sources of conflict (Forcada, 2017). In RECODA there were basic management tools such as a budget for communication process, and personnel responsible for the communication aspects in the project.

2.4.3 Communication channel

Communication channel is a medium through which a message is transmitted to its intended audience, such as print media or broadcast (Smart Development Workers, 2016). Proper, frequent communication with partners is essential to maintain commitment (Yang *et al.*, 2011). Frequent communication further propagates the sense of trust and unity hence, ensuring the success of a project. Channels must be selected to fit the participants and the communication task; analysis of these channels will help to prevent the use of a communication channel for the wrong reasons (UNICEF, 2008). Not all channels work in all environments thus, proper analysis of the project conditions should be conducted in order to attain the most proper means of communication that are relevant and prove effective. According to Forcada (2017), some of the project channels that propagate effective communication are face to face, phone, teleconference, e-mail/ WhatsApp/Web-based systems/Facebook/Twitter, letters, memos and meetings. Generally, the means of communication are divided into three categories thus, according to Alatalo (2012), they are; face-to-face communication, printed media and electronic media. RECODA used

letters, face to face, meetings and telephone means of communication during the project. The approach was relevant to the communities' settings and socio-economic conditions.

2.4.4 Quality of information and communication

Information is the message of communication and is essential to effective communication. It should be concise, clear, and easy to understand and access. Clarity of communication is vital to the effective coordination of a project (Chang and Shen, 2014).

Concise: Effective communication should use the least amount of words necessary to convey the required information, without sacrificing the other elements of communication (Care coordination, 2017).

Clear: Clear message makes use of exact, appropriate and concrete words (Tyagi and Rathi, 2015). The deliverer has to be clear about the goal or message when writing or speaking to someone. The purpose in communicating with a person should be the first aspect to consider before addressing the receiver. Clarity in communication means: minimize the number of ideas in each sentence; use exact, appropriate, and simple words and construct effective sentences and paragraphs (Pol, 2017). The deliverer of the message has to make sure that the receiver well understands the message without second-guessing the meaning.

Considerate: Effective communication takes into account the audience's background, education level, mindset and anything else that may impact their ability to understand the conveyed message (Care coordination, 2017).

2.5 Project Performance (Stakeholder Satisfaction)

Generally, it has been widely accepted that time, cost, and stakeholder satisfaction are factors of major concern in the performance measurement of a project. However, according to Ollows (2012), there is an indication that time and cost attributes in a project can be compromised on, nonetheless, the stakeholders' satisfaction can never be tempered which is the real determinant of the success of the project. Project performance is not only about doing the project right; it is about doing the right projects. Yet doing the right projects is about more than simply individual project selections, rather it is about how Development Partners (DP) project management manages the entire mix of the business's portfolio of projects (Rajegopal, 2007). According to Spacey (2018), stakeholder satisfaction is a measurement of stakeholder perceptions of a program, project or initiative. It is measured by asking stakeholders to rate their satisfaction on a numerical scale or index.

Stakeholder satisfaction is one of the project performance indicators that are determined by the extent to which the project objectives and a project operation/project implementation (service) meet and/or exceed stakeholder's expectations (Kärna *et al.*, 2013). The key point is that both the project success components must meet stakeholders' satisfaction where there is a link between their interests and these components (Heravi *et al.*, 2015). The stakeholders' expectations have to be well met as well as the project's expectations/objectives. Stakeholder satisfaction is typically calculated from a single question (Spacey, 2018). It is proposed that stakeholders of any project will have expectations concerning the information provided, the results of the project and the process around the project. They develop a perception of the performance concerning these three factors and compare them to the expectations they had before the project started (Hietbrink and Dewulf, 2012).

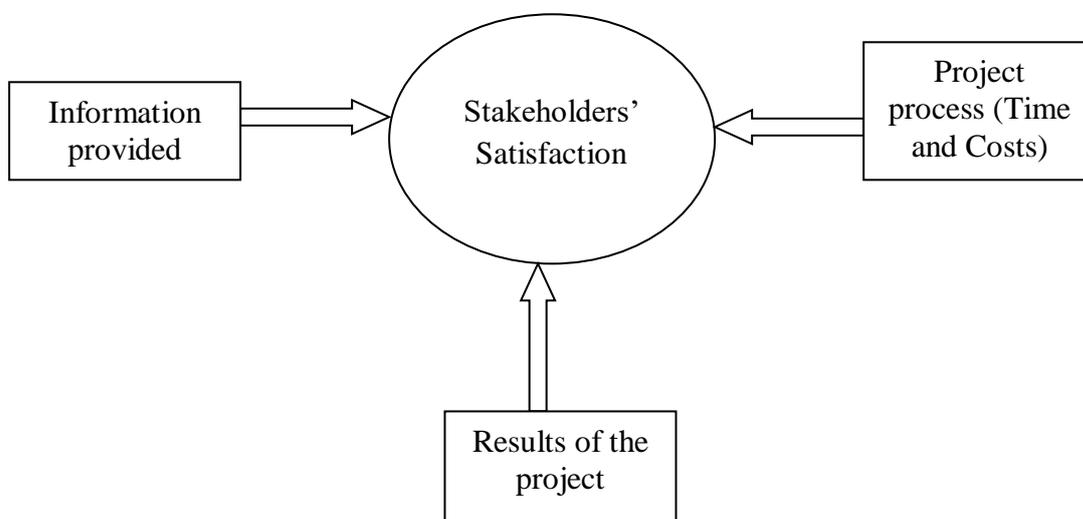


Figure 2: Stakeholders' satisfaction indicators (Source: Hietbrink and Dewulf, 2012)

2.6 A Review of RECODA

RECODA (Research, Community and Organizational Development Associates) is an NGO based in Tanzania. It was established in 2000 to bridge the technology gap in development through research, consultancy, capacity-building, and facilitation of community-based projects. In the beginning, RECODA's main activity was consultancy work carried out for various development organizations (Vesterager *et al.*, 2017). In 2003, RECODA with Help to Self-Help organization in Tanzania and Danida, introduced diversified crops, reduced tillage, and cover crops in Likamba, Manyire, Nduruma and Ngorbob villages, with support from the Tanzania Assemblies of God. At the same time conservation agriculture was introduced to reduce soil erosion, conserve soil moisture and restore soil organic matter (RECODA, 2005).

RECODA was first involved with the Conservation Agriculture for Sustainable Agriculture and Rural Development (CASARD) in the 2005 season. Since then RECODA mainstreamed CA promotion in all its activities in Karatu, Arusha, Meru, and Korogwe districts (Mkoga, 2010). The organization started with two groups under sustainable

agriculture in Manyire (Shetto and Owenya, 2007). The organization introduced fodder crops that are planted along the contours lablab, mucuna and improved pigeon pea and breaking compacted soil with rippers. Banana leaf mulch, made from leaves and the pseudostem, is used for livestock feed, balancing the needs of both livestock and the soil (Gilbert, 2013). Three villages, with 300 farmers, benefited from lablab, pigeon pea and mucuna seed and rippers provided by the project. The organization works with other institutions and the government to enhance conservation agriculture (Shetto and Owenya, 2007). RECODA used lobbying and advocacy with the Farmer-farmer training approach to promote CA in banana-based farming systems. Achievements include extending training from one village in one district covering two groups in 2005 up to a total of 34 villages in four districts and a total of 68 FFS groups in 2010 (Mkoga, 2010).

Since 2006 RECODA's main activity has been to develop the Rural Initiatives for Participatory Agricultural Transformation (RIPAT) approach (Vesterager *et al.*, 2017). Currently, the goal of the organization is to make poverty and food insecurity history in Tanzania through ensuring poor communities have developed socially and economically sustainable livelihoods that can uphold their living. RECODA has three programs; the Community Economic Development Program, which organizes the various RIPAT projects and any other projects implemented by RECODA, the RECODA Academy Program, which offers tailor-made courses for rural economic development facilitators to start new RIPAT-like projects and to work on the spreading of development ideas in general and the Monitoring and Quality Control Program, which is responsible for continuous quality checks and for monitoring the implementation of RIPAT projects (Vesterager *et al.*, 2017). RECODA continues with activities in the designated districts with funding from a Danish organization known as the Danish Mission Council Development Department (DMCDD) established in 1981 (Mkoga, 2010).

The organization collaborates very closely with the Ministry of Agriculture, President's Office Regional Administration and Local Government offices (PO-RALG), Local Government Authorities (LGA), Rockwool Foundation (RF) grassroots communities, Help to Self Help (HSP), Foundation for Civil Society Organizations (FCSOs), Tanzania Agricultural Research Institute (TARI), World Vision Tanzania (WVT), Compassion International–Tanzania, Participatory Ecological Land Use Management (PELUM), African Conservation Tillage (ACT), Tanzania Renewable Energy Association (TAREA), Horticultural Research and Training Institute(HORTI), Livestock Training Institute Tengeru, Sokoine University of Agriculture (SUA), and Arusha NGOs Network (ANGONET). Others include Food and Agriculture Organization (FAO), and the Southern African Development Community (SADC). The main areas of cooperation include sharing of experiences, improved source of inputs, project implementation, the establishment of trial plots for studies (experimental learning) and technology transfer. There are formalized agreements of partnership with SUA, TARI, World Vision, PULS, Rockwool Foundation and various district councils (RECODA, 2018).

Project: Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and Their Communities project. The project's aim was on community mobilization into groups while building their capacity to utilize locally available resources and opportunities for improvement of livelihoods of the community with special attention to PLHAs. The four-year research and development project was sponsored by the Danish Mission Council Development Department (DMCDD). It was located in the Kilimanjaro region in four villages of Mdawi in Kimochi ward; Kidia, Tsudunyi and Kikarara in East Old Moshi wards, in Moshi District, Kilimanjaro. The main activity of the community in the project area is small-scale farming and livestock keeping.

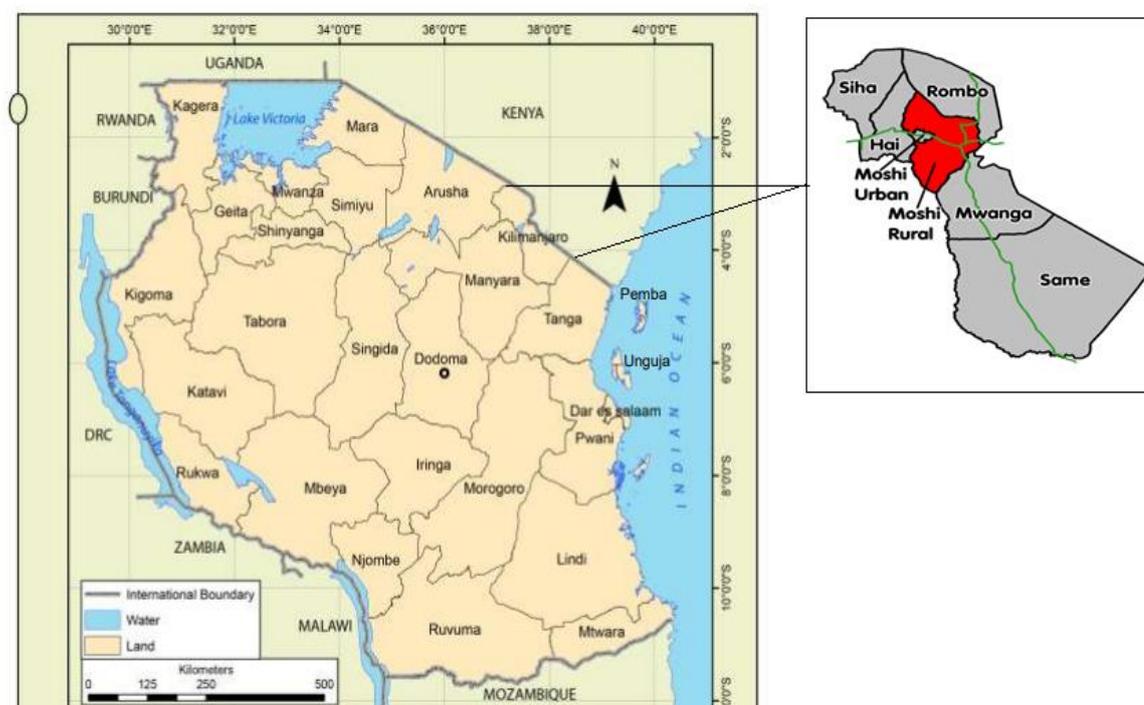


Figure 3: Map showing Moshi the study district in Kilimanjaro Region where the Project was implemented (source: RECODA, 2017)

The project started in October 2014 and was expected to end in September 2017 but got a no-cost project extension till June 2018. The project applied the Rural Initiatives for Participatory Agricultural Transformation (RIPAT) Approach which from the project's design had an inbuilt spreading and sustainability approach through two phases i.e. RIPAT 'Start' and RIPAT 'Spreading' with capacity building to community-based experts (extension offers, local institutions and lead farmers) (RECODA, 2017).

The key objective of the project included capacity building of the community to understand their land rights and to be able to integrate PLHAs. The second objective was to improve livelihood of the community, while the third was to build the capacity of KIWAKKUKI "*Kikundi cha Wanawake Kilimanjaro Kupambanana Ukimwi*" to apply the RIPAT approach in community livelihood improvement projects as part of their work

with HIV/AIDS prevention, and also care and support for People Living with HIV/AIDS (PLHAs) and Orphans and Vulnerable Children (OVCs). The targeted project beneficiaries are now working in VSLA groups and at group plots, to learn new agricultural technologies. The project was expected to ensure small-scale farmers through the inclusion of disadvantaged groups in the project area have developed socially and economically sustainable livelihoods that can uphold their living by 2022. The project has been very successful. Beneficiaries are moving out of poverty, hunger and malnutrition due to the adoption of high valued and improved nutritional crops/livestock. Through the use of community-based experts there is continued replication of the achieved results in much larger local populations i.e. the project aimed at four villages and eight groups but through RIPAT spreading 4 other villages (Mahoma, Mowo, Sango and Shia) and more 11 groups were added (RECODA, 2017). The Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and their Communities project had extensive stakeholder inclusion throughout the project aiming at satisfying the stakeholders of the project. The current study identified the extent to which the stakeholders were satisfied with the project information and the results of the project and how communication played to that satisfaction level.

2.7 Human Aspects of Communication in DFPs

Seeing the project environment as an interconnected network of actors is appropriate because every such venture, no matter how small or well defined, can be completed without interactions and transactions between people and organizations (Dainty *et al.*, 2012). For example, a simple vegetable production project in a rural area, a relatively straightforward project which alone involves the interactions (communication) of the project team, stakeholders, consultants and village officers. Now, considering a project like Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and

their Communities; such projects will take years of planning investigation and interactions between the stakeholders, project management, surrounding institutions, organizations and the villages/community leaders. According to Dainty *et al.* (2012), the information flows involved with such an endeavor are potentially enormous, and yet must be carefully managed if the desired outcomes are to be achieved. However, in both examples, the success or otherwise of the project will depend upon the effectiveness of those involved to convey their needs and perspectives to others. It is the multifarious nature of human interaction that renders the understanding of communication and effective communication practice so problematic.

Donor funded projects are not the only projects that are harmed by improper communication. However, the study has specifically aimed at donor-funded projects because these projects tend to be two-way (OECD, 2014). Two-way communication tends to have more complications because both sides have to know and understand the projects progress and work together coherently to achieve the proposed project's outcomes. Therefore, they present a more unique and complex communication pattern.

2.8 Empirical Review of the Association of Communication and Performance of the Project

Literature shows that some studies have been conducted on communication in projects. For example, Bubshait, Siddiqui, and Al-Buali (2014), conducted a case study to analyze the role of communication and coordination in project success. Coordination and communication are specifically challenging tasks for industrial projects where several interdependent role players are needed to achieve the desired project outcomes. In this context, a two-stage case study of construction phase delay control for an oil and gas industrial project was researched in Saudi Arabia. A process improvement methodology

was carried out in the first stage and the root causes for the delays were identified. Ultimately, the study demonstrated the importance of communication and coordination in successful project management for complex projects.

Liu *et al.* (2016) researched on the identification of key contractor characteristics that affect project success under different project delivery systems. The data was collected through empirical analysis based on a group of data from China. According to the authors, the reasonable choice of a proper project delivery system (PDS) is one of the key links to project success. The findings mentioned that regardless of the project delivery system, communication is among the most critical factors that would affect project success.

Similarly, Lindhard and Larsen (2016) also researched on the effects of emotional intelligence on project manager performance in construction. However, in their findings the authors confirmed that improvement in communication would help avoid project failure, therefore increasing the chances of project success.

Besteiro *et al.* (2015) conducted a study on the success factors in Project and concluded that communication was one of the critical factors for project success. Furthermore, the researcher confirmed that communication in the projects was the most important critical success factor in large companies and the most critical for small companies. They noted that regardless of project management factors or project management phases, communication is a common variable associated with project success. The research was conducted through a survey of 28 project managers from different companies working in Brazil.

A study done by Weldearegay (2012), in Sweden on the role of communication in managing projects aimed to explore the way of communication in the delivery of the project in Umeå 2014. The research was done through a review of the literature and through purposive (judgmental) sampling whereby 5 respondents were selected. The researcher concluded that the communication system is viewed as a high priority. Henceforth, it should incorporate long term communication objectives, philosophy statements, mission statements and communication policies.

Further to the above, research on the Role of Communication in Sustaining Development Projects: The Case of Ejura Sekyedumase Municipality in Ghana was conducted by Owusu (2015). The research focused on the role of communication in sustaining these development projects. Based on the development communication theory, the study sought to determine the channel of communication used by development partners to involve communities in their own development and the changes the projects bring to the lives of the people in the Ejura/Sekyedumase Municipality through the use of communication. Using four purposively selected communities in the Ejura/Sekyedumase Municipality, a cross-sectional research design was adopted for the study. The study revealed that though development partners communicated to communities on some of the projects, the components of development communication was not wholly employed. The projects that employed communication among other things have been sustained whilst those with little or no communication are in a deplorable state. The study also revealed that interpersonal communication was the most common means of communication used by development partners to contact communities and this helped in bringing social change to the lives of the people in the Ejura/Sekyedumase Municipality.

Forcada *et al.* (2017), conducted research in 2017 focusing on Communication key performance indicators for selecting construction project bidders and construction project success. The research results confirmed that it is vital to select the right project bidders as this affects the success of a project. Although there are numerous methods for assessing bidders, communication is rarely taken into account. Data were collected from 390 construction partners in Spain through a survey. The results indicated that the most significant communication key performance indicator is the quality of information: basically, its accuracy and timeliness. In addition, experienced respondents placed less importance on communication flow structures and communication management than did inexperienced respondents. Experienced respondents distrusted new trends and/or management theories and mainly relied on experience. The findings also reveal that the communication flow structure, the communication and information management plan, and the channels of communication are relevant aspects for the success of a project. The results of this research can be used to assess bidders' communication abilities and systems.

2.9 Knowledge Gap

The review of literature suggests that a number of studies have been carried out to study communication and project performance in different spectrum (Forcada *et al.*, 2017; Owusu, 2015; Weldearegay, 2012; Besteiro *et al.*, 2015; Lindhard and Larsen, 2016; Liu *et al.*, 2016; Bubshait *et al.*, 2014). Moreover, most of these studies have been mainly undertaken to understand the impact of communication on the success, deliverance and development of projects. As evident from the studies, there has been a rapid increase in trying to understand the aspects that prone to project success. However, these studies have defined performance as achievements of project goals or achievement in meeting the project budgeted cost, quality set and schedule.

There is no substantial literature however, that has captured performance as satisfaction of the stakeholders on the information provided during the project and the result of the project reflecting project performance differently. In addition, these studies were not carried out in Tanzania, thus findings cannot be generalized to Tanzanian context due to the difference in project settings, cultures, policies and communication technological advancement. Subsequently, these studies have not substantially captured rural projects' communication settings which are different from the urban projects' communication settings. Therefore, there is a prerequisite for further investigation. This study intended to fill the research gap by examining how the communication plays a role on performance of donor funded agricultural project.

2.10 Theoretical Framework

The current study was guided by several theories that provided a platform for understanding the role of communication to projects' success. The theories are the Diffusion theory, Communication development theory and Exhaustive theory separately played a role in the study.

2.10.1 Diffusion theory (DT)

The diffusion theory of communication explains how new viewpoints and ideas spread through cultures. Generally, information and ideas pass through a path of communication in order to reach the target group and the entire population. Generally, the spread of an idea is influenced by the nature of the idea to be spread, the available communication channels, the social system and the time of communication (Westland, 2007). In DT, the aspect of communication channel is of vital importance in determining the performance of a project. Therefore, for a project's success, the project manager should consider vital

aspects of the diffusion theory in mind during planning and execution of ideas in the group (Campbell, 2009).

The DFPF performance promotes openness and feelings of inclusion by the team members. However, only the individual considerations that may not negatively impact on the project performance should be factored. The project members should determine the best way that a certain decision or communication channel will accelerate project performance. Some decisions and ideas may be shared online via e-mail and social media while others may be shared via the telephone (Harrison and Lock, 2004). However, for decisions that need face-to-face interaction, the project manager should organize for a meeting to ensure the ideas are shared and decisions and conclusions are drawn from a common sense of agreement. The DT shows a link between the project channels and the performance of the project. Some ideas that need to be taken seriously may appear less serious based on the channel of communication adopted. Using social media to pass information pertaining to change of project management may appear informal and less serious. However, when ideas are sought on merit of their importance and communicated using the right channel, project performance becomes certain (Carroll, 2012). The DT theory explains more on the link between the project channels and the performance of the project thus focusing mainly on the second objective hence, the role of communication channels in the success or failure of a given project. The theory, however, was not sufficient in guiding the whole study, therefore, the other theories were taken on board.

2.10.2 Communication development theory (CDT)

The term "development communication" was coined in 1972 by Nora C. Quebral, an academic and a pioneering figure in the discipline of Communication Development in Asia (Manyozo, 2006). Modern communication development theory asserts that

information becomes a catalyst for change. The underlying fact behind the genesis of the CDT is that there can be no development without communication. Development Communication is in essence, the notion that communication is capable of creating a public atmosphere favourable to change, which is assumed indispensable for modernizing traditional societies (Njuguna, 2007). In other words, there could be no performance without communication (Femi, 2014). The theory has undergone several alterations to date. The theory perceives communication to be the essence of projects and bears great significance to its performance.

According to Manyozo (2006), the World Bank defined development communication as the "integration of strategic communication in development projects" based on a clear understanding of indigenous realities. Mefalopulos (2003) stressed that development projects cannot bring about change without an ongoing culturally and socially relevant communication dialogue among development providers and the recipient. The CD theory partly filled the gap left by the DT. The CD theory guided the study in understanding how communication is important in the delivery of any change that is, stakeholder satisfaction as one of the performance indicators. Therefore, assisting the researcher understand the significance of communication in bringing about development (performance) in DPFs.

2.10.3 Exhaustive Theory (ET)

Chester Barnard published his seminal work on "The Functions of the Executive" where he suggested "In the exhaustive theory of project management, communication occupies a central place, because the structure, extensiveness, and scope in other words performance of the projects is almost entirely determined by communication techniques" (Barnard, 1938). Awareness of how, why and when the project operates is significant so that to attain a better understanding of how communication works (Dainty, 2012). Barnard

strongly argues that communication is the primary task of any executive, and communication with employees regarding their concerns, problems, ideas, and suggestions about the organization is the critical skill of managing (Henderson, 2004). Since Barnard, a number of behavioural scientists have underlined the theory on the importance of communication in contributing to project effectiveness. Roberts and O'Reilly have suggested that if communication is good, then a project's performance and effectiveness will also be good (Jain, 2016). Both the CD and DT did not cover the remaining objectives and performance indicators thus, the ET complemented by covered the left out parts. Generally, the ET theory shows that if communication is well and good, attainment of the project's performance is guaranteed. The ET guided the study in the process of data collection, proving the practicability of this theory.

2.11 Conceptual Framework

The study's conceptual framework (Figure 4) shows the relationship between the independent and the dependent variables. The units of assessment are communication among the project actors and the performance. The kind of project information shared among the project actors during the life cycle of the project i.e during the problem identification, project planning, project implementation, project monitoring and evaluation and project phase-out was important in understanding and explaining many of the issues investigated in this study. Furthermore, in the process of seeking good project performance the vitality of the communication channels opted by the individuals such as face to face, phone, telephone, twitter, radio, letter, e-mail, meeting, newspaper, brochure, Whatsapp, memo and TV to transfer information from one project actor to another had an influence on the project performance thus stakeholder satisfaction performance. The communication aspect of the project involves communication flow, quality of information and communication management as main indicators that judge the communication

influence in the performance on high or low performance particularly in relation to stakeholder satisfaction performance. The study sought to describe and analyse the barriers that can influence effective communication, that is, factors that negatively affect effective communication of the DPFs. A detailed operational definition of variables is presented in Appendix I.

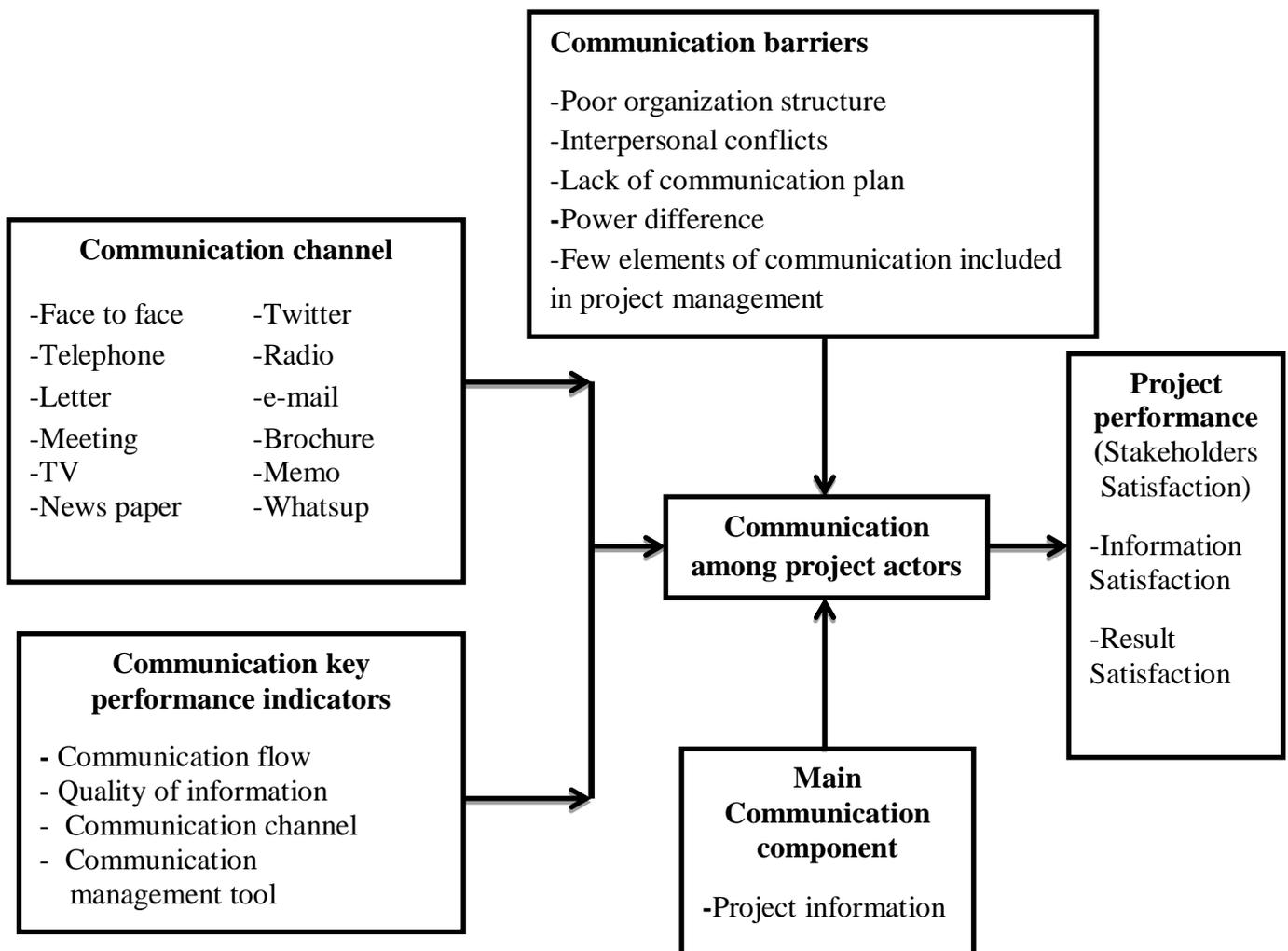


Figure 4: Conceptual framework for understanding; the role of communication on performance of donor funded agricultural projects

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Study Area

The study was conducted in Moshi District which is located between Latitudes 2°, 50” South; and Longitudes 37’ to 38’ east. According to the Tanzania’s 2012 Population and Housing Census, Moshi District had 93,275 households with a total population of 466, 737 (URT, 2012). The study was conducted in four villages in the two wards where the RECODA project titled “Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS)” was being implemented between October 2014 and June 2018. This project was selected for the study due to RECODA’s experience in managing donor-funded agricultural project has existed for over a decade. The study covered four villages i.e. Mdawi in Kimochi ward; Tsuduni, Kidia and Kikarara in East Old Moshi/Old-Moshi Mashariki ward. The villages were purposefully selected because they were the sole villages that have accomplished the project implemented by RECODA.

3.2 Study Design

The study used a case study design. A case study enables intensive, systematic investigation of a single individual, group, community or some other unit in which the researcher examines in-depth data relating to several variables (Heale and Twycross, 2018). Henceforth, it enables obtaining data that help understand a phenomenon in detail. The design enabled the collection of both qualitative and quantitative data from the study sample so as to improve the validity and reliability of the study. However, according to Zainal (2017), case study design bares the inability to provide a generalising conclusion henceforth one way of overcoming this is by triangulating the study with other methods in order to confirm the validity of the process, an approach used in this study.

3.3 Study Population and Sampling Procedures

3.3.1 Study population

The study's population included all the stakeholders, project leader (manager), the extension officers and RECODA project staff i.e. those involved in the "Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) Project" that was implemented by RECODA.

3.3.2 Sample size and sampling procedure

The study focused purposive on four villages namely Mdawi, Kikarara, Kidia and Tsudunyi which were the direct beneficiaries of the project. According to Bailey (1998) and Bartlett *et al.* (2001), a sample size of 30 respondents is said to be the minimum sample for data collection. Furthermore, according to Maas and Joop (2005), a sample size of at least 30 respondents is reasonably sufficient in social science research studies to ensure normal distribution of the sample mean. Therefore, 30 respondents were randomly selected from each village hence, a total of 120 respondents.

Purposive sampling was used as the most appropriate non-probability sampling technique whereby; the extension officer, project leaders and project members were purposively selected to collect more in-depth knowledge on the study objectives i.e. the project manager (1) and project team (3), extension worker (1) making a total of 5 key informants. Purposive sampling was essential for the study because it allowed the researcher to find people/respondents who were willing to provide data/information by virtue of knowledge and experience (Bernard, 2002; Lewis and Sheppard, 2006). Furthermore, the procedure is used when a diverse sample is necessary or the opinion of experts in a particular field is the topic of interest (Martínez-Mesa *et al.*, 2016). Purposeful sampling is widely used in

qualitative research for the identification and selection of information-rich cases related to the phenomenon of interest (Palinkas *et al.*, 2015).

Snowball sampling was also used during the data collection so as to reach the study's project's stakeholders. This was because some of the stakeholders had either moved to other places, died or have left the group made during the project. The respondents were asked about the members who benefited from the project. With this method, the researcher was able to attain the required number of stakeholders.

3.4 Types of Data

The study collected both primary and secondary data so as to adequately address the study's specific objectives.

3.4.1 Primary data

Primary data were collected on the types of project information used by the project actors, communication channels used and their relationship to project performance, the relationship between communication system and the performance of the projects and lastly, at examining the barriers experienced by the project actors to effective communication. The study measured performance in terms of perceived performance.

3.4.2 Secondary data

The researcher also went through agricultural project reports, the final evaluation document, project reports and some organization publications in order to understand more on the "Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and their Communities project" and the communication system among project actors.

3.5 Data Collection Method

3.5.1 Primary data collection

Primary data was collected using a questionnaire. Generally, a questionnaire is an appropriate tool for collecting quantitative data in social science research (Kombo and Tromp, 2006). Furthermore, it is very cost-effective (Roopa and Rani, 2012). Most of the data collected during the survey was attained using a Likert scale. The scale was used to measure beneficiaries' views/perceptions on the project's communication system as well as the performance of the RECODA agricultural projects. The questionnaire was the major tool that was used to collect data that would answer the research on all the objectives. The questionnaires were administered to the randomized stakeholders of the project.

Qualitative data was collected using key informant interviews (KIIs) and focus group discussions (FGDs) through a checklist and an FGD guide respectively. The in-depth interview involved the project leaders as the key informants. As regards to the FGDs, one group in each village was formulated hence, having 4 FGDs for the project beneficiaries. The FGDs were used in the research because the group format stimulates better discussion, generates new ideas, and promotes exploration of unknowns regarding the research objectives. Furthermore, the KIIs were also used because the information comes directly from knowledgeable people who provide data and insight that cannot be obtained with other methods. The informants may offer confidential information, recall incidents, local happenings, or conditions. Subsequently, key informant interviews provide flexibility to explore new ideas and are among the least expensive of the social science research methods (Marshall, 2009). Using these methods of data collection, proper and sufficient data in section 3.4 were collected in relation to the objective of the study.

3.5.2 Secondary data collection

Secondary data was collected using a checklist. The tool was used to attain information on the objectives and more details of the project. Generally, information was collected from the project's final evaluation document of the "Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS)" and the Communities Project.

3.6 Data Analysis

The study's quantitative data was analysed using a descriptive, Likert-rating scale using the International Business Machine Statistical Package for the Social Science (IBM SPSS) and content analysis was used to analyse qualitative data whereby the ATLAS. ti software was used.

- Data for the first Objective was analysed using content analysis and descriptive statistics.
- As for objective two, a Likert scale rating was used to determine the mean and the standard deviation of the communication channel effectiveness and Pearson bivariate correlation to identify the strength of the correlation with the performance of the project.
- Objective three was analysed using Pearson bivariate correlation and linear regression for expressing the strength of association between the independent variable and the dependent variable (stakeholder satisfaction).
- Finally, for objective (4), content analysis was used to generate meaning from the qualitative data to be collected as well as Likert scale rating.

3.6.1 Data analysis methods

3.6.1.1 Descriptive statistics

Descriptive statistics were determined using SPSS in order to explore the underlying features in the data. The data covered several aspects such as the response rate, profile of individual respondents and all response variables. For each of the indicators for each variable, the mean score and standard deviation of the responses was calculated. Finally, the coefficient of variation (CV) was calculated as a percentage so as to give an indication of how each of the responses varied and to simplify the comparison of the relevant variations. Furthermore, the mean score and standard deviation attained from the independent variables were aggregated so as to illustrate the general score of the specified variables.

3.6.1.2 Likert rating

A 5 point Likert scale was used to measure the perception of respondents on the effectiveness of communication channels and the importance of the communication barriers on the project. The scale was not relevant/important (1), slightly relevant/important (2), moderately relevant/important (3), very relevant/significant (4) and exceedingly relevant/important (5). Respondents with a mean of 3 and above implied they were in agreement that the communication channels in use are effective in fostering project performance as well as the communication barriers, were important. The scale analysis assisted to identify the ranking as well. To determine the mean Likert level the following method was used;

Where; \bar{X}_s = mean score f_n = Frequency of responses pattern

n = number of respondents (sample)

$X_s = \sum (fn/n)$ of each item was computed by multiplying the frequency of each responses pattern with its appropriate nominal value and by dividing the sum with the number of respondent to the items. Example to summarized; $X_s = \sum [(fn/N = 5+4+3+2+1 = 15/5 = 3.$

3.6.1.3 Pearson correlation

Inferential analysis using Pearson Product Moment correlations were computed to reveal relationships between dependent (performance of the project) and independent variables using a confidence interval of 95% in order to explain the strength of the linear association between the dependent and independent variables ordinal type of variables. The researcher presented the information collected in the form of tables. Percentages were also presented to explain the amount of correlation that can be explained by the model (coefficient of determination). The independent variables are;

X1= Communication flow

X2 = Communication channel

X3= Communication management tool

X4 = Quality of information

The dependent variable (Y) = Performance of the project (Stakeholder satisfaction) thus, stakeholders satisfaction on the information provided performance and stakeholder satisfaction on the results of the project performance.

In order to determine the existence of any relationship between the communication and performance of the project using the Pearson correlation method, hypothesis testing was required. The null hypotheses required for performing the test are as follow:

There is no significant association between communication flow used and project's performance.

i. e. $H_0; \mu_{cf} - \mu_p = 0$

There is no significant association between communication channels used and project's performance)

i. e. $H_0; \mu_{cc} - \mu_p = 0$

There is no significant association between communication management tools used and the project's performance.

i. e. $H_0; \mu_{cmt} - \mu_p = 0$

There is no significant association between quality of the information provided and project's performance.

i. e. $H_0; \mu_q - \mu_p = 0$

The null hypothesis is rejected when either $r \geq 1$ and $p \leq 0.05$

Where μ_{cf} represents sample mean for Communication flow

μ_{cc} represents sample mean for Communication channel

μ_{cmt} represents sample mean for Communication management tool

μ_q represents sample mean for Quality of the information

μ_p represents sample mean for Performance

3.6.1.4 Linear regression

This was used to determine the influence of the project communication indicators (communication flow, communication channel, communication management tool and quality of information) on the project performance status. The project performance status will be derived from the computed mean of the dependent variables thus, forming the dependent variable for the linear regression model such as the inference collected from stakeholders satisfaction on the Information provided performance and Stakeholder satisfaction on the results of the project performance, will be regressed as one status; PERFORMANCE followed by associating the status with independent variables. It's expression as;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$$

Where Y is the dependent variable; Project performance

X₁= Communication flow

X₂= Communication channel

X₃= Communication management

X₄= Quality information

3.6.1.5 Content analysis

Qualitative information collected from KIIs and FGDs was summarized into themes thus, the information was categorized thematically. Subsequently, corroboration of the results was used to link the study with the latest relevant research studies. The reason for using this form of analysis is because the analysis makes replicable and valid inferences by interpreting and coding textual material. The first objective data were more textual than quantitative. By systematically evaluating texts (documents, oral communication, and questionnaires), qualitative data were converted into quantitative data for further analysis.

3.7 Ethical Issues

The study adhered to the ethical principles whereby a clearance permit for conducting research in Tanzania from the Vice Chancellor of Sokoine University of Agriculture was issued. The letter introduced me and the purpose of the research to the district council office. The district council office provided introductory letters to all four wards. Furthermore, the respondents were asked for consent and were briefed on their rights before the survey thus if they wished to participate in the study or not. The confidentiality of the respondents was strictly adhered to including personal information of respondents.

3.8 Limitation of the Study

- The study's data was collected in a subjective approach thus, it might be affected by biases. This is because the study was based on perceived performance than the

actual performance of the project. Therefore, research should be conducted on the actual performance to further improve/ increase understanding of communication and performance.

- Lack of access to many key informants. The project phased out in 2017 thus deeming it hard for the researcher to trace the project team and staff that traveled overseas, changed organization or changed phone numbers. This limited the key informants data collected in the study. The researcher resolved to attain as much information as possible from the attained key informants.

CHAPTER FOUR

4.0 RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the study's findings and discussion. The study assessed the role of communication in the performance of donor funded agricultural projects. Specifically, it established the kind of project information shared by various actors in the RECODA donor funded agricultural projects; examined the effectiveness of various communication channels to the performance of RECODA agricultural projects; assessed the relationship between communication and performance of RECODA agricultural projects; and identified barriers to effective communication among actors in the RECODA donor funded agricultural projects.

Based on the study's specific objectives, section 4.2 presents the respondents' socio-economic and demographic characteristics: section 4.3 presents the kind of information shared by various actors in the project: section 4.4 presents effective communication channels used and their relationship with the performance of the project. Section 4.5 presents the performance of the project (Stakeholder Satisfaction performance): section 4.6 depicts the relationship between communication indicators and the performance of the project and lastly, section 4.7 presents the barriers of communication to effective communication.

4.2 Respondents' Socio-economic and Demographic Characteristics

Respondents' socio-economic and demographic characteristics are important in research as they bring to light the sort of respondents who took part in the survey. The respondents who were household members provided some basic and personal information about

themselves which was useful in determining the influence of communication with individuals on the performance of donor-funded projects. Table 1 presents the respondents' personal characteristics that were seen to be relevant to the study.

Table 1: The socio-economic and demographic characteristics of respondents (n=120)

Personal characteristics		Frequency	Percentage
Age group	26-35	1	0.8
	36-60	68	56.7
	60>	51	42.5
Level of education	No formal education	22	18.3
	Primary school education	82	68.3
	Secondary school education	8	6.7
	Certificate	2	1.7
	Diploma	5	4.2
Occupation	Degree	1	0.8
	Farmer	87	72.5
	Businesswoman/man	24	20.0
Sex	Clergy	9	7.5
	Female	72	60
	Male	48	40

4.2.1 Sex and age of respondents

A total of 120 beneficiaries of the 'Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and their Communities' project were interviewed. From the study's findings (Table 1), it was observed that women have got more interest in agriculture whereas, 60% of the respondents were randomly selected were women. The study further identified that 72% of the women rated above average on their satisfaction with the agricultural project. This is also supported by Idris (2018), who explains that agriculture accounts for the largest share of employment in Tanzania and that a greater proportion of women than men (69.9% versus 64.0%) work in agriculture. In addition, unpaid family helpers constitute 34.5% of those employed in agriculture with more than twice as many females as males in this category. Furthermore, sex categorization was required to determine findings that would be explained by the nature of the sex of the

respondents. In addition to sex, age was also required so as to determine the age group of respondents that participated in the project and whether there are communications aspects that are specific to a particular age. From Table 1, 56.7% of the respondents were aged 36 to 60 and 42.5% of the respondents were aged above 60. However, only 0.8% of the respondents were aged between 26-35 9 (Table 1). According to Anania and Kimaro (2016), land ownership in Arusha and Moshi districts is mostly influenced by the customary laws meaning that people acquire land from their parents and grandparents resulting in age biasness on who should be given land. Moreover, the youths are not given or inherit land unless they are married or when their parents die creating a barrier for youths to participate in agriculture projects.

4.2.2 Respondent's educational level and occupation

According to Owusu (2014), it is essential for project implementers to choose a channel of communication that best suits the stakeholder's educational level to inform them about the goals and activities of the project. Study findings (Table 1) show that over two-third (68.3%) of the respondents had primary education and a few (6.7%) had no formal education at all. However, according to the FGDs; the majority of the respondents had the ability to read and write. The study findings have identified education level as one of the important factors that can hinder effective communication. Moreover, literacy levels of respondents do influence their ability to understand the message that is being communicated (Literacy Foundation, 2019) especially in this particular project which involved training on modern farming hence, one's literacy had a big effect on the performance of the project.

One's occupation was also of significance to the study as one's experience and exposure in agriculture can allow a better understanding of what has been communicated. Study

findings (Table 1) show that the majority (72.5%) of the respondents were farmers thus, had prior knowledge of agriculture though more of the traditional form.

4.3 Kinds of Project Information Shared

Different kinds of information were shared among various actors in the project. During each phase, the kind of information shared in the project was almost similar in the villages studied. It was because the projects were conducted simultaneously in all the villages following the same framework.

4.3.1 Kind of information shared during project initiation

According to a Key Informant *“The kind of information shared during the beginning of the project perpetuated the establishment of proper and a healthy relationship among the project actors through-out the project”*. Project initiation is the first phase of a project. This is the phase where communication is most vital and important as it lays the foundation of a project by determining objectives, requirements and constraints (Mentula, 2015). Furthermore, in this phase, the problems and solutions that need to be addressed by the project are identified by the stakeholders and the project initiators from the community. Therefore, effective communication is important during collective presentation and assessment of problems in the community for the sustainability of the solutions identified.

The common information shared in the initial phase was mainly on project introduction and directives, community orientation, the need for the project in the villages i.e to increase their crop productivity, to form farmer groups and the community livelihood situation. Furthermore, 90.8% of the respondents claimed that the project staff shared information on the project with the beneficiaries; on the resources needed for the project,

i.e demonstration land and the number of members required for the project groups (not more than 35 member); on the scope of the project, that is the villages that were involved in the project (Kikarara, Tsuduni, Mdawi and Kidia) and on the other regions where the RIPAT project had been implemented and success achieved. Furthermore, information on the motto of the project that is “*njaa na umaskini kuwa historia Inawezekana*” which literally translates as ‘it is possible for hunger and poverty to be history’ was shared. The respondents also recalled another famous slogan used was “*hatujaja kuwaletea samaki, tumewaletea ndoana*” meaning “they did not come to give them ‘fish but teach them how to fish’”. Lastly, information of the organization involved introduction that is RECODA and KIWAKKUKI to the stakeholders.

4.3.2 Kind of information shared during project planning

According to ITRM (2016), the project planning phase communicates project activities in terms of; what tasks will be performed; who will perform the tasks; when will the tasks be performed; what resources will be needed to accomplish the tasks; and how the tasks will be sequenced, Therefore, the planning phase involves effective interaction between the project actors in configuring the use of the resources and the fall out of the project activities before implementation. The information among the project actors has to be well established in this phase as effective coordination of participants requires a proper communication pattern to share their experience, skills, resources, and equipment for collective collaborative action (Abbasi *et al.*, 2018).

During project planning the information shared were mainly on the project’s organization and plotting such as information on the schedule of the project that is when the project will start (2014) and when the project will end (2018) and who will be the responsible in the organization during the project phases over the years (The first phase ‘RIPAT START’

was implemented by RECODA organization for three years and then handed over to KIWAKKUKI for the two remaining years for the '*SPREADING*' phase); on the pre-activities that have to be done before the implementation those are on the formulation and selection of group leaders whereas each group consisted of not more than 35 members including super farmers; on the five years contract formulation between the farm owners and the stakeholders for demonstration plot during training. On the formulation of the group constitution of their own making so as to make laws and regulations that they can manage and handle. And also on the materials that were needed for the project i.e seeds, *Chaka hoe* or popularly known as '*Jembe la Mzambia*'. The materials were provided by RECODA.

4.3.3 Kind of information shared during project implementation

This phase generally involves putting the plans into actions and this is when the interactions and communications among the project actors are at the apex to ensure coordination, effectiveness and efficiency of the project. In this phase the kind of information shared among the project actors was mainly educational information that is both theoretical and practical education i.e. on preparations of farms that is before growing the crops that will propagate more yield; on the use of fertilizer effectively and efficiently, on the requirement when digging holes in farming; on how to grow and maintain different crop varieties such as improved banana farming such as conservation agriculture and crop diversification which includes maize intercropped with pigeon pea (PP) or lablab, root crops such as cassava and orange-fleshed sweet potatoes, vegetables (keyhole garden), agro-forestry (fodder and fruit trees); on how to divide farmland in order to produce much yield in a small area; on the rules and regulation for keeping farm cattle such as improved local chicken, pigs and milking goats and how to build sheds for better health of the cattle; on types of farming such as conservative and mixed farming and on how to economically

gain from the agricultural practices. After the project 200 households were reported to benefit directly with VSLA activities initiated by the project in four villages in the project area since the inception of the project in 2014 (RECODA, 2017).

4.3.4 Kind of information shared during project monitoring and evaluation

Monitoring and evaluation is an assessment that is best preferred to be conducted by the project stakeholders in order to establish trust, transparency and enabling an organization to assess the quality and impact of a project, against project plans and work plans (Phiri, 2015). The kind of information shared among the project actors during this phase was mainly the assessment kind i.e. on the progress of the project which was monitored every week by the project staff to check if the project was being done accordingly. In addition, there was an assessment write-up document by the stakeholders after every three month, on the correction of any deviations from project objectives and the results of the project, as well as, on the results of the previous three months assessment with the representatives' stakeholders from all the four villages.

4.3.5 Kind of information shared during project phase-out

According to Pulse of the Profession (2013), even after the project is finished, team leaders and project sponsors are still responsible for communicating with end-users, about the accomplishment and the value of the project. Proper information during the project phase-out is necessary in order to propagate the sustainability of the project. The kind of information shared was mainly on the survival of the project after the project phase-out i.e on the project activities to be continued by the groups after the project phase-out such as distribution of the crops as agreed upon, reports writing illustrating the progress of the project and "SPREADING" of the knowledge to other villages; on the survival of the associations formed during the project such as Village Savings and Loan Association

(VSLA) and *Umoja wa Vikundi vya Kilimo Old-Moshi* (UVIKIO) (literally translated as Association of Farming Groups in Old Moshi) for Kidia, Mdawi, Tsuduni and Kikarara., on the project handover to KIWAKKUKI after the three years of RIPAT START and on the congratulatory ceremony and reward that was conducted after the third year of the project.

According to Payne and Watt (2018), the essential kind of information to be communicated in a project typically includes project status, project scope statements and updates, project baseline information, risks, action items, performance measures and project acceptance. The structure and nature of the project could be the reason for the absences of some kind of information shared in the “RIPAT project”

4.3.6 Relationship between understanding Information and stakeholder’s satisfaction performance

The project’s success or failure is linked to the effectiveness of its various communications being directed towards the right stakeholders at the right times during the life of the project (Bourne, 2016). On 23rd January 2019, a RECODA Project Manager explained: *“The kind of information shared during the project had a relative impact on the performance of the project”*. According to the KII, the kind of information shared through the project triggered stakeholder satisfaction because it propagated better coordination of activities, efficiency, effectiveness as well as better understanding of the project. Furthermore, the kind of information shared throughout the project was most understood by the respondents leading to Information stakeholder’s satisfaction as shown in Table 8. From this study finding, the level of understanding was however not related to the occupation of the respondents insinuating that the occupation of the respondents did not

cause more or less understanding of what was communicated. Table 2 illustrates how the stakeholders understood the information shared during the project.

Table 2: Understanding on the information provided (n=120)

Understanding on the what was communicated	Frequency	Percent
Excellently	32	26.7
Very well	74	61.7
Neutral	13	10.8
Slightly	1	0.8
Not at all	0	0.0

From Table 2, 26.7% of the respondents did affirm to have excellently understood the information provided, 61.7% of the respondents claimed to have very well understood the information provided both comprising of more than three-quarters of the respondents acknowledged to have understood the information provided. The study further linked the respondents' responses on the understanding of the project in relation to the project performance that is whether there is a relationship between understandings of the information provided during the project and dependent variable which are stakeholder satisfaction on the result and stakeholder satisfaction on Information provided. The results are as follows;

Table 3: Correlation between understanding on what was communicated and the performance of the project

	Stakeholders satisfaction on Project Results	Stakeholders satisfaction on Information Provided
Pearson Correlation	0.860	0.729
Sig. (2-tailed)	0.002	0.018
N	120	120

Table 3 shows that there is a strong and significant statistical correlation between understanding on what was communicated and the two predictor indicators stakeholders satisfaction on project results and stakeholders satisfaction on information provided with a

coefficient of $r=0.860$, $n=120$, $p=0.002$ and $r=0.729$, $n=120$, $p=0.018$ respectively. The study's observations suggest that the direction of the relationship is positive hence the more the stakeholders understand what is communicated the more the stakeholders become satisfied with the project's results and the information provided.

4.4 Effective Communication Channels with the Performance of the Project

4.4.1 Channels of communication used during Project

The channels of communication used were face to face, phone calls, messages, meetings letters and radio. However, the means of communication differed in both frequency and usage as presented in Table 4.

Table 4: Type of communication used during the project (n=120)

S/N	Type of communication channel	No of people who used the means during the project	Percent
1	Face to face	120	100
2	Meeting (public and small group)	120	100
3	Telephone	86	70
4	Letters	25	20.8

In Table 4, the most frequently used communication channels are telephone (phone calls and phone messages), public meetings and face to face. Traditional means of communication channel were the only communication channels used in the project. Some of the channels such as telephones and letters were not exposed to every stakeholder. According to Ndilowe (2013), a study conducted in Zambia revealed that communication channels used in the agricultural project included demonstration blocks, village meetings and communication through field days. In addition, the electronic communication channel used was radio. Subsequently, print communication channels were also used such as posters (leaflets). The communication channels used in the later project show the use of a

more modern form of communication channels contrary to the former project which communication channels were mainly traditional. According to EDUCBA (2019), while a lot of attention is received by the methods of effective communication that are new, the value along with the relevance of the traditional methods of communication still exists.

4.4.1.1 Face to face

The face-to-face communication is the mode of communication in which the participants can directly respond to signals of the counterpart (mimic and gesture) (Arndt, 2011). 100 percent of the respondents confirmed to be exposed to this method of communication. In stakeholders in the villages favoured face-to-face communication channel despite the development of much less expensive and more flexible electronic ways of communication this could be a result of first, being physically close influences better use and understanding of all senses such as sight, sound, smell and touch. Secondly, using face to face allows a better chance for probing questions and better clarification during the process of communication (training and practical). Lastly, the medium has an advantage of speed because the message is instantaneously received by the receiver. According to Blenke (2013), face to face communication is the most traditional, but still very effective, way to communicate and spread information, as it allows targeting the message and obtaining a direct feedback. Face to face means of communication was mainly used by the project staff with the stakeholders when conducting occasional household to household visit to the farmers who benefited from the project. This was the most favoured means of communication as the stakeholders had the chance to further air their individual concerns regarding the project.

4.4.1.2 Telephone

According to Serbanescu (2017), the telephone was created to simulate face to face communication over long distances, through sound. The telephone channel of communication was used by 71.7% of the respondents as a medium of communication during the project due to aspects such as distance, speed and ease of use. Phone calls and phone messages were an essential means of communication used among the project staff, the project stakeholders and the project group leaders with the stakeholders during the project. The project staff used this means to inform the group leaders of the project on their visits. Furthermore, periodical calls were conducted to inform key contacts of any progress of activities regarding the project. And the stakeholders used this means to inform each other on the weekly and emergency meetings. The respondents confirmed to have used this kind of communication channel during the project due to no accessibility of telephone gadget, network problems, need of electricity and expensive phone charges that proved to be a challenge to stakeholders living in rural areas. Subsequently, according to Fotoyi and Jiang's (2016) study in South Africa, about 57% of the participants rated the effectiveness of the telephone channel to communicate project information as high. The finding insinuates that telephone communication channel is a means of communication that is often used in the project.

4.4.1.3 Public and small group meeting

Both types of meetings were used by the project actors as all the respondents confirmed to have used this communication channel. According to Reynolds and Seeger (2012), a public meeting is generally a larger assembly, open to the public, where experts present information and answer questions, and community members ask questions and offer comments. Small group meetings allow for more interaction between members. At a small group meeting, for example, agency personnel share information with interested

community members, stakeholders, partners, and state and local officials. It is especially useful for informing and keeping in touch with community concerns, answering questions, and clearing up any misconceptions or misunderstandings (Centre for Disease Control and Prevention, 2014). Public meetings were initially conducted by the project representatives, the local government representatives and the public residing in the stated villages. The initial aim was to introduce the organizations (RECODA and KIWAKUKI) and their intentions, goals and objectives. Small group meetings were then conducted by the stakeholders who were interested and registered in groups. The purpose of the meetings is as shown in Table 5;

Table 5: Meetings conducted during the project

Type of meeting	Objective	Frequency	Involved personnel
Kick-off meeting	<ul style="list-style-type: none"> - Introduction of the RECODA and KIWAKUKKI organizations to the stakeholders - Introduction of the project team and all the personnel that were involved in the project. - Collective analysis of the projects goals and objectives 	Once	<ul style="list-style-type: none"> -Project team -Local government leaders -Stakeholders
Project Team Meetings (Internal)	<ul style="list-style-type: none"> - Report project status and progress of scheduled milestones and activities. - Identify and discuss project issues and how to subdivide four villages for simultaneous training. 	Weekly	<ul style="list-style-type: none"> -Project Team -Project Manager -Project Officer
Project stakeholders with project team meeting	<ul style="list-style-type: none"> - To present and educate the stakeholders on the farming systems and other economic initiatives to be undertaken by them in order to improve their livelihood as well as answer questions to the stakeholder's questions and comments regarding the project. - Regarding the project progress - Other initiatives to be taken to improve the economic conditions of the stakeholders such as VCSL. 	Weekly or (Twice per month)	<ul style="list-style-type: none"> - Project team - Project stakeholders
Project Progress Meetings	<ul style="list-style-type: none"> - Report the status including the activities, progress, accomplishments, and issues of the project from each ward groups benefited from the RIPAT project. 	- Quarterly	<ul style="list-style-type: none"> - Project owner - Project manager - Project team - Stakeholders' leaders - Stakeholders' representatives
Project stakeholders meetings	<ul style="list-style-type: none"> -Meeting several conditions for the project such as constitution and contract formulations. - Formation of groups and group leaders. - Discussing the progress of the project - Distributions of agricultural inputs. 	- Weekly	<ul style="list-style-type: none"> - Project stakeholders

Table 5, shows the form of meetings that took place during the whole course of the project. Meetings were rated second in the effectiveness of communication channels (Table 7). As clearly showed in table 5, the project team initiated by both the

KIWAKKUKI and RECODA organized meetings that had an immense role in the dissemination of information in the project. The information in Table 5 and 6 is a result of the review of project documents. Due to the effectiveness of the meetings, a gradual increase in the attendance level of the stakeholders in all four villages propagating much to stakeholders' satisfaction as shown in Table 6. According to Rodriguez (2017), the project manager should organize meetings to ensure the ideas are shared and decisions and conclusions drawn from a common sense of agreement. This shows that the essentiality of meetings in RECODA project was high.

Table 6: RIPAT Group Members' Attendance to Group meeting for project activities from April to June 2017

Village	Group name	Average attendance in April (%)	Average attendance in May (%)	Average attendance in June (%)	Average attendance (%)
Kikarara	Juhudi	78	79	82	80
	Lukundane	78	79	67	76
Tsuduni	Amka	62	65	68	65
	Funguka	72	79	64	75
Kidia	Upendo	91	89	97	92
	Neema	89	91	95	92
Mdawi	Luwadane	73	65	75	71
	Mafanikio	73	75	65	71
Average		77	78	77	77

Source: RECODA (2017)

4.4.1.4 Letters

Letters were also used as a means of communication by the projects but, mainly by the stakeholders. The letters were mainly used when the member(s) of a group did not fully commit and abide by the drafted constitution. According to Kumar (2009), letters are formal in tone and addressed to an individual. They are used for official notices, formally recorded statements and lengthy communications. The overall style of the letter depends on the relationship between the parties concerned. A letter of warning drafted by the group

leaders was presented to the stakeholder(s) who were required to reply in relation to the misconduct. Furthermore, the means of communication was used during the registration of the groups, contract making with the farm owners as formalities to be followed. However, only a fifth (20%) of the respondents confirmed to have used this kind of communication channel during the project.

4.4.2 Communication channels effectiveness

According to the diffusion theory, communication channels are important for the performance of the project. The theory was examined and the study did confirm that the communication channels used in a project to pass information have a positive linear statistical relation with the two performance indicators thus, Stakeholders Satisfaction on the information provided performance and stakeholders satisfaction on the results performance as illustrated in Table 13.

Jowi (2018), defines an effective communication channels as that which under appropriate circumstances creates familiarity with the target audience. Furthermore, according to Holmes and Wilson (2017), communication channels have to be interactive for them to be effective for the participants to give feedback to each other and foster proper coordination of the project. The respondents were required to rate the communication channel exposed during the project effectiveness in the deliverance of the project performance. A 5-point Likert scale was used to measure the level of effectiveness of the communication channel to the performance of donor-funded projects whereas (1) = Not effective (2)=Slightly effective (3)= Moderate effective, (4)= Very effective (5)= Exceedingly effective. The scoring was done using mean values ranging from 1-5; therefore, the closer a score is to 5, the more effective the communication channel is to the performance of donor-funded projects.

Table 7: Effectiveness of the communication channel used during the project (n=120)

Communication Channel	f	Minimum	Maximum	Mean	Std. Deviation	Rank
Face to face	120	2	5	4.05	0.868	1
Phone call	86	2	5	3.66	0.849	3
Meetings	120	2	5	4.03	1.004	2
Letter	25	2	5	3.64	1.036	4
Grand Mean				3.845		

Table 7 shows that the respondent's description of how the communication channels were effective in the project performance. From a grand mean of 3.845, face to face and meetings were rated to be the most effective communication channel used during the project when fostering the performance of the project leading by 4.05 and 4.03 mean. However, the grand mean suggests that the communication channels were generally rated moderately effective by the respondents when propagating the performance of the project. This shows that in communicating with a project stakeholder the medium used to communicate the project message is just as important as the message itself. The effectiveness of some of the communication channels was hindered by some barriers as explained in section 4.7. According to Stanton *et al.* (2007), respondents' preferred verbal communication channel was face-to-face, followed by mobile phone, and finally video call and teleconference. The preference for face-to-face communication was expected because it also includes nonverbal communication. According to Zulch's (2014), study in South Africa, electronic communication ranked the highest in relation to effective communication. The communication method ranked second was written, communication with oral communication ranking third. Visual communication was ranked fourth and nonverbal communication fifth. However, according to Farcoda's *et al.* (2017), study on communication media and channels, respondents believed that written media were better than oral media (i.e face to face), a finding that is in contrast with this particular study. Nonetheless, according to Ricker (2017), communication channels used in the project

varies depending on the setting, which depends on the environmental contexts of interpersonal communication. This could substantiate the variation of communication channels used in the case study areas.

4.4.3 Relationship between communication channels effectiveness with the performance of the project.

The study aimed at determining whether the communication channels' effectiveness had a relationship (in this case linear relationship) with the performance of the project. Operational definition described performance as stakeholders' satisfaction with the information provided and the results of the project.

Table 8: Relationship between the communication channels effectiveness with performance of the project (n=120)

Categories		Telephone	Face to face	Meetings	Letter
Stakeholders' satisfaction on the Results of the project(Y ₁)	Pearson Correlation	-0.038	0.329	0.095	-0.289
	Sig. (2-tailed)	0.729	0.002	0.045	0.161
Stakeholders' satisfaction on the information provided (Y ₂)	Pearson Correlation	-0.147	0.012	0.070	-0.010
	Sig. (2-tailed)	0.176	0.007	0.048	0.963
Total	n	86	120	120	25

Table 8 shows the correlation between communication channels' effectiveness with the project performance. The findings show that the use of face to face and meeting had a significant statistical linear relation with the stakeholder satisfaction on the results performance (Y₁) whereas $r=0.329$, $n=120$, $p=0.002$ and $r=0.095$, $n=120$, $p=0.045$ respectively. Subsequently, face to face and meeting communication channels had a statistical significance with the information provided with $r=0.012$, $n=120$ and $r=0.007$ and

$r=0.070$, $n=120$, $p=0.048$. The effectiveness of both telephone and letter showed no correlation with either dependent indicators. Therefore, the effective use of face to face communication channel and meetings has proved to have a positive relationship with the performance of the RECODA project. According to Affare (2012), meetings help overcome communication barriers and increase the performance level of the project. Subsequently, Williams and Seidel (2019) argued that face-to-face is one of the richest channels of communication that can be used in a project as it is the best channel to use for complex messages because it allows interaction between speaker and recipients of a project. Therefore, face to face and meeting effectiveness played a major role in the performance of the RECODA project as it deliberates proper and efficient message transfer between the project actors.

4.5 Project Stakeholders' Satisfaction Performance on the Agriculture Project

Good performance of the project is what is strived for in any project (Marius, 2017). In this study stakeholders' satisfaction is defined as the extent to which the stakeholders were satisfied with the information provided in the project as well as stakeholders' satisfaction with the results of the project. Data for both variables were collected in an ordered scale to facilitate further computation of the independent variables.

4.5.1 Stakeholders satisfaction with the information provided

The stakeholders in each village in the selected study area were required to respond as to the extent to which they were satisfied with the information provided during the project. Stakeholders' satisfaction with the information was one of the dependent indicators. The stakeholders' information satisfaction was measured using a five-point Likert scale from Not at all (1), Slightly (2), Neutral (3), Very Satisfied (4) and Exceedingly Satisfied (5). The value increases towards 5;

Table 9: Stakeholder satisfaction with the information provided (n=120)

Information Satisfaction	Frequency	Percent
Not at all	-	-
Slightly	1	0.8
Neutral	32	26.7
Very	54	45.0
Extremely	33	27.5

According to Table 9, the respondents were satisfied with information provided by the project whereby 72.5% of the respondents responded in favour of the good performance information provision process during the project. One of the participants in the FGD claimed that *“the information that was provided was very useful. We are in the process of spreading the information given to other villages so that they can benefit as well.”*

Village wise 70%, 69%, 70%, and 80% of the respondents in Kikarara Mdawi Tsudunyi and Kidia confirmed to have been satisfied with the information provided in the project respectively. The variation of percentage village wise could be due to the difference of prior exposure to modern agricultural practices.

4.5.2 Stakeholder satisfaction with the result of the project

Stakeholders in each of the beneficiary villages in the selected study area were required to respond as to the extent to which they were satisfied with the project’s results/outcomes. The indicator was measured using a ten index scale (1-10) whereby the value increase towards 10. From the respondents, the average of the responses was computed and delivered the results are as shown in Table 10.

Table 10: Stakeholder's results satisfaction performance index (n=120)

Stakeholder Satisfaction Index	Number of Respondents	Per cent	Trend Performance	
			Number of respondents	Per cent
1	-	-		
2	1	.8	22	16.8
3	3	2.5		
4	7	5.8		
5	9	7.5		
6	19	15.8		
7	21	17.5	98	83.2
8	28	23.3		
9	16	13.3		
10	16	13.3		
Mean Stakeholder Satisfaction Index				7.28

According to Table 10, 83.2% of the project stakeholders were satisfied by the project's delivery. The reasons for the results satisfaction was mainly because of the benefits attained i.e modern livestock species (chicken, goats and pigs) different crop species (maize intercropped with pigeon pea (PP) or lablab, root crops such as cassava and orange-fleshed sweet potatoes, vegetables (keyhole garden), agro-forestry i.e. fodder and fruit trees), the knowledge attained during the project, the networking formed among the four villages and related organization and the livestock and agricultural produces attained as a result of the project. Village-wise, the percentages of stakeholders' satisfaction in results responses were; Kikarara is leading with 90%, Tsuduni with 86.6%, Kidia with 79.9% and lastly Mdawi with 76.7%.

4.5.3 Overall stakeholders' satisfaction performance of the project

According to Beckman-Cross (2016), the KPI scoring framework shown in Table 11 was defined by the Alliance Leadership Team (ALT) and allows the KPI scores to be standardised irrespective of what the KPI measures e.g. stakeholder satisfaction on the results of the project, stakeholder satisfaction on the information provided.

Table 11: KPI Scoring Framework

Score (%)	Performance
0-50	Unsatisfactory
51-65	Minimum condition of satisfaction
66-80	Good (Satisfied)
81-100	Outstanding

Source: Beckman-Cross (2016)

From the matrix, the stakeholder's satisfaction on the information provided during the project scored 72.5% that is ranked as good (satisfactory) performance and stakeholder's satisfaction on the results of the project scored 83.2% hence ranking as outstanding performance. Overall the stakeholders' satisfaction on the information provided and project stakeholder satisfaction on the results of the project performance of the "Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and their Communities project" is 77.8%. This means that the overall stakeholder satisfaction within the operations of this study indicates a good performance.

4.6 The Relationship of Communication in the Performance of Donor Funded Project

The study's main aim was to establish the relation between communication and the perceived performance of the project. This section discusses if communication indicators thus, the communication flow, communication channel, communication management tools and information quality used had anything to do with the stakeholder's satisfaction performance on the information provided and the results of the project. The Exhaustive Theory of project management shows that communication occupies a central place, because the structure, extensiveness, and scope in other words performance of the projects is almost entirely determined by communication techniques. This theory was examined in the third objective to determine the importance of communication in the performance of

the project. In order to assess the role on donor-funded projects, the respondents were asked to rate the importance of each communication indicator from (1)= Not important (2)= Slightly important (3)= Moderately important (4)= Very important to (5)= Exceedingly Important. The scoring was done using mean values ranging from 1-5; therefore, the closer a score is to 5, the more important the communication indicator was in the Empowerment and Livelihood to People Living with HIV and AIDS (PLHAS) and their Communities project commonly known as “The RIPAT project”.

4.6.1 Relationship between communication flow with the performance of the project

The communication flow used was a mixed type of communication flow. The leaders of the groups and the project staff had a two-way communication with the members of the groups. In one of the focus group discussions, one of the participants expressed that “*The flow allowed better expression of feedback, concerns and suggestion from all parties*”. This propagated a sense of unity, honesty and openness. To verify the relationship between communication flow and performance, the null hypothesis (H_0 : *There is no significant association between communication flow used within the project and project’s performance*) had to be tested.

Table 12 shows that communication flow (X_1) is moderately important when propagating the performance of the project. The Pearson correlation coefficient is statistically significant meaning that a positive linear relationship exists between communication flow with stakeholders’ satisfaction on the Information provided (Y_1) and with stakeholders’ satisfaction on the results of the project (Y_2), with a correlation coefficient (r) of 0.129, $n=120$, $p=0.033$; and (r)=0.196, $n=120$, $p=0.021$ meaning that direction of the relationship is positive and the communication flow used whereby in this project was mixed communication flow is correlated to the increase of the project performance. According to

Farcoda's *et al.* (2017), the results of their study showed a negative coefficient between communication flow structures and project performance. Nonetheless, according to Katerega and Sebunya (2017) study, organizations and projects with proper information flow are in a position to receive eventual project success. Thus, since in this study the significance level attained for in both the dependent indicators is below 0.05, the null hypothesis is rejected that was; *there is no significant association between communication flow used within the project and project's performance.*

Table 12: Communication flow and performance of the project

Independent variable correlated with the dependent variable (X₁)	Stakeholders' satisfaction on the information provided (Y₁)		Stakeholders' satisfaction on the Results of the project(Y₂)	
Communication flow	Correlation Coefficient	Significance (p-value)	Correlation Coefficient	Significance (p-value)
	0.129	0.033	0.196	0.021

4.6.2 Relationship between communication channel (X₂) with the performance of the project

The communication channels used by the project are clearly defined in section 4.3. The communication channels used were relevant to the beneficiaries' education level. The channel used propagated performance of the project as they were used in appropriate settings and conditions.

Face to face communication channel played a huge role in the dissemination of information during the project. Face to face is preferred as it enables one to read facial expressions, interact with people and test understanding. Relationships can be developed face to face in a way that phone or email does not allow (Travers, 2016). Subsequently, the project actors that are the project staff and the project stakeholders had the chance to meet

and establish a bond with each other. Furthermore, they could limitlessly ask and inquire more about the project during the project implementation propagating better understanding and sustainability of the project. Moreover, the communication facilitated first-hand gaining of knowledge and skills during the training and beneficiaries had the chance to observe and learn during the practical sessions.

Telephone had its sparks as well as it was used to establish proper coordination through agreement of the meeting time and place. Coordination is vital for the success of any project (Alaloul *et al.*, 2016). The channel propagated awareness in case of emergency meetings or situations that had to be held. According to Masuki *et al.* (2010), the use of the phone was appreciated by rural communities as an easy, fast and convenient way to communicate and get prompt answers to respective problems.

Public and small group meetings also contributed in the performance of the project as the public meetings had several benefits to the project as highlighted by the stakeholders that; they facilitated better transparency and openness about the project as the project actors become closer and develop a sense of trust with the community members. Furthermore, it developed an opportunity for the community to get first-hand information from the project initiators and develop views and learn or provide personal concerns. The small group meetings were favoured as well by the stakeholders as they allowed a proper interaction with the stakeholders and the project staff. Furthermore, it stimulated direct feedback on comments, concerns or questions. Lastly, the meetings propagated unity and trust among the stakeholders hence, enhancing the performance of the project. Subsequently, according to Michelle (2011), meetings are an essential part of any project thus how well they are managed is critical to the success of the project. To verify the relationship between communication channels and performance the null hypothesis (H_0 : *There is no significant*

association between communication channels used and project's performance) had to be tested.

According to Table 13, the second independent variable (Communication Channel) is moderately important to the performance of the project. Moreover, the Pearson Correlation analysis between communication channels (X_2) with stakeholders' satisfaction on the information provided (Y_1) and stakeholders' satisfaction on the results of the project (Y_2) has a positive linear relationship to both dependent indicators thus (r) of 0.275, $n=120$, $p=0.039$; and (r) of 0.206, $n=120$, $p=0.049$ respectively however, both had a weak relationship. This means that the communication channels used in the RECODA project correlates with stakeholders' satisfaction performance. Henceforth, because the significance level observed for both dependent indicators is below 0.05, null hypothesis (*there is no significant association between communication channels used and project's performance*) is rejected.

Table 13: Communication channel and performance of the project

Independent variable correlated with the dependent variable (X_2)	Stakeholders' satisfaction on the information provided (Y_1)		Stakeholders' satisfaction on the Results of the project (Y_2)	
	Correlation Coefficient	Significance (p-value)	Correlation Coefficient	Significance (p-value)
Communication Channels (Y_2)	0.275	0.039	0.206	0.049

4.6.3 Relationship between communication management tools (X_3) with project performance

Communication management generally means planning, directing, leading and controlling the communication. The tools used to facilitate these procedures are i.e the communication manual, communication plan and the budget allocated for the communication procedures in the project. All the above are developed during the project planning process. Failure to

that, the communication system may be easily compromised causing the project to fail. During planning for the project's communication, the project experts should evaluate the living pattern, socio-economic characteristics and the condition of the community such as the education level, age, and occupation; before establishing any form of plans. This is because failure of the assessment of the communication channels and tools allocated during the project may compromise the information delivery. According to Mahmoud (2018), a communication management plan is based upon five fundamental questions i.e who will make decisions on issues, who will develop an action list of tasks and who were responsible for the tasks, when will these tasks be completed and reported, how will other pertinent information be distributed, and to whom will the information be delivered to. Therefore, proper communication management tools facilitate better coordination of the RECODA project leading to project performance. To verify the relationship between the communication management tool and performance the null hypothesis (H_0 : *There is no significant association between communication management tools used and the project's performance*) was tested.

Study findings (Table 14) show that the communication management tools variable was rated by a mean of 3.87 as being moderately important to the performance of the project. However, the Pearson correlation coefficient shows a positive linear correlation (r) of 0.129, $n=120$, $p=0.045$ and 0.211, $n=120$, $p=0.028$ between communication management tools with stakeholders' satisfaction on the information provided (Y_1) and stakeholders' satisfaction on the results of the project (Y_2). The observation suggests that the usage of the communication management tools had a positive correlation with stakeholders' satisfaction indicators' variable (Y_1 and Y_2), therefore, proves relationship between the use of communication management tool and the performance of the RECODA project. Nonetheless, due to the significance level attained in both dependent indicators to be

below 0.05, the null hypothesis is rejected for *there is no significant association between communication management tools used and the project's performance.*

Table 14: Communication management tools and performance of the project

Independent variable correlated with the dependent variable (X_3)	Stakeholders' satisfaction on the information provided (Y_1)		Stakeholders' satisfaction on the Results of the project (Y_2)	
	Correlation Coefficient	Significance (p-value)	Correlation Coefficient	Significance (p-value)
Communication Management tools	0.129	0.045	0.211	0.028

4.6.4 Relationship between Information quality (X_4) link with project performance

Information in any project has to be well planned and organized to deliver the best results, especially when dealing with stakeholders living in rural areas (Ollows, 2009). The project mainly dealt with educating the stakeholders on good agricultural practices. The quality of the information involved being precise, concise and accurate. The respondents were asked to rate the quality of the information in the premises of these three criteria. Subsequently, to verify the relationship between information quality and performance the null hypothesis (H_0 : *There is no significant association between quality of the information provided and project's performance*) was tested.

Study findings in (Table 15) show that the quality of the information variable was rated by a mean of 4 thus being very important to the performance of the project. Quality of the information (X_4) was weak but positively correlated to both indicators of the dependent variable whereas the stakeholders' satisfaction on the information provided (y_1) and stakeholders' satisfaction on the results of the project (Y_2) had a correlation of $r=0.156$, $n=120$, $p=0.039$ and $r=0.281$, $n=120$, $p=0.019$. The observation suggests that the direction of the relationship is positive. According to Forcoda *et al.* (2017), the quality of

information is essential for effective coordination of projects as it minimizes misinterpretation and misunderstanding by parties. Due to the significance level attained for both dependent indicators is below 0.05, null hypothesis *there is no significant association between quality of the information provided and project's performance* is rejected.

Table 15: Quality of the information and performance of the project

Independent variable correlated with the dependent variable (X ₄)	Stakeholders' satisfaction on the information provided (Y ₁).		Stakeholders' satisfaction on the Results of the project (Y ₂).	
	Correlation Coefficient	Significance (p-value)	Correlation Coefficient	Significance (p-value)
Quality of the information	0.156	0.039	0.281	0.019

4.7 Barriers to Effective Communication

A 5-point Likert scale was used to rate the importance of the possible barriers encountered during the project and denoted as (1) = Not Significant (2) = Slightly Significant (3) = Moderately Significant (4) = Very Significant and (5) = Exceedingly Significant. This was to measure the importance of the communication barriers because in a community not all problems bare the same weight. The scoring was done using mean values ranging from 1-5; hence, the closer a score is to 5, the more significant the barrier is to communication. Communication is successful when it is understood by the receiver. The receiver must get the meaning of the message as exactly as the sender wants to convey it. According to Affare (2012), poor communication had resulted in project delays, project cost overrun and project abandonment. Many factors are involved in the process of communication and something can always go wrong. There may be so many reasons for the failures of communication or miscommunication (Mittal, 2018).

Study findings (Table 19) show that communication barriers were not strong barriers to the performance of the project as the highest-rated barriers were poor infrastructure, lack of gadgets such as phones and sickness with 3.01, 2.48 and 2.33 mean value respectively. The total grand mean shows that the barriers were slightly important in the hindrance of effective communication. According to Bandulahewa (2015), age difference, ineffective reporting systems, unclear objectives, interpersonal conflicts, unclear communication channels, gender issues and lack of necessary skills are among the leading communication barriers that affect the effective communication in Singapore projects. The communication barriers are presented in a blanket because the aim was to identify the general barriers that can affect effectiveness of communication in a project collectively and not village wise or for comparison purposes. Nonetheless, the study findings assist the project planner to prepare contingency plans in case of occurrence of such barriers to communication that can occur at any particular project settings.

Table 16: Barriers to communication (n=120)

Barriers of communication	Minimum	Maximum	Mean	Std. Deviation	Rank
Poor infrastructure such as roads	1	4	3.01	0.983	1
Lack of gadgets such as phones	1	4	2.48	0.879	2
Sickness	1	4	2.33	0.758	3
Illiteracy	1	4	2.29	0.893	4
Distance between the stakeholders households	1	4	2.28	0.777	5
Sincerity barrier	1	4	2.26	0.615	6
Old age	1	4	2.24	0.926	7
Sender's barrier	1	5	2.11	0.848	8
Role perception barrier	1	3	2.08	0.602	9
Grand Mean				2.28	

4.7.1 Technological failure

44.2% of the respondents rated moderately and above the significance of the technological communication barrier during the project. Poor communication network system in the study area had a lot of effect on the communication system and the project implementation process due to phone calls and phone messages late deliverance to the intended stakeholder or the project staff. Delay in receiving information caused delay in the project implementation hence compromising the smooth undertaking of the project and the stakeholder's satisfaction. Sudhagar and Gnanam (2017) argued as well that communication network system can make communications difficult thus forms bad transfer of information.

4.7.2 Physical barriers

Physical barriers to communication in this study were the geographic distance between the project staff and the stakeholders as well as the stakeholder to stakeholders. Furthermore, the physical barrier was also on the poor physical infrastructure such as the roads, especially during the rainy seasons. 38.3% of the respondents rated moderately and above on the significance of the distance barrier. Furthermore, the project officers' offices (RECODA) are located in Arusha rendering difficulty for the stakeholders in reaching the offices. Communication is generally easier over shorter distances as more communication channels are available and less technology is required (Mutua, 2010). The distance between one stakeholder and another was also one of the hindrances of effective communication. Households were far apart, especially in Mdawi and Kidia. In case of emergency meetings a stakeholder without a phone had to be followed to his/her house for delivery of the message. However, the challenge was reduced with weekly Monday meetings and modern technology as hand-phones and grouping the household according to their areas of residence to reduce the distance barrier.

The poor infrastructures such as roads are among the effective communication barriers especially for face to face type of communication channel. Over half (53.3%) of the respondents rated the barrier as a moderate and above significant in hindering effective communication. The infrastructure in the four villages was poor especially the roads which were mostly weathered roads. The project staff met with stakeholders every Monday for training, practical sessions and assessment of the project. However, during the rainy seasons, the roads proved hard to travel creating a barrier on a few occasions for the face to face type of communication.

4.7.3 Accessibility of mobile gadgets

Due to the poor living conditions of the stakeholders, some of the stakeholders could not afford communication gadgets such as hand phones. Nonetheless, telephones were among the main channels of communication used within the project as a way to inform each other of any project progress as well as emergency meetings. This caused a challenge as they missed some of the important project information. The barrier was rated by 54.2% of the respondents as a barrier that affected effective communication during the project.

4.7.4 Sender barrier

The sender barrier was a barrier that was highlighted by under a third (30.8%). This normally occurred when some of the stakeholders with innovative ideas failed to speak up at a meeting, chaired by the superintendent, for fear of criticism. Even with the high level of participation between the project initiators, some stakeholders feared to express their views. However, a further discussion showed that the fear had nothing to do with the project but with the respondent's lack of self-confidence. According to Lunenburg (2010), some stakeholders fail to speak up at a meeting to provide innovative ideas for fear of criticism.

4.7.5 Sincerity barrier

Observations from the study show that over a third (36.7%) of the respondents rated moderately and above on the significance of the sincerity communication barrier. Some of the project respondents argued that some project beneficiaries were not completely sincere with their devotion to the project. As a consequence, number of group members has slowly decreased after RECODA handed the project to KIWAKUKKI. According to Kamath (2017), interests and attitudes of people determine communication strategy. Lack of interest or wrong attitude can lead to improper communication. Without sincerity, honesty, frankness, and validity in a project, all attempts of communication are destined to fail (Mason, 2018).

4.7.6 Role perceptions

Role perception is a range of viewpoints, attitudes, understandings, approaches, or expectations that are related to the status and the position of a person or a group of people within the organization (Grobgeld *et al.*, 2016). Some of the beneficiaries did not respect their roles in the project. Some disregarded the project's attempt to improve their livelihood. A-45-year old male respondent claimed that "Other members would tell fellow group members, just go ahead I will learn from you later", another 63-year-old female respondent claimed that "some members lie that they are attending to family emergencies hence, they cannot attend the group meetings but you later find out he/she was farming instead". Lunenburg (2010), claimed that when the stakeholders do not know what their role is, the importance of their role, and what is expected of them, they will not know what to communicate, when to communicate or to whom to communicate. 22.5% of the respondents rated moderately and above on the communication barrier.

4.7.7 Sickness and age

Some of the stakeholders were old and about 10% of each group were people living with HIV/AIDS as a requirement. The health situation sometimes posed as a challenge for face to face meetings. Sickness and age were moderately and above rated 36.7% and 32.5% respectively. According to Treinor (2009), it is difficult to effectively communicate with a group with young children, adolescents, and older patients as they present unique communication concerns. She argued that even the most experienced program offices can find it challenging to communicate effectively with individuals who are much younger or older in the same group.

CHAPTER FIVE

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study established the kind of project information shared by various actors in the RECODA donor funded agricultural projects; examined the effectiveness of various communication channels to the performance of RECODA agricultural projects; assessed the relationship between communication and performance of RECODA agricultural projects; and identified barriers to effective communication among actors in the RECODA donor funded agricultural projects.

Based on the findings and discussions presented in Chapter Four, it is concluded that communication is indeed related to the performance of RECODA's donor funded projects. The kind of information shared during the project initiation, project planning, project implementation, project monitoring and evaluation, and project phase out at RECODA is mainly on the introduction, project organization, educational, assessment and on the survival of the project. It is also concluded that RECODA projects use four communication channels i.e. face to face, meetings, telephones and letters. Of the four communication channels, face to face and meetings are more effective and these have a positive association with stakeholders' satisfaction with the information provided and results of the project. The study also concludes that communication has proved to be useful in the stakeholders' satisfaction with the performance of the donor funded agricultural project under RECODA. All four communication indicators i.e. communication flow, communication channels, communication management tools and quality of the information have a positive and statistically significant linear relationship

with the beneficiaries satisfaction. Communication barriers established in the study include poor infrastructure such as roads, lack of communication gadgets i.e. phones, sickness, the distance between the stakeholders' households, lack of sincerity, old age, sender's barrier and beneficiaries' perception of roles barrier were rated. Nevertheless, the findings show that these barriers are not serious.

5.2 Recommendations

Based on the study's findings and conclusion, the following recommendations are made:

- i. Information sharing by project designers and implementers to stakeholders at RECODA should consider the socio-demographic characteristics such as education, age and occupation of respondents. This is because they can limit the persons' understanding of what is communicated.
- ii. Agriculture donor-funded designers and implementers RECODA should think of using a multitude of communication channels such as radios and print communication (posters). Doing so will increase the number of stakeholders of the intended project that got the required information in its purity.
- iii. Communication in the project calls RECODA for a thorough recognition of its role in performance. Therefore, there is a need for proper communication plans that are realistic and which call for commitment and a communication management department that is well resourced.
- iv. Project planners in RECODA have to critically do proper risk analysis of their communication strategy right from proposal development. Barriers should be predicted and proper contingency plans be put in place to reduce or avoid the negative effects of poor communication on the performance of the project.

5.3 Suggestion for Further Studies

Further research could be conducted on the following areas;

- i. A case study on the value of communication plans in the management of donor-funded agricultural projects.
- ii. An assessment could be conducted on the contribution of communication plan to the performance of the project by assessing those projects with and without the communication plans. Therefore, such a study will provide a good understanding of the effect of a good communication plan on a project's success.
- iii. A study should be also conducted on the contribution of good communication plan to labour and monetary use efficiency (i.e. the value of money).

REFERENCES

- Abbasi, A., Sadeghi-Niaraki, A., Jalili, M. and Choi, S. M. (2018). Enhancing response coordination through the assessment of response network structural dynamics. *Journal Pone* 13(2): 63 – 85.
- Affare, M. A. W. (2012). An assessment of project communication management on construction projects in Ghana. Thesis for Award of PhD degree at Kwame Nkrumah University of Science and Technology, 116pp.
- Alaloul, W. S., Liew, M. S. and Zawawi, N. A. B. (2016). A framework for coordination process into construction projects. *Journal of Sciences* 6(2): 432 – 449.
- Alatalo, U. (2012). *Communication Strategy in Projects, Master's degree in Entrepreneurship and Business Competence*. HAMK Häme University of Applied Sciences, Finland. 136pp.
- Anania, P. and Kimaro, P. J. (2016). Factors affecting effective youths' participation in agricultural marketing co-operatives in Tanzania: Experience from selected agricultural co-operatives in Arusha and Moshi district councils, Tanzania. *International Journal of Economics, Commerce and Management* 4(2): 709 – 731.
- Arndt, C. (2011). The importance of face-to-face communication in HR departments. Dissertation for Award of MSc Degree at University of Gothenburg. Sweden, 55pp.

- Bailey, D. K. and Mouton, J. (1998). *Methods of Social Science Research*. The Free Press Collier Macmillan Publisher, London. 43pp.
- Bandulahewa, B. K. M. (2015). Effective project communication for construction project managers in Sri Lanka. 29pp.
- Barnard, C. (1938). *The Functions of the Executive*. Harvard University Press, Cambridge. 32pp.
- Bartlett, E. (2001). Organization research; determining appropriate sample size in survey information technology. *Learning and Performance Journal* 19(1): 43 – 50.
- Beckman-Cross, T. R. (2016). *Evaluating Alliance Non-cost Performance Measurement*, Bloomsbury, USA. 54pp.
- Bergman, C., Dellve, L. and Skagert, K. (2016). Exploring communication processes in workplace meetings: A mixed methods study in a Swedish healthcare organization. *Work* 54(3): 533 – 541.
- Bernard, H. R. (2002). *Research Methods in Anthropology: Qualitative and Quantitative Methods*. AltaMiraPress, Walnut Creek, California. 23pp.
- Besteiro, E. N. C., Pinto, J. de S. and Novaski, O. (2015). Success factors in project management. *Business Management Dynamics* 4: 19 – 34.

- Blenke, L. R. (2013). *The Role of Face-To-Face Interactions in the Success of Virtual Project Teams*. Missouri University of Science and Technology, USA. 45pp.
- Bothhale, E. (2017). Enhancing public project implementation in Botswana during the NDP 11 period. *Africa's Public Service Delivery and Performance Review* 5(1): 1 – 9.
- Bourne, L. (2010). *Stakeholder Relationship Management: Using the Stakeholder Circle Methodology for More Effective Stakeholder Engagement of Senior Management*, John Wiley and Sons, Netherlands. 72pp.
- Bourne, L. (2016). Targeted communication: The key to effective stakeholder engagement. *Procedia-Social and Behavioral Sciences*, 226: 431-438.
- Bubshait, A. A., Siddiqui, M. K. and Al-Buali, A. M. A. (2014). Role of communication and coordination in project success. *Journal of Performance of Constructed Facilities* 29(4): 322 – 347.
- Caltrans, V. (2007). *Project Communication Handbook*. Second Edition. McGraw Hill. New York. 32pp.
- Campbell, G. M. (2009). *Communications Skills for Project Managers*. AMACOM books, United States of America. 56pp.
- Care coordination (2017). 7 C's of communication. [[http://www.care coordination.com .au/wpcontent/uploads/the_seven_cs_of_communication.pdf](http://www.carecoordination.com.au/wpcontent/uploads/the_seven_cs_of_communication.pdf)] sited on 09/11/2018.

- Carroll, J. (2012). *Effective Project Management*. Leamington Spa, United States of America. 54pp.
- Chang, A. S. and Shen, F. Y. (2014). Effectiveness of coordination methods in construction projects. *Journal Management* 1943: 54 – 79.
- Cho, K., Hong, T. and Hyun, C. (2009). Effect of project characteristics on project performance in construction projects based on structural equation model. *Expert Systems with Applications* 36(7): 10461 – 10470.
- Costa, P. (2009). Communicating development results commissioned. Development Co-operation Directorate. [<http://www.oecd.org/dev/devcom/44836250.pdf>] site visited on 7/4/2018.
- Dainty, A. (2012). *Communication in Construction Theory and Practice*. Taylor and Francis, New York. 116pp.
- Dhilsharth, M. J. M. (2014). Stakeholder satisfaction in NGO funded local governance improvement projects in Sri Lanka. Dissertation for Award of MSc Degree at University of Moratuwa, Moratuwa, Sri Lanka, 130pp.
- EDUCBA (2019) Different Effective Methods of Communication (Useful). [<https://www.educba.com/different-methods-of-communication/>] site visited on 22nd October 2019.
- FEMA (2014). *Effective Communication*. Instructor Guide, sehemu 18pp.

- Femi, A. F. (2014). The impact of communication on workers' performance in selected organisations in Lagos State, Nigeria. *Journal of Humanities and Social Science* 19(8): 75 – 82.
- Ferreira, H. (2013). *Advancing Leadership Skills-Developing Project Management Capabilities*. USA. 241pp.
- Forcada, N., Serrat, C., Rodríguez, S. and Bortolini, R. (2017). Communication key performance indicators for selecting construction project bidders. *Journal of Management in Engineering* 33(6): 1 – 20.
- Fotoyi, P. and Jiang, D. (2016). Effectiveness of electronic media in project communication. *Management of Engineering and Technology Portland International Conference*, Portland 2016: 2082 – 2087.
- Gibson, T. (2013). Influence of DPFs on the Social-Economic Welfare of the Rural Communities, Dissertation for Award of MA degree at University of Nairobi, Kenya, 154pp.
- Gilbert, M. L. (2013). Factors influencing adoption of conservation agriculture in south Uluguru mountains in Morogoro region, Tanzania. Dissertation for Award of MSc Degree at Sokoine University Of Agriculture. Morogoro, Tanzania, 89pp.
- Grobgeld, E., Teichman-Weinberg, A., Wasserman, E. and Barchilon Ben-Av, M. (2016). Role perception among faculty members at teacher education colleges. *Australian Journal of Teacher Education* 41(5): 1 – 6.

- Harrison, F. L. and Lock, D. (2004). *Advanced Project Management: A Structured Approach*, Aldershot. 98pp.
- Heale, R. and Twycross, A. (2018). What is a case study?. *Evid Based Nurs Journal* 21(1): 7-8.
- Henderson, L. S. (2004). Encoding and decoding communication competencies in project management—an exploratory study. *International Journal of Project Management* 22: 469 – 476.
- Heravi, A., Coffey, V. and Trigunaryah, B. (2015). Evaluating the level of stakeholder involvement during the project planning processes of building projects. *International Journal of Project Management* 33(5): 985 – 997.
- Hietbrink, M., Hartmann, A. and Dewulf, G. P. M. (2012). Stakeholder expectation and satisfaction in road maintenance. *Procedia-Social and Behavioral Sciences* 48: 266 – 275.
- Holmes, J. and Wilson, N. (2017). *An Introduction to Sociolinguistics*. Routledge, United Kingdom. 56pp.
- Hurt D. K. (2018). How to run a better project: A communication tool for project managers. [<http://letsgrowleaders.com/2018/03/08/communication-tool-project-manager>] site visited on 05/04/2018.

- Husain, Z. (2013). Effective communication brings successful organizational change. *The Business and Management Review Journal* 3(2): 43 – 50.
- Idris, I. (2018). Mapping women's economic exclusion in Tanzania, GSDRC, University of Birmingham, Tanzania. 13pp.
- ITRM Guideline (2016). Project management guideline section 3 – project planning phase. [<https://www.vita2.virginia.gov/uploadedFiles/Library/CPMG-SEC3.pdf>] sited visited on 12/03/2019.
- Jain, H. (2016). Organizational Communication: A Case Study of a Large Urban Hospital. *Industrial Relations Journal* 31(4): 588 – 608.
- Jaki, A. and Mikula, B. (2017). *Knowledge Economy Society Management in the Face of Contemporary Challenges and Dilemmas*. Crakow. Poland. 28pp.
- Jin, D. and Lin, S. (2012). *Advances in computer science and information engineering*. Berlin: Spinger.
- Johnson, S. (2008). *Failure Causes Statistics; Project Application*. McGraw- Hill Companies, USA. 23pp.
- Jowi, E. O. (2018). Evaluation of effectiveness of communication channels used to create awareness about plant clinics: Case of Kiambu county. Thesis for Award of PhD Degree at University of Nairobi, Kenya, 340pp.

- Kamath, P. (2017) Chapter No 5. Barriers to Communication. SKM'S J.M. PATEL College of Commerce. 5pp.
- Kärnä, S., Junnonen, J. M., Manninen, A. P. and Julin, P. (2013). Exploring project participants' satisfaction in the infrastructure projects. *Engineering Project Organization Journal* 3(4): 186 – 197.
- Katerega, K. S. Y. N. and Sebunya, A. K. M. A. (2017) Project Communication a Dimension for Improved Project Performance: The Case of Selected Public University Projects. *Journal of Resources Development and Management* 30: 77-84
- Kikwasi, G. (2012). Causes and effects of delays and disruptions in construction projects in Tanzania. *In Australasian Journal of Construction Economics and Building-Conference Series* 1(2): 52-59.
- Koivula, J. (2009). Succeeding in project communication: effective tools for the purposes of change management. Dissertation for Award of MSc Degree at Tampereen University of Applied Sciences, Tempele, Finland. 25pp.
- Kombo, D. and Tromp, K. (2006). *Proposal and Thesis Writing*. Paulines Publications Africa, Nairobi. 5pp.
- Kumar, R. (2009). *Communication - Introduction, Meaning and Definition*. Uttarakh and Open University, India. 10pp.

- Leonardo, L. (2012). Delays in it projects due to failures in the stakeholders management. *Future Studies Research Journal* 5(2): 158–185.
- Lewis, J. L. and Sheppard, S. R. J. (2006). Culture and communication: can landscape visualization improve forest management consultation with indigenous communities?. *Landscape and Urban Planning Journal* 77: 291 – 316.
- Lindebaum, D. and Jordan, P. (2012). Relevant but exaggerated: The effects of emotional intelligence on project manager performance in construction. *Construction Management and Economics* 30(7): 575–583.
- Literacy Foundation (2019). Consequences of illiteracy. [<https://www.fondational-phabetisation.org/en/causes-of-illiteracy/consequences-of-illiteracy>] site visited on 23/3/2019.
- Liu, B., Huo, T., Meng, J., Gong, J., Shen, Q. and Sun, T. (2016). Identification of key contractor characteristic factors that affect project success under different project delivery systems: empirical analysis based on a group of data from china. *Journal of Management in Engineering* 32(1): 0501 – 5003.
- Löfgren, P. (2009). Effects of collaboration in projects on construction project performance. Dissertation for Award of MSc Degree at Lulea University, Sweden, 22pp.
- Lunenburg, F. C. (2010). Communication: The process, barriers, and improving effectiveness. *Schooling Journal* 1(1): 1 – 11.

- Lyngø, K. (2009). Tanzania-the darling of the donor community. A critical review of the failure of past development aid efforts. Dissertation for Award of MSc Degree at Copenhagen Business School. Frederiksberg, Denmark, 72pp.
- Maas, C. J. and Joop, J. H. (2005). Sufficient Sample Sizes for Multilevel Modeling. *Methodology Journal* 1(3): 86 – 92.
- Manson, P. (2018). The importance of sincerity in the workplace. [[https://onlineecareertips.com/2013/03/the-importance-of-sincerity-in-the-work place](https://onlineecareertips.com/2013/03/the-importance-of-sincerity-in-the-work-place)] site visited on 19/3/2019.
- Manyozo, L. (2006). Manifesto for development communication: Nora Quebral and the Losbaños School of development communication. *Asian Journal of Communication* 16(1): 79 – 99.
- Manyozo, L. (2006). Manifesto for development communication: Nora Quebral and the Los Bantildeos School of development communication. *Asian Journal of Communication* 16(1): 79 – 99.
- Marius, T. C. (2017). The importance of performance appraisal in project management. *Training* 47(41): 1 – 7.
- Marshall, M. N. (2009). The key informant technique. *Family Practice* 13(1): 92 – 97.
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R. and Bastos, J. L. (2016). Sampling: how to select participants in my research study?. *Anaisbrasileiros De Dermatologia* 91(3): 326 – 330.

- Masuki, K. F. G., Kamugisha, R., Mowo, J. G., Tanui, J., Tukahirwa, J., Mogoi, J. and Adera, E. O. (2010). *Role of Mobile Phones in Improving Communication and Information Delivery for Agricultural Development: Lessons from South Western Uganda*. Workshop at Makerere University, Uganda. 1pp.
- Mefalopulos, P. (2003). Theory and practice of participatory communication: The case of the FAO project Communication for Development in Southern Africa. Dissertation for Award of MSc Degree at University of Texas at Austin, America, 69pp.
- Mefalopulos, P. (2008). *Development Communication Source Book: Broadening the Boundaries of Communication*. The World Bank, Washington DC. 45pp.
- Mentula, V. (2015). *Project Communications in Two Case Organizations, Lappeenranta Degree Programme in International Business*. Saimaa University of Applied Sciences Faculty of Business Administration, Finland. 56pp.
- Meredith, J. R. and Mantel, S. J. (2012). *Project Management: A Managerial Project*. John Wiley and Sons, Singapore. 48pp.
- Michelle, P. (2011). The importance of project meetings. [<https://www.parallelprojecttraining.com/blog/the-importance-of-project-meetings>] site visited on 19/4/2019.
- Mittal, S. (2018). Barriers to communication. *International Journal of Advanced Research and Development* 3(1): 243 – 245.

- Mkoga, Z. J. (2010). *Conservation Agriculture for Sustainable Agriculture and Rural Development and Food Security*. Southern and Eastern Africa, Tanzania. 15pp.
- Mnkandla, E. (2014). A review of communication tools and techniques for successful ICT Projects. *The African Journal of Information System* 6(1): 1 – 9.
- Mujungu, P. P. (2015). Socio-Economic Impacts of DP funded projects on beneficiaries – The case of Babati cluster in World Vision Tanzania. Dissertation for Award of MA Degree at Open University, Tanzania, 134pp.
- Napierala, M. A. (2012). What is the Bonferroni correction. *AAOS Now Journal* 6(4): 1 – 40.
- Ndilowe, U. M. (2013). An investigation of the role of communication in the Malawi agriculture sector wide approach-special project a closer look at conservation agriculture: The case of Mitundu extension planning area (Epa) in Chisamba Village. Thesis for Award of MSc Degree at University of Oslo, Zambia, 97pp.
- Njuguna, C. K. (2007). Factors influencing the access and flow of market information within the Kenyan Informal Sector: The case of Kamukunji Metal workers in Nairobi. Dissertation for Award of MA degree in Communication Studies at University of Nairobi, 70pp.
- Odine, M. (2015). Communication problem in management. *An Online International Research Journal* 4(2): 1615 – 1630.

- OECD (2014). Good practices in development communication [http://www.oecd.org/dev/DevCom%20Publication%20Good%20Practices%20in%20Development%20Communication] site visited on 29/01/2019.
- Ojie, F. N. (2016). The Role of Effective Communication in the Management of Projects: A Case of Alemu Nigeria Enterprises Limited. *International Journal of Innovative Research* 5(13): 197 – 207.
- Ollows, M. (2012). Impact of project management practices on organizational performance of small and medium size enterprises: A case of Letan limited. Dissertation for Award for MA Degree at University of Nairobi, 72pp.
- Olsson, B. J. (2011). Projects as communication system: Creating a culture of innovation and culture. *Journal of International System* 31(3): 30 – 37.
- Olsson, B. and Johannsson. (2011). Projects as communication system: Creating a culture of innovation and culture. *Journal of International System* 31: 30-37.
- Owusu, E. (2015). The Role of Communication in Sustaining Development Projects: The Case of Ejura Sekyedumase Municipality. Dissertation for Award of MSc Degree at Kwame Nkrumah University of Science and Technology, Ghana, 115pp.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N. and Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research* 42(5): 533 – 544.

- Payne, B. and Watt, A. (2018). Communication planning. [<https://opentextbc.ca/projectmanagement/chapter/chapter-15-communication-planning-project-management/> site visited on 23/3/2019.
- Pfeiffer, W. J. (1998). Conditions that hinder effective communication. *The Pfeiffer Library* 6(2): 400 – 456.
- Phiri, B. (2015). Influence of monitoring and evaluation on project performance: A Case of African Virtual University, Kenya. Thesis for Award of PhD Degree at University of Nairobi, Kenya, 135pp.
- Pol, D. (2017). The 7Cs for effective communication cheat sheet. [<https://www.cheatography.com/davidpol/cheat-sheets/the-7cs-for-effective-communication>] site visited on 09/11/2018.
- Project Management Institute (2015). Capturing the Value of project management [<https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-/pulse/pulse-of-the-profession-2015.pdf>] site visited on 4/1/2018.
- Public Focus (2016). Implementation and communication plan. [https://www.ofm.wa.gov/sites/default/files/public/legacy/reports/washingtonmentalhealthassessment_implementationcommunicationplan.pdf] site visited on 09/04/2019.
- Pulse of the Profession (2013). Communications: The message is clear. *American White Paper Journal* 4(3): 96 – 120.

- Rajegopal, S. (2007). *Project Portfolio Management: Leading the Corporate Vision*. McGraw Hill, New York. 11pp.
- Rajkumar, S. (2010). Defining the future of project management. Dissertation for Award of MSc Degree at Project Management Institute, Washington DC, 108pp.
- Ramsing, L. (2009). Project communication in a strategic internal perspective. *Corporate Communications: An Internal Journal* 14(3): 345 – 357.
- Rauzana, A. (2016). Analysis of causes of delay and time performance in construction projects. *Journal of Mechanical and Civil Engineering* 13(5): 116 – 121.
- RECODA (2005). *Annual Progress Report on Sustainable Crop Production and Environmental Conservation Project in Arumeru District, Tanzania*. Arusha. 1pp.
- RECODA (2017). *Empowerment and Livelihood Improvement to Plhas and Their Communities Project, Evaluation Report, Tanzania*. Arusha, 3pp.
- Reynolds, B. and Seeger, M (2012). Crisis and emergency risk communication. [https://upload.wikimedia.org/wikipedia/commons/6/6c/2012_Crisis_and_Emergency_Risk_Communication.pdf] site visited on 22/4/2019.
- Ricker, J. (2017). How Different Settings Affect Communication. [<https://study.com/academy/lesson/how-different-settings-affect-communication.html>] sited on 24th October 2019.

- Robinson, L. (2017). *Effective Communication; Improving Communication Skills in Your Work and Personal Relationships*. Helpguide, USA. 153pp.
- Rodriguez, P. A. (2017). Conceptual model of communication theories within project process. *INNOVA Research Journal*, 42-51.
- Roopa, S. and Rani M. S. (2012). Questionnaire designing for a survey. *The Journal of India Orthodontic Society* 469(4): 273 – 277.
- Saeed, A. A. (2009). Delay to projects – cause, effect and measures to reduce / eliminate delay by mitigation/acceleration [<https://bpace.buid.ac.ae/bitstream/1234/234/1/60046.pdf>] site visited on 5/1/2018.
- Schneider, K., Liskin, O., Paulsen, H. and Kauffeld, S. (2015). Media, mood, and meetings: Related to project success? *Transactions on Computing Education* 15: 1 – 21.
- Serbanescu (2017). An interactive qualifying project. Thesis for Award of PhD Degree at Worcester Polytechnic Institute, Worcester, United States of America, 179pp.
- Shao, R. S. (2011). Sustainability of DP-funded community projects under DADPS in Tanzania: A case of selected local chicken improvement sub-projects in Morogoro municipality. Dissertation for Award of MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania, 88pp.

- Shetto, R. and Owenya, M. (2007). *Conservation Agriculture as Practiced In Tanzania: Three Case Studies: Arumeru District, Karatu District, Mbeya District*. Food and Agriculture Organization, Rome, Italy. 23pp.
- Shrestha, P. P. and Mani, N. (2013). Impact of design cost on project performance of design-bid-build road projects. *Journal of Management in Engineering* 30(3): 0401 – 4007.
- Sima, L. (2017). Fundamental skills for project managers. [<https://teamweek.com/blog/2017/09/8-fundamental-skills-for-project-managers-in-2018>] site visited on 1/05/2015.
- Smart Development Workers (2016). Behaviour change communication guidelines. [http://www.snv.org/public/cms/sites/default/files/explore/download/snv_behaviour_change_communication_guidelines_-_april_2016.pdf] site visited on 11/05/2018.
- Spacey J. (2018). What is stakeholder satisfaction? [<https://simplicable.com/new/stakeholder-satisfaction>] site visited on 4/3/2019.
- Stanton, W. J., Walker, B. J., and Etzel, M. J. (2007). “Fundamentos de Marketing” McGraw-Hill. 65pp.
- Sudhagar, R. and Gnanam S. P. (2017). Most Common Barriers to Effective Communication in the Skill Based Challenges about the Class Room Situation,

Special Issue Published in International Journal of Trend in Research and Development (IJTRD) 3(3): 86-87.

Tanzania Ministry of Finance (2008). General Budget Support Annual Review 2008 Final Report. [http://www.tzdp.gov.tz/fileadmin/_migrated/content/uploads/PRBS_Annual_Review_Final_Report_2008_01.pdf] site visited on 13th September 2018.

Travers, C. (2016). Does the future have room for face to face communication? [<https://exhibitcitynews.com/research-proves-value-of-face-to-face-communication>] site visited on 22/4/2019.

Treiner, P. (2009). Overcoming Communication Barriers. [http://downloads.lww.com/wolterskluwer_vitalstream_com/sample-content/9780781799805_Nield-Gehrig/samples/13747_CH3.pdf] sited on 26th October 2019.

Tyagi, S. and Rathi, N. (2015). Effectiveness of “7Cs of communication” in the teaching of mathematics at elementary school level. *International Journal of Applied Research* 1(13): 377 – 382.

UNICEF (2008). *Writing a Communication Strategy for Development Programme*. Multimedia Ltd., Bangladesh. 31pp.

United Republic of Tanzania (2010). *The National Strategy for Growth and Reduction of Poverty*. Vice President’s Office, Dar es Salaam. 32pp.

- URT (2012). *National Sample Census of Agriculture 2007/2008. Kilimanjaro Region*. Government Printers, Dar es Salaam, Tanzania. 283pp.
- Vesterager, J. M., Ringo, D. E., Maguzu, C. W., Ng'ang'a, J. N. and Shao, P. (2017). The RIPAT manual—rural initiatives for participatory agricultural transformation. *World Vision Tanzania* 1(2): 1 – 3.
- Wahdan, M. I., Mostafa, S. M. and Ahmed, T. M. (2015). Study and assessment of the reasons for project delay or stalled from project management view, project. *Development Journal* 5(3): 94 – 104.
- Westland, J. (2007). *The Project Management Lifecycle: A Complete Step-by-Step Methodology for Initiating, Planning, Executing and Closing a Project Successfully*. <https://epdf.tips/the-project-management-life-cycle.html> Sited on 24 September 2018.
- Williams, N. and Seidel, M. (2019). What Are Communication Channels Within an Organization?. [<https://smallbusiness.chron.com/communication-channels-within-organization-61447.html>] sited on 26th October 2019.
- World Vision (2016). Strategy summary 2013 – 2015. [<http://www.wvi.ngo/sites/default/files/STRATEGY%20AMENDED%20.pdf>] site visited on 07/04/2018.
- World Vision (2018). New graduates pass their expertise empower communities [<https://www.wvi.org/tanzania>] site visited on 07/04/2018.

Yang, J., Shen, G. Q., Ho, M., Drew, D. S. and Xue, X. (2011). Stakeholder management in construction: An empirical study to address research gaps in previous studies. *International Journal of Project Management* 29(7): 900 – 910.

Zainal, Z. (2017). Case study as a research method. *Journal Kemanusiaan* 5(1): 34-43.

Zulch, B. G. (2014). Communication: The foundation of project management. *Procedia Technology* 16(1): 1000 – 1009.

APPENDICES

Appendix 1: Operational Definition

i. Dependent Variable Definition

Indicator	Definition	Level of measurement	Unit of measurement	
Stakeholder satisfaction on the information provided Performance	Tentatively in this study, Stakeholder satisfaction on the information provided is when the stakeholders expectation on the information shared to them during the project is adequate.	ORDINAL	Likert Scale	1= Not at all 2= Slightly 3= Neutral 4= Very 5= Extremely
Stakeholder satisfaction on the results of the project Performance	Tentatively in this study, Stakeholder satisfaction on the results of the project Performance is when the stakeholders are satisfied with deliverance of the project	-ORDINAL	Index	1-10 index scale

ii. Independent Variable

Indicator	Definition	Level of measurement	Unit of measurement
Communication flow	The communication flow is a vertical, one-way flow either downwards or upwards, or as a horizontal, two-way or multi-way flow with all the members of the organization communicating with each other -Central communication flow -Informal communication flow -Hierarchical communication flow -Mixed communication flow	-Ordinal	5= (Not at all important) 4= (Slightly important) 3=(Neutral) 2= (Very important) 1= (Extremely important)
Quality of information	Is the concise, clear, available Information and that is easily accessible. -Timely, Reliability, Centralization and Precise	-Ordinal	5= (Not at all important) 4= (Slightly important) 3= (Neutral) 2= (Very important) 1= (Extremely important)
Communication channel	Communication channel is a process through which a message is a message is transmitted to its intended audience - Face to face, Phone, Teleconference, E-mail, Facebook/Twitter/Watsup, Letters, Memo and Meeting.	-Ordinal	5= (Not at all important) 4= (Slightly important) 3= (Neutral) 2= (Very important) 1= (Extremely important)
Communication Management tool	Tentatively in this study communication management tools are the communication ingredients used by the organization to foster performance -Quality management system, Communication manuals and Communication plans, communication leader, and communication budget for communication management	-Ordinal	5= (Not at all important) 4= (Slightly important) 3= (Neutral) 2= (Very important) 1= (Extremely important)
Effective communication channel	Tentatively in this study, effective communication channels are the medium used by the project to produce effective and efficient results to performance	-Ordinal	5= (Not relevant) 4= (Slightly relevant) 3= (Moderate relevant) 2= (Very relevant) 1= (Exceedingly relevant)

Appendix 2: Stakeholders questionnaire

The Role of Communication on Performance of Donor Funded Agricultural Projects: A Case of RECODA

By

Sia W. Machange

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My name is Sia Willy Machange; a Postgraduate student (MAPME) from Sokoine University of Agriculture. I am conducting a research and you have been selected to participate in the study because of your involvement and participation in the agriculture project. With your involvement you are capable of understanding the communication system that is used in the project. The interview will take less 30 minutes. In order to capture every bit of the interview I were recording the conversation with your permission. The information obtained from the interview were confidential and will only be used for the intended purpose i.e. MAPME dissertation research. Remember, your participation is voluntary thus you don't have to talk about anything you don't want to. Please feel free to share as much as you would like with me and there is wrong or right answer.

Thank You Once Again For Agreeing To Share Your Knowledge With Me

GENERAL INFORMATION	
Ward:	
Village:	
Name of the respondent:	
Sex:	
Occupation:	
Education:	
Age:	
Marital status:	

1. What kind of information did you share with the project actors?	
INFORMATION SHARED.	INFORMATION
Problem identification	<ul style="list-style-type: none"> A. On the need for the project B. On goals and objectives of the project C. On the resources needed to develop the project plan D. On the scope of the work. E. On the organizations involved F. On the benefit of the project G. On the project motor H. Others_____
Project planning	<ul style="list-style-type: none"> A. On the identified work/activities B. On the project schedule C. On some of the projects costs/budget D. On required materials for the project. E. On project plans. F. On how the project were executed. G. Constitution development H. Contract development I. Group formation and choosing of leaders J. Others_____
Project implementation	<ul style="list-style-type: none"> A. On the tasks carried out B. On training in various issues related to the project C. What did you receive training on <ul style="list-style-type: none"> i. Digging of holes ii. Use of fertilizer iii. On how to divide farm land iv. On how to grow various crop varieties v. On how to build cattle's shed vi. On how to save money obtained. D. Others_____
Project monitoring and evaluation	<ul style="list-style-type: none"> A. On calculation of key performance indicators B. Development of monitoring tools C. Progress evaluations D. On tracking variations from allocated objectives. E. Monitoring results
Project phase out	<ul style="list-style-type: none"> A. On final evaluation B. On documentation of the project C. On the process to move on the next one project D. On releasing project resources E. Releasing the project to another organization F. Others_____

2. What communication channels were you exposed to during the project? (tick on all the relevant channel)			
Face to face		Facebook	
Phone		Twitter	
Radio		Letter	
E-mail		Meeting	
Newspaper		Brochure	
WhatsApp		Memo	
TV		Others	

3. Were the communication channels (selected) effective?

	Not effective	Slightly effective	Moderate effective	Very effective	Exceedingly effective
Face to face					
Phone					
Radio					
E-mail					
Newspaper					
WhatsApp					
TV					
Facebook					
Twitter					
Letter					
Meeting					
Brochure					
Memo					
Others					

4. Which communication channel do you perceive as being important but not considered?

5. To what extent do you think the communication flow used was important in the project?				
No extent	Slight extent	Neutral	Good extent	High extent

6. To what extent do you think the communication management tool were important in the project?

No extent	Slight extent	Neutral	Good extent	High extent

12. What challenges did you face as project beneficiaries in the process of communicating?

	Not significant	Less significant	Neutral	Significant	Very significant
Illiteracy (unable to read and write)					
Lack of gargets such as phones, radio and TV					
Poor mobile network					
Lack of prior information on meetings					
Getting in contact with the local government					
Poor media reach and exposure					
Far distance from one stakeholder of the project to another					
Poor infrastructure					
Old age					
Diseases					
Sincerity barrier					
Role perceptions					
Sender barrier					

13. Did you understand what was communicated?

Excellently	Very well	moderately	Slightly	Not all

13. What satisfied you in the project regardless of the communication

Appendix 3: Kiswahili stakeholders questionnaire

**SOKOINE UNIVERSITY OF AGRICULTURE
COLLEGE OF SOCIAL SCIENCE AND HUMANITIES
DEPARTMENT OF POLICY PLANNING AND MANAGEMENT**

Dodoso kwa Wadau wa mradi kwenye tafiti ya:

**The Role of Communication on Performance of Donor Funded Agricultural
Projects: A Case of RECODA**

By

Sia W. Machege

M.A. (Project Management and Evaluation) Student

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Naitwa Sia Willy Machege; mwanafunzi wa Postgraduate student (MAPME), mtafiti kutoka Sokoine University of Agriculture. Nakusanya dodoso, naumechaguliwa kwa kua ulishiriki/ulishirikishwa kwenye mradi wa RECODA. Kwa ushirikishwaji wako na amini utakua kwenye nafasi nzuri ya kuelewa mradi na mfumo ya mawasiliano iliyotumika. Zoezi litachukua takribani dakika 30.

Taarifa zozote zitakazokusanywa zitakua kwa usiri wahali ya juu na kutumika kwenye tafiti tuiliyolengwa. Kumbuka, zoezi hili ni la hiari, kwa sababu hiyo uko huru kutokuongea au kujibu swali ambalo hutakikujibu. Tafadhali kuahuru kunipa taarifa zote zinazohitajika kwenye hili dodoso.

ASANTE SANA KWA USHIRIKIANO WAKO

GENERAL INFORMATION	
Kata:	
Kijiji:	
Jina la mhojiwa (hiari):	
Jinsia:	
Kaziyamhojiwa:	
Elimu:	
Umri:	
Hali yandoa:	

1. Aina gani habari mlikua mkishirikishana na watendaji wa mradi ?	
AWAMU ZA MRADI	HABARI
Problem identification (tatizo kitambulisho)	I. Kuhusu uhitaji wamradi J. Kuhusu lengo na makusudiyamradi K. Kuhusu upatikanaji wa rasilimal izinazohitajika. L. Kuhusu wigo wa mradi M. Kuhusu mashirika yanayohusika N. Mnufaa ya mradi O. Kaulimbiu ya mradi
Project planning Mipango ya mradi	A. Kuhusu shughuli za mradi B. Kuhusu ratiba za mradi C. Kuhusu baadhi ya gharama za mradi D. Kuhusu upataji wa vifaa vya mradi E. Kuhusu mipango F. Kuhusu namna ya kutekelezamradi. G. Kuhusu mikataba na wenyeshamba H. Utengenezaji wa katiba I. Utengenezaji wa makundi na viongozi wao J. Nyinginezo_____
Project implementation (utekelezaji wa mradi)	A. Kuhusu kazi zinazoendelea B. Kuhusu umafunzo ya mradi. C. Ulipatamafunzo ya nini? i. Uchimbaji wa mashimo ii. Namna ya kuweka mbolea iii. Namna ya kugawanya shamba iv. Namna ya kupanda baadhi ya mazao v. Namna yakutengeneza mabanda ya wanyama vi. Kuwekeza fedha tunazozipata kwenye vikundi D. Nyinginezo_____
Project monitoring and evaluation (ufuatiliaji na tathmini wa mradi)	F. Kuhusu uchunguzi wa viashiria muhimu vya utendaji G. Kuhusu utengenezaji wa dodoso zaufuatiliaji H. Kuhusu tathmini ya maendeleo. I. Kuhusu matokeo ya tathmini J. Nyinginezo_____
Project phase out	G. Kuhusu tathmini ya mwisho H. Kuhusu kutengeneza nyaraka ya mradi

(awamu ya kuondoa mradi)	I. Kuhusu kusonga mbele na miradi mingine J. Kuhusu kuachilia rasilimali za mradi K. Nyinginezo_____
--------------------------	--

2. Njia gani za mawasiliano zilitumika kwenye mradi? (tick on all the relevant channel)			
Uso kwa uso		Facebook	
Mawasiliano ya simu		Twitter	
Redio		Barua	
E-mail		Vikao	
magazeti		vipeperushi	
WhatsApp		Memo	
Televisheni		Others	

3. Je njia za mawasiliano zilizotumika zilikua fanisi?

	Siyo fanisi	Fanisi kwa Kiasi	Wastani	Zilikua fanisi	Zilikua fanisi sana
Uso kwa uso					
Mawasiliano ya simu					
Redio					
E-mail					
magazeti					
WhatsApp					
Televisheni					
Facebook					
Twitter					
Barua					
Vikao					
vipeperushi					
Memo					
Nyingine					

4. Kwa maoni yako, ungependekeza njia ipi mbadala ya kupatahabari na haikutumika kipindi cha mradi?

5. Kwa kiasi gani unadhania ule mtiririko wa mawasiliano ulikua muhimu kwenye mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu

6. Kwa kiasi gani unadhania ule usimamizi wa mawasiliano ulikua muhimu kwenye mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu

7. Kwa kiasi gani unadhania zile njia za mawasiliano zilukua muhimu kwenye mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu

8. Kwa kiasi gani unadhania ubora wa habari ulikua muhimu kwenye mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasikizuri	Kwa kiasi cha juu

9. Kwa kiasi gani unadhania mawasiliano ni muhimu kwenye utendaji (mafanikio) wa/ya mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu

10. Kwa mawazo yako, kwa kiasi gani unadhania mfumo wa mawasiliano uliotumika kwenye mradi ilikuakati ya vitu vilivyokukuridhisha na mradi?

Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu

11. Kwa kiasi gani uliridhika na mradi?

	Mafanikio hasi					Mafanikio chanya.				
	1	2	3	4	5	6	7	8	9	10
Tiki.										

12. Changamoto gani kwenye mawasiliano mlipata kama mdau wa mradi? Kwa kiasi gani?

	Hamna Kiasi	Kiasi cha chini	Wastani	Kwa Kiasi kizuri	Kwa kiasi cha juu
Kutokua na uwezo wakusoma na kuandika					
Ukosefu wa vifaa kama simu na televisheni					
Mtandao mbaya wa simu					
Ukosefu wa habari kabla ya vikao					
Kutoweza kuwasiliana vizuri na viongozi wa serikali					
Kutokua na mahusiano mazuri na watendaji wa mradi					
Kupatikana mdogo wa vyombo vya masafa ya habari					
Umbali mkubwa kati ya mdau mmoja na mdau mwingine wa mradi					
Uzee					
Ugonjwa					
Miundo mbinu					

13. Ulielwa kilichokua kina wasilishwa?

Vizurimno	Vizuri	Wastani	Kiasi kidogo	Hata kidogo

Appendix 4: In-Depth Interview Checklist

A: INTRODUCTION AND CONTEXT

My name is Sia Willy Machange; a Postgraduate student (MAPME) from Sokoine University of Agriculture. I am conducting a research and you have been selected to participate in the study because of your management position and the fact that you communicate amongst yourselves and with project beneficiaries making you in the position of better understanding the project's communication pattern. By the end of the session I would like to understand better on the communication components, strategies attributes and its facilitation on the project performance. The interview will take less 30 minutes. You will not be paid for your participation in this study. In order to capture every bit of the interview I were recording the conversation with your permission.

The information obtained from the interview were confidential and will only be used for the intended purpose i.e. MAPME dissertation research. Remember, your participation is voluntary thus you don't have to talk about anything you don't want to. Please feel free to share as much as you would like with me and there is wrong or right answer.

**THANK YOU ONCE AGAIN FOR AGREEING TO SHARE YOUR
KNOWLEDGE WITH ME.**

B: General information

Date: _____ Time: _____

Name (optional): _____

Organization: _____

Position: _____

C: Project and communication related questions

1. Could you give me a brief description of the project and how it is operated?
2. How do the project actors communicate with each other? How frequently?
3. When is project communication most needed among the project acting groups in the project cycle? Where does it fail?
4. In a range of 1 to 10, how have communication helped in propagating stakeholders' performance of donor funded project, why?
5. Think back of any event that occurred when communication was overlooked and caused some negative impact on project performance?
6. How does communication between project actors affect stakeholders' satisfaction performance?
7. Can you rate, to what extent do you think communication affect Stakeholder satisfacion on the results of the project_____ Information stakeholders' satisfaction _____
8. What barriers do you face while communicating with other project actors?
9. You as the leader, what barriers do you think the rest of the project actors face?
10. What measures do you use to ensure communication is effective?
11. Is there anything you would like to add with regard to the role of communication in enabling good project performance?

THANK YOU FOR PARTICIPATION

Appendix 5: Focus group discussion checklist

1. According to your experience what were the usefulness of communication during the project?
2. How did you perceive the communication flow used during the project?
3. How did you perceive the communication channels used during the project?
4. How did you perceive the communication management tools used during the project?
5. How did you perceive the information quality in the project?
6. Was the communication shared relevant with the aims of the project?