

COMMUNICATION FOR BETTER AGRICULTURE:
The case of outreach to small-scale farmers on farming as a business in Kabompo
District

BY

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Approval

This report of Fredrick Moya Mwanamuchende is approved as fulfilling the partial requirements for the award of the degree Master of Communication for Development by the University of Zambia.

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Abstract

(If you fail to plan, you plan to fail – Benjamin Franklin.)

This study investigated *Communication for Better Agriculture: A case of outreach to farmers on farming as a business in Kabompo District* with the view to establish whether the communication strategies used to impart business knowledge and skills to farmers were effective. This was an important pedestal for addressing the problem of small-scale farmers' poverty and would be backed by farmers' adoption of the farming as a business innovation.

A mixed design methodology was used to collect information from 57 respondents who included the Agricultural Management Staff; the Extension Workers; and the Farmers, the first two of which were purposively selected being the custodians of required information. Stratified random sampling was used to select farmer respondents as the researcher required their equal participation based on gender. Data collection instruments for the Management and Extension Workers were *in-depth interviews* and a *Questionnaire* respectively, while a *Focus Group Discussion* was used to collect data from the farmers.

According to findings, *participatory approaches* were used by Extension Workers to teach farmers business skills whose main topic covered was the subject of *business planning*. The importance of planning in every undertaking cannot be overemphasised – after all people plan all the time. As they say; *“if you fail to plan, you plan to fail.”* Interestingly, despite the presence of this conducive environment for farmer prosperity, it was found that these small-scale farmers *did not adopt* the “agriculture as a business” innovation. The study also revealed poor monitoring mechanisms within the agricultural extension system.

Although appropriate approaches, messages, and communication channels were used to deliver the business aspect of agriculture to small-scale farmers in the study area, there was no real adoption of the innovation among the farmers in the study area. A robust monitoring mechanisms is critical in programme implementation and this study revealed poor post-training monitoring activities in the area. For this reason, the study concludes that, as things stand, persistent poverty among farmers in Kabompo can be ascribed to, among other things, insufficient monitoring activities from the extension services, which discourages adopter capacities in the farming community.

As a way forward, therefore, the agricultural curriculum in all Agricultural Colleges and Universities in the country needs to be refocused so as to incorporate the agricultural extension methodologies training modules with a robust monitoring system as part of the training package and not just as an add-on in the practice of agricultural extension. In addition, further study on ways and means of strengthening these monitoring services at grassroots farming systems is suggested because of the findings of this study.

Dedication

To my wife, Fridah, and children; Choolwe, Mwiinga, Muyangwa, and Rebecca.

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List of Abbreviations and Acronyms

ABM	-	Agri-Business and Marketing
ADEO	-	Agricultural Diary for Extension Officers
AEO	-	Agricultural Extension Officer
AES	-	Agricultural Extension System
AIDS	-	Acquired Immuno-Deficiency Syndrome
AS	-	Agricultural Assistant
CCF	-	Country Cooperation Framework
CSO	-	Central Statistical Office
CSOs	-	Civil Society Organisations
DACO	-	District Agricultural Coordinator
DAIO	-	District Agricultural Information Officer
DMDO	-	District Marketing Development Officer
DRC	-	Democratic Republic of Congo
EM	-	Extension Methodologist
EO	-	Extension Officer
FAB	-	Farming as a business
FAO	-	Food and Agricultural Organisation
FGD	-	Focus Group Discussion
FISP	-	Farmer Input Support Programme
FMEG	-	Farm Management Extension Guide
FNDP	-	Fifth National Development Plan
FRA	-	Food Reserve Agency
GDP	-	Gross Domestic Product
GRZ	-	Government of the Republic of Zambia
HIV	-	Human Immune Virus
ICT	-	Information and Communication Technologies
JCTR	-	Jesuit Centre for Theological Reflection
LDC	-	Least Developed Country
MAL	-	Ministry of Agriculture and Livestock

NAIS	-	National Agricultural Information Services
NAMBOARD	-	National Agricultural Marketing Board
NGO	-	Non-Governmental Organisation
NMTPF	-	National Medium Term Priority Framework
NPRAP	-	National Poverty Reduction Action Plan
PDL	-	Poverty Datum Line
PM&E	-	Participatory Monitoring and Evaluation
PRA	-	Participatory Rural Appraisal
PRSP	-	Poverty Reduction Strategy Paper
PTD	-	Participatory Technological Development
RFF	-	Radio Farm Forum
RRA	-	Rural Rapid Appraisal
SMS	-	Subject Matter Specialist
SPSS	-	Statistical Package for Social Sciences
UN	-	United Nations
UNESCO	-	United Nations Educational Scientific and Cultural Organisation
VA	-	Veterinary Assistant
ZESCO	-	Zambia Electricity Supply Corporation
ZNBC	-	Zambia National Broadcasting Corporation
ZNFU	-	Zambia National Farmers' Union

CHAPTER ONE

1.0 INTRODUCTION

Poverty is one of the many challenges that many countries in Africa and other parts of the world continue to grapple with in order to survive amidst other numerous economic and social challenges. In most countries and regions where dire poverty exists, it is usually the lower income category of people who are most affected. Different sectors of development, too, are affected in various ways, and within such sectors, different categories of people get affected in different ways.

In Zambia's agricultural sector, small-scale farmers are the ones most vulnerable to poverty, yet they participate significantly in the growth of this country's per capita Gross Domestic Product (GDP) through various agricultural production activities. For instance in Zambia, the agricultural sector contributes about 20 percent of the Nation's GDP (Bunyolo, 1995) and the small-scale farmers are the principal contributors – yet they are still the most vulnerable to poverty; hence the need to examine the possible causes of their poverty.

This Chapter deals with the study of *Communication for Better Agriculture*, especially concerning the subject of farming as a business in addressing poverty among small-scale farmers in Kabompo district (and consequently elsewhere in Zambia). It highlights the *statement of the problem*, explaining the *purpose* of the study, and its *significance* to the body of knowledge about poverty issues in the agricultural sector.

1.1 Background to the Study

1.1.1 Zambia's Location

The study was conducted in Zambia (**Fig. 1**), a Central African state lying between 8° North and 18° South and longitudes 22° West and 32° East. Its size measures about 752, 614 Km², occupying 2.5% of the African continent (Bunyolo 1995).

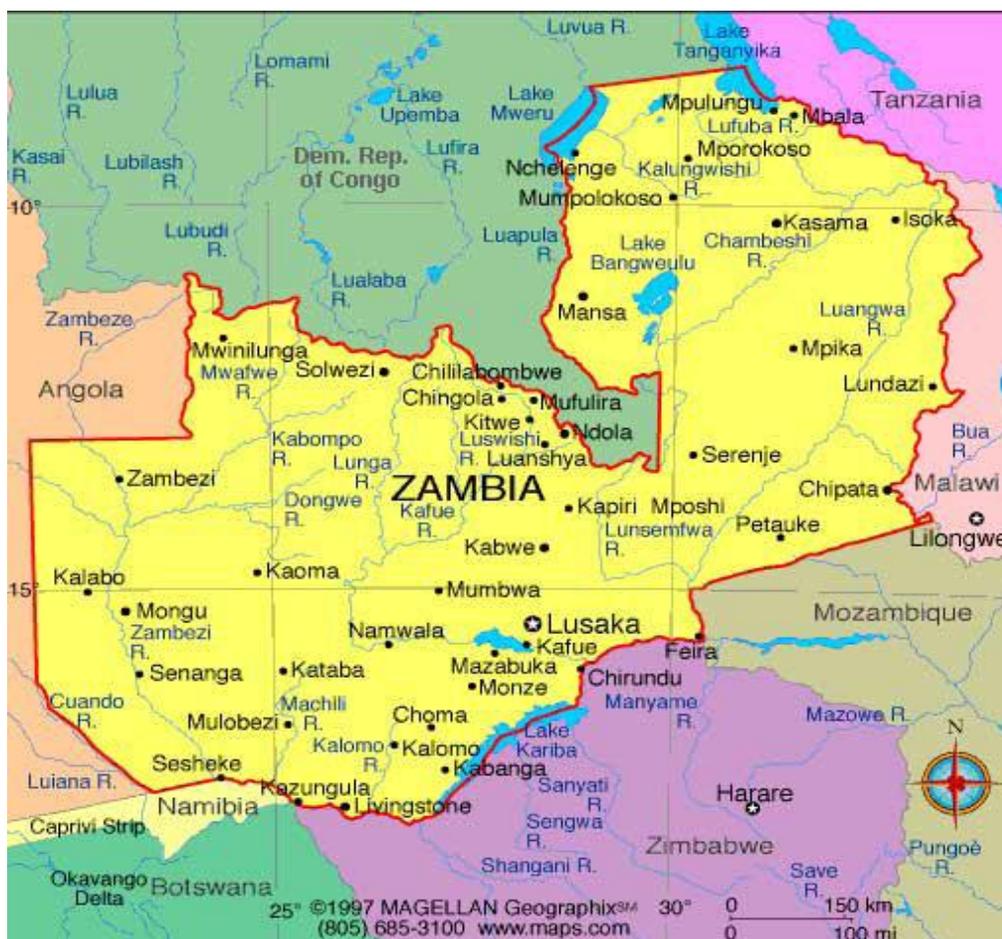


Figure 1. Zambia's Geographical Location

*Adapted from Country Pasture/Forage Resource Profiles
by Eroarome M.A. (2009).*

Zambia is a landlocked country sharing borders with Angola in west; Democratic Republic of Congo in the north; Tanzania in the north-east; Malawi in the east; Mozambique in the south-east; Zimbabwe in the south; Namibia and Botswana in the south-west. It is demarcated into ten (10) provinces: Muchinga, Eastern, Southern, Western, North-Western, Copperbelt, Luapula, Central, Northern, and Lusaka Provinces (Eroarome, 2009).

1.1.2 Natural Resources

Zambia is rich with natural resources. In terms of minerals, she has Copper, Cobalt, Lead, Zinc, Silver, Uranium, Gold, Emeralds, and Coal deposits with Copper as the core mineral for sustaining her economy. These mineral resources are complimented with big rivers and lakes such as Zambezi, Kabompo, Kafue Luangwa, and Luapula, and lakes Mweru, Kariba, Bangweulu, and Tanganyika, which serve as sources of water for various industries (<http://www.zambiatourism.com> accessed on 18th August, 2014).

Kabompo district, which is the study area, has abundant natural resources such as high rainfall patterns suitable for agriculture as it lies within the high rain belt of North-western Zambia (Eroarome, 2009). Agriculture happens to be its main economic activity among others such as the honey industry and forestry.

1.1.3 Economy

The economy of the country is mainly dependent on Copper reserves found on the Copperbelt Province. This is where the major Copper mines are found; apart from the North-Western Multi-Million Dollar mining companies at Lumwana and Kalumbila sites, driven by electrical energy by the local public Power Company, The Zambia Electricity Supply Corporation (ZESCO). These mines were established recently and contribute the largest share of the country's Gross Domestic Product (GDP) through proceeds from the mining sector (<http://www.zda.org.zm/content/economic-review> - accessed on 19th August 2014).

The next biggest source of revenue for the country is the *agricultural* sector, which accounts for 20 percent of the country's GDP. Maize production is the largest agricultural activity. Other crops grown at large scale are groundnuts, cotton, and sorghum (<http://www.google.co.zm> – accessed on 19.08.2014).

1.1.4 Institutional Administration

The biggest governing body for the country is the Government of the Republic of Zambia (GRZ). It comprises a number of Ministries among them Ministry of

Agriculture and Livestock (MAL) under which this study is housed. Actual names of government ministries have kept changing over the years according to preference of successive governments. This study took place within the functions of the Ministry of Agriculture and Livestock, embodied in its Mission Statement, Vision, and Objectives as outlined below (NMTPF: 2009-2013, FAO <http://www.google.co.zm> – accessed on 20th August, 2014).

1.1.4.1 MAL Mission Statement

To facilitate and support the development of a sustainable, diversified and competitive agricultural sector that assures food and nutrition security, contributes to job creation and maximises the sector's contribution to GDP (Ibid).

1.1.4.2 MAL Vision Statement

To be a committed, focused and proactive institution that provides quality agricultural goods and services assuring food and nutrition security, increased incomes and contributing to poverty reduction (Ibid).

1.1.4.3 MAL Objectives

“The overall objective for the sector is to facilitate and support the development of a sustainable and competitive agricultural sector in order to ensure food security and income generation at household and national levels and maximize the sector's contribution to GDP (Gross Domestic Product).” (National Medium Term Priority Framework: 2009-2013, FAO <http://www.google.co.zm>).

The function of this objective is to provide the country with a basis for ensuring food security to its citizens so that they are enabled to function in the development of the

various sectors of the national economy. Clearly, the overall objective of the Ministry of Agriculture and Livestock in reference to both the commercial and small-scale farmers is to produce not only enough or excess food for the country's food security needs and GDP, but also significantly contribute to poverty reduction at household level.

It is, therefore critical that as farmers produce this food, they are themselves not rendered vulnerable to the same poverty they are endeavouring to help eradicate. For instance, the economic status of the small-scale farmers is expected to improve as a result of their successive farming activities.

This, however, is not the case in the Zambian situation. Small-scale farmers around the country are often in situations of more poverty than is generally acceptable. This is a problem.

What then, is the cause for this poverty, one may ask? Is it lack of proper environmental conditions? Is it lack of sufficient and appropriate agricultural inputs like fertilizers, or seed? Could there be something wrong with the transfer of agricultural knowledge between small-scale farmers and the providers of this knowledge – who are primarily the government through its workers? Knowing the causes for the persistence of poverty among small-scale farmers could provide government and other policy-makers a foundation for basing their policies or policy changes that promote individual farmer development from small-scale to higher levels of farming, and consequently, to a higher economic status for these farmers.

1.1.5 History of Agricultural Policy in Zambian

The Government of the Republic of Zambia (GRZ) did not seem to have a meaningful policy to run the agricultural sector through a structured funding system from previous years until about the year 2006 during the Fifth National Development Plan (FNDP). Funding from the Food and Agricultural Organisation (FAO) of the United Nation (UN) was “guided by emerging requests and priorities from government, and, to some extent, donor interests” and not by any structured country programme approach (*National Medium Term Priority Framework [NMTPF]: 2009-2013, FAO*).

With the establishment of the FNDP, however, there was a clear set of interventions that had varying operational cycles, funding contexts and partnerships between the then *Ministry of Agriculture and Cooperatives* and the Food and Agricultural Organisation, government institutions and various Civil Society Organizations (CSOs).

Currently, Government of the Republic of Zambia largely funds its own agriculture through the Ministry of Agriculture and Livestock with occasional financial injections from donors, so the potential for the development of agriculture in Zambia is high.

The total land area for the country is 75 Million hectares (752,000 Km²), 58 percent of this (about 42 Million hectares) is classified as medium to high potential land for agricultural production, with rainfall ranging between 800 mm to 1,400 mm annually. This is suitable for the production of a broad range of crops, fish, and livestock, and Kabompo is one of the districts that fall within the higher rainfall endowed regions.

In order to exploit this potential for agriculture development and to achieve the ministry's vision and mission, government has developed a number of policy objectives and measures (www.govt.mal.co.zm, accessed on 18 October, 2014).

The Government of the Republic of Zambia (GRZ) changed its agricultural development focus through the National Poverty Reduction Action Plan (NPRAP, 2003-2005) to five key intervention areas although this study emphasises only four of them: Firstly, it focussed on Marketing, trade and agri-business so that all farmers can find market and trade their farm produce for profit. Secondly, Agricultural finance and investment were improved to allow those with ability to borrow to do so and improve their productivity. Thirdly, Agricultural infrastructure and land development was emphasised in order to increase potential for agricultural expansion. Finally, the government targeted support systems for food security so as to raise the standard of living for small and medium scale farmers in Zambia. (GRZ, 2002; Qingsong, 2004).

This food security component was critical to the country, and FAO was charged with the responsibility to coordinate activities under the outcome, in order to among other

things, strengthen multi-sectoral approaches to food security for sustainable agricultural production and productivity in risk prone areas.

Secondly, this key result area was to improve institutional and household level capacity for disaster preparedness and response, as well as to enhance good nutritional practices among food insecure households and schools.

Although the overall objective of the agricultural policy in Zambia has relatively remained the same over the years, it has, nevertheless, undergone various implementation adjustments and reforms in order to make agriculture more responsive to the various needs of farmers at their different levels.

For instance in 2002, the government of the Republic of Zambia established Farmer Input Support Programme (FISP) during the reign of the third President of Zambia, Dr, Levy Patrick Mwanawasa. At that time, Government was in the process of liberalising agricultural market systems. The idea behind this policy shift was to provide for capacity building “of both the private sector and small-scale producers. . .” and for government to make agriculture more affordable among small-scale farmers while gradually disengaging itself from providing agricultural services so that the private sector would eventually take over the agricultural input distribution and marketing of production (*FISP Implementation Manual, Ministry of Agriculture and Livestock, 2014*).

From the outset, the overall objective of the Farmer Input Support Programme, as stipulated in the *FISP Manual* quoted above, was to:

“(Improve) the supply and delivery of agricultural inputs to small-scale farmers through sustainable private sector participation at affordable cost, in order to increase household food security and incomes.”

On the other hand, the specific objectives of the FISP, among others, as stated in the 2014 FISP Manual were and still are to:

“. . . expand markets for private sector input suppliers/dealers and increase their involvement in the distribution of agricultural inputs in rural areas, which will reduce the direct involvement of government; ensure timely, effective and adequate supply of agricultural inputs to targeted small-scale farmers; (as well as to) improve small-scale farmers’ access to agricultural inputs; (and to) ensure competitiveness and transparency in the supply and distribution of inputs . . .”

By this policy, it was expected that farmers would access this kind of help only *for two years* after which they should ‘graduate’ from the FISP plan into the medium–scale category which comprises farmers who are able to access agricultural inputs at economic prices on their own. However, to this day, small-scale farmers in the study area (and possibly elsewhere in Zambia) have continued to access agricultural inputs through the FISP at a heavily subsidized cost by government. Not a single small – scale farmer has graduated from this system into independent planning and execution of their agricultural activities in Kabompo district (GRZ Quarterly Reports, Kabompo 2013/2014).

1.1.6 Communication in Agriculture

In the agricultural sector, *communication technology* has been in use for a long time and is still popularly being used today. This technology is mainly used by organisations such as the Zambia National Farmers Union (ZNFU) as one of the Cooperating Partners. According to this organisation, every farmer engaged in farming needed “up-to-date market price information . . .” without which they would be “susceptible to selling off their produce at below-market rates.”

“The platform serves as a price discovery type of tool built to help farmers access actionable up-to-date market prices on their own, within their vicinity, and allows them to have a better negotiating position. They can avoid the daunting task of going out of their way to look for a

market.” (Zainab P. <http://www.znfu.org.zm/policy-briefs> - accessed on 27th March, 2015).

From this type of communication, farmers are expected, not just to acquire agricultural pricing information, but also to be able to use it to plan activities that would increase their agricultural productivity (Miyagawa and Manish, 2003). The use of communication in agriculture is, therefore, the basis for agricultural and sustainable economic development for Kabompo and Zambia as a whole.

1.1.7 The Agricultural Extension Communication System

The Agricultural Extension System (AES) runs under the department of Agriculture within the Ministry of Agriculture and Livestock whose role is “to undertake the provision of extension services to small-scale farmers in order to facilitate dissemination of information and technologies for improved agriculture at camp level” (*Ministry of Agriculture and Livestock, A.D.E.Os, 2014*).

Agricultural Extension is, therefore, a form of agricultural communication system that has potential to capacity build small-scale farmers in better agricultural productivity techniques. Farmers become self-sufficient in household food security as they adopt the various crop or livestock production innovations.

The development of agricultural sector, therefore, largely depends on the organisation, functioning, effectiveness, and efficiency of the Extension Services in the Department of Agriculture. The effectiveness of this department in turn depends on the nature of the communication strategies that are developed and used as information transfer tools between the Extension Officers and the farmers. However, for this to occur there should be a cordial learning relationship between these two stakeholders, motivated by appropriate results of their adoption of the innovations.

1.1.8 National Agricultural Information Services (NAIS)

The National Agricultural Information Services is a department in the Ministry of Agriculture and Livestock that enhances agricultural information and technology

transfer between farmers and the Ministry. Currently, District Agricultural Information Officers (DAIOs) run the section. The section is in charge of Radio Farm Forum programmes, but also produces agricultural publications like Newsletters, Brochures, and agricultural television documentaries such as the current Lima Program that runs on Zambia National Broadcasting Corporation (ZNBC) from which farmers can get agricultural information. These services were initiated as early as the mid-1960s with assistance from the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

Radio Farm Forum (RFF) Groups, or listening groups as they are sometimes referred to, were set up in rural communities all over the country. A number of them exist around the country and many more are being established at District levels. Their modalities of operation are such that at the appointed time when agricultural programmes are broadcast on radio, farmers sit around their group radio sets to listen to programmes, after which they discuss the lessons learnt in the presence of an agricultural expert, usually the local Extension Officer (E.O.) if available. There is a form they fill at the end to show that they listened to the programme and questions on aspects of the programme that were not clear to them are included in this form which the DAIO collects and forwards to Headquarters in Lusaka for attention.

Current challenges for RFF Groups include lack of radios and accessories. Initially these groups were sponsored by government. Each group was given a radio and batteries were periodically supplied to them to sustain the learning process – a thing that no longer happens.

This has reduced the effectiveness of many Listening Groups with some completely disbanding; claiming they cannot afford to buy both their own radios and continue to purchase batteries for the purpose of listening to programmes on radio.

1.1.9 Agriculture as a business

In order to improve one's economic status; to have a basis for meeting one's daily needs; an individual, family, or society has to engage in a form of transaction of their

goods or services that brings monetary gain or its equivalent. This is not an exception when it comes to agriculture. Since colonial times, agriculture has been an undertaking that was meant for supplying food to the family and the nation. Normally farmers had to produce more than they needed for the family and were able to sell the excess to marketing organizations engaged by government. After independence, such a task was performed by what was then called National Agricultural Marketing Board, popularly referred to as NAMBOARD (<http://www.fao.org/docrep/003/V4595E/v4595e06.htm> - accessed on 14th August, 2014).

When farmers took their maize to NAMBOARD, they were paid for it almost immediately. What to do with this money was the particular farmer's responsibility. Most of them opted to buy requirements for their agricultural tools and wait for the other farming season, while others would use it to meet their personal and social needs. Very few small-scale farmers had Bank Accounts and this presented difficulties in keeping their money.

Currently, the Zambian government handles the maize marketing process through another unit called Food Reserve Agency (FRA). It works in a similar way to NAMBOARD, except that under the FRA, there is involvement of the Bank through which the farmers receive their dues instead of directly from the marketing agency as it was under NAMBOARD.

Throughout all the four Republics of the nation, Government has been running Agricultural Marketing business through marketing agencies –NAMBOARD in the first, and the current FRA in the second, third, and fourth republics respectively. Farmers have had very little or no choice on where else to take their maize for sale. For this reason, some unscrupulous people, especially from the Democratic Republic of Congo (DRC), have taken advantage of it and have come on board the maize marketing system, buying maize from farmers.

However, the predicament that small-scale farmers face is that because these are not organised marketing institutions, the marketing price for maize fluctuates through a

private customer negotiation process that renders the farmer vulnerable to the outcome. It is usually the farmers who succumb to the buyers' price propositions due to their desperate financial situation in the pre-marketing period.

Whether dealing with government, or with "brief case businessmen," the small-scale farmers in Zambia face challenges in improving their standard of living.

The challenge, however, is that most of them do not have market research skills. This requires that since small-scale farmers may not have the necessary knowledge and business skills, they could be trained in doing farming, not just as a means of survival, or for contributing to the nation's food security, but to give them an opportunity to make money for themselves in a systematic and sustainable way that will improve their own economic statuses.

1.2 Statement of the problem

Despite receiving agricultural inputs at subsidised prices; a ready market for their farm produce through the Food Reserve Agency (FRA); and despite the opportunity to receive training in entrepreneurship skills from the Ministry of Agriculture and Livestock through the Agri-Business and Marketing (ABM) Department, small-scale farmers still suffer 83 percent levels of poverty – and the figures keep rising (*Poverty Reduction Strategy Paper (PRSP), 2002:10*). Efficient communication plays a critical role in the diffusion and adoption of innovations. The expectations were that if the initiatives being undertaken by government to reduce poverty among small-scale farmers were adopted and efficiently communicated, the farmers would effectively implement them, resulting in reduction of poverty.

At the time of the study, it was not clear as to whether or not the communication strategies being applied to promote *farming as a business* among small-scale farmers were effective. Put as a question, the problem under investigation is how effective are the communication strategies used by Extension Officers to teach FAB?

It was, therefore, necessary to assess the communication strategies used to impart knowledge of farming as a business to the small-scale farmers. This assessment revealed important facts about weaknesses inherent in the communication processes taking place between the farmers and the Extension Agents who provide the extension services. It further made it easy to identify farmers' poverty as the consequence of factors related to such weakness. Failure to review and improve these communication strategies could result in prolonged non-adoption of farming as a business and, therefore, perpetual poverty experiences for small-scale farmers in Kabompo – a situation that could weaken their efforts to improve their household livelihoods, including eventually reducing their contribution to the country's food security, its *per capita* Gross Domestic Product.

1.3 Purpose of the study

The purpose of this study was to assess the communication strategies that have been used to facilitate farmers' training in farming as a business. This was important in ascertaining whether communication strategies needed to be redesigned and adopted in directing efforts that would help farmers adopt farming as a business and alleviate poverty among them.

1.4 Objectives

The objectives of the study were divided into two parts: the *Main Objective* and the *Specific objectives*.

1.4.1 The Main Objective

To establish whether or not the communication strategies being used to teach farming as a business among small-scale farmers in Kabompo district were effective.

1.4.2 Specific Objectives

- a) To identify the methods of instruction used to deliver extension messages to small-scale farmers.

- b) To find out what specific topics of farming as a business were given to the farmers.
- c) To establish the main communication channels used for transmitting agricultural messages.
- d) To determine if farmers had adopted the innovation of “farming as a business.”

1.5 Research questions

- a) What are the methods of instruction used to deliver extension messages to small-scale farmers?
- b) What specific topic of farming as a business are given to the farmers?
- c) What is the main communication channel used for transmitting agricultural messages?
- d) Have farmers adopted the methods and instructions given to them?

1.6 Justification for the study

The study of *Communication for better agriculture* is an important assessment of communication, not just as a tool for exchanging agricultural information between stakeholders in the sector. It is, rather, one that is vital to the development of the Agricultural Sector through the capacity building of small-scale farmers to productivity levels that will contribute significantly to the wealth of the country. The findings of this study might be used by agricultural stakeholders such as Ministry of Agriculture and Livestock (MAL), Agricultural Institutions, and organisations, Extension Officers to review and improve the communication strategies currently being used in the promotion of diffusion and adoption of agricultural technologies among small-scale farmers.

Further, and more importantly, this study has the exclusive potential to provide further insight into communication as a tool for developing not only the Agriculture sector in general *per se*, but more specifically, and for sustainability purposes, the players upon whom that development process depends – the small-scale farmers.

Improving the communication strategies used to teach agriculture as a business could precipitate adoption capacity in small-scale farmers and significantly contribute to poverty reduction among them. This would not only lead to sustainable household food security for these farmers, but also give them ability to inject a business aspect into their daily agricultural activities. Needless to say, this could improve farmers' household economies, thereby reducing their chronic dependence on government policy-generated assistance that come by way of subsidies on agricultural inputs that currently characterize agricultural sustainability programmes.

The results of this study make a reasonable contribution to the body of knowledge in communication for development as a process and provide scholars with an opportunity to examine the validity of their own previous and current positions in communication research programme outcomes.

In the process of carrying out this study, the Researcher neither came across, nor was he aware of any study that may have been undertaken by any scholar, which focuses on *Communication* as a conduit for *better Agriculture* with deliberate emphasis on poverty reduction for small-scale farmers through implementation of *farming as a business* as this study does.

1.7 Risks or Limitations of the study

1. The researcher was confined to a small district of Kabompo, the findings of which might be insufficient to generalise to the entire national population.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter deals with the various citations of works that have been published by different writers on the subject of communication and the issue of poverty among small-scale farmers in Zambia. It begins with literature that is descriptive of the possible environment in which poverty might establish itself and moves on to areas that describe previous attempts by poverty reduction stakeholders to solve the challenges that small-scale farmers were faced with. This is designed to carry the reader along and unveil certain weaknesses inherent in past interventions against poverty among small-scale farmers and to suggest why communication for better agriculture needed to be considered for adoption as one of the next best alternatives that could contribute to the solution of this problem.

Communication is an important ingredient for all forms of development. It has the capacity to bring development when properly used; it has the potential to cause economic stagnation, or negative development when underutilized, or when deliberately used to achieve that purpose. While the world's social problems, including HIV and AIDS, and poverty, can be solved using various approaches by individuals, civil societies, or governments, communication is the one indispensable tool that is commonly used in all these strategies; so appropriate communication is vital to all forms development.

2.2 Causes of Poverty

According to Whitworth, (2013) despite abundant natural resources, fifty years after Independence, Zambia has some of the worst poverty in Africa. Immediately after independence in 1964, Zambia's economy was characterized by sufficient financial reserves – what with the soaring copper prices on the metal market. However, the country needed to develop quickly for its people to adequately enjoy this independence with equal access to its social services like education, and health.

Whitworth points out that while some of this capital resource was invested in social infrastructure, “much was wasted on an extraordinary expansion of the state’s role in the economy and a vain attempt at industrialisation through import substitution. Increased public service wages and subsidies were no longer affordable once mineral prices and taxation collapsed in the mid-1970s.” Instead of cutting expenditure, government took the option of borrowing in order to service the country’s fiscal deficits. Meanwhile the copper prices on the world market kept falling, precipitating more borrowing, and thereby increasing the debt burden from then onwards. “By the 1980s public expenditure was largely confined to debt service, wages and subsidies – crowding out expenditure on basic social services of most benefit to the poor” (Whitworth, 2013).

In 1991 there was change of government, which instituted policy reforms (such as liberalisation of trade, removal of most subsidies, and privatisation of some parastatal companies). The situation was further turned around and boosted by the 2004 rebound of copper prices, debt relief, and increasing mineral taxation, thereby preventing the downward economic trend. However, as Whitworth indicates, although the economy seemed to be booming, this era had its own problems, stemming mainly from administrative, rather than economic forces, among them “uneconomic road projects and poorly targeted agriculture subsidies. Poverty reduction strategies were largely confined to the urban population” (Ibid).

2.3 The Fight against Poverty

According to the Jesuit Centre for Theological Reflection (JCTR), poverty levels in Zambia somewhat stabilized with minimal reduction during the period of the Fifth National Development Plan (FNDP) in the face of high economic growth. This called for significant measures to transform this economic growth into positive and sustainable poverty reduction strategies.

Strategies to eradicate poverty have been well documented. The JCTR, for instance, suggests *employment creation* as the one surest way of reducing poverty. They opined that decent work gave people income and dignity, and allowed them to provide for their

needs, and to invest, not only in their own future, but in that of their children as well. (<http://consumerdiaries.wordpress.com> – accessed on 23.03.2014).

However, it seems that the particular strategies approved and employed by various stakeholders in this fight appeared to incline towards the contextual definition of the concept of poverty as given by those who aspired to design the strategies. For instance the JCTR designed strategies that tended to lobby government to increase budgetary allocations to social sectors such as education, health, and social security so that education from Primary to Tertiary levels as well as health care provision for all categories of treatment would be made free of charge.

“We thus agree with the Patriotic Front’s (a 2011 Ruling Political Party in Zambia) pronouncements on job creation and increased budgetary allocations to the social sectors. This is the only way the poor people in both rural and urban areas would meaningfully benefit from the economic growth of the country” (Retrieved 23 March, 2015 from <http://consumerdiaries.wordpress.com>).

However, diverse positions may be encountered on what should be understood as the best strategy for poverty reduction, and while any such strategy may be academically acceptable, efforts must not be limited to assertions by these service provider organisations or individuals scholars with their established contemporary philosophies and policies. Studies must continue to examine the politico-social systems in order to determine what will be the standard and generally acceptable measurement for designing poverty reduction strategies that will really work to develop small-scale farmers in such areas as Kabompo district and indeed, for those in other areas of the country as a whole.

Other organisations look at the poverty problem in terms of what they feel is the main complaint by those involved in the production of the staple food – the farmers. The Zambia National Farmers’ Union (ZNFU), for instance, has highlighted some of the areas it feels are critical to the eradication of poverty such as access to agricultural

inputs. According to the Union, late distribution of fertilizers to beneficiaries under the government Farmer Input Support Programme (FISP) has been a major concern to most small-scale farmers (Retrieved 23 March, 2014 from <http://consumerdiaries.wordpress>). Farmers are aware that delayed application of fertilizer has negative effects on maize – usually lowering yields which are currently at an average of 1.55 tons per hectare. (It is assumed that if farmers received their agricultural inputs on time, the poverty of small-scale farmers would be sufficiently solved) Under the FISP, beneficiaries are said to have usually complained of late delivery of agricultural inputs (Ibid).

As a strategy to offset this imbalance, at least to some extent, the ZNFU has established the Lima Credit Scheme which renders timely access to inputs through a loan system to farmers. According to the ZNFU, improvements in yields have been observed primarily because of timely provision of inputs (Retrieved 23 March, 2014 from <http://www.znfu.com> accessed).

However, the ZNFU has also identified a number of constraints in the whole agricultural input supply system, among them the prohibitive costs of fertilisers for non-FISP farmers which, for instance, accounted for over 30 percent of the total costs of inputs used in maize production between the 2007 and 2008 farming seasons.

In addition, Petrol & Diesel prices rose by about 21 percent in early 2013 and could potentially rise further. According to the ZNFU, a rise in fuel costs results in higher maize production costs because transportation of both inputs and maize output to the end user point and market respectively, will consequently be higher since these services run on fuel. The costs of certain farming activities such as land preparation and harvesting where mechanisation is practiced are equally inflated by high fuel prices.

However, the ZNFU is worried about other things besides. According to its website, (Retrieved 23 March, 2014 from <http://www.znfu.com>), ready access to production information such as the appropriate technologies is almost non-existent, leading to weakened extension services, and therefore, minimal returns. It has been proven that

farmers who adopt good agricultural practices have produced yields above 8 tons per hectare (Ibid).

Certainly, higher productivity such as this one would be good for the district, the country, as well as the region. Nevertheless, for the purpose of this study, it must be understood that it is not just productivity alone that is vital for the small-scale farmers. Rather it is what they do with that productivity that matters because it has a bearing on what they economically become in the end. For instance, a farmer who sells all his harvest is less likely to add value to the well being of his or her household than a prudent one despite the fact that they would have had a “*bumper harvest*” for a particular season or seasons. Such a farmer will need appropriate information on management of their harvest so that they are not rendered vulnerable to poverty because of their poor marketing practices.

The Union suggests a number of strategies in order to address these low productivity challenges. One of the areas of improvement it proposes is that of research and technology. ZNFU is collaborating with the Golden Valley Agricultural Research Trust (GART), another agriculture oriented organisation in Zambia, “to expose a majority of farmers to modern technologies through what will become a *one stop shop for all Agritech information* be it in relation to machinery, seed technology, modern breeding technology, etc.” (Retrieved 23 March, 2014 from <http://www.znfu.com>).

From this account, it is clear that the dimensions of previous interventions for small-scale farmers from various agricultural stakeholders were in the provision of goods and services rather than the empowerment of farmers with business skills through effective communication.

2.4 Production Trends in the Agricultural Sector in Zambia

Generally, favourable weather conditions for agriculture prevail in Zambia. The Ministry of Agriculture and Livestock states that the country recorded three “bumper harvests” between 2010 and 2012, with highest being the 2011 harvest of close to 3.00 metric tons. However, maize production seems to plummet in the successive year 2013

at 2.53 metric tons (**Fig. 2.**) as captured by the Ministry of Agriculture and Livestock, reports the ZNFU (Retrieved 14 July, 2014 from www.znfu.zm).

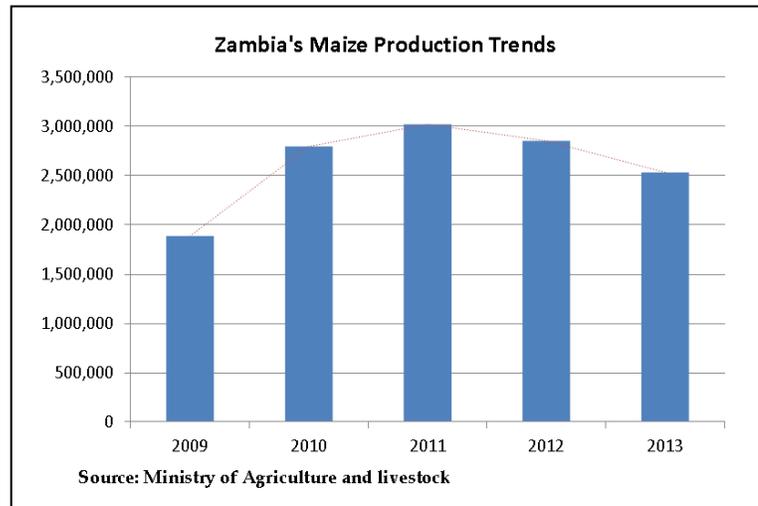


Figure 2. Maize production trends in Zambia (2009 - 2013).

2.5 Farming as a Business and its Challenges to Small-scale Farmers

2.5.1 Farming as a Business

According to the *Allafrica website*, a business does not need to be a huge multi-million dollar conglomerate of companies. It should be understood that a business in this context can range from selling tomatoes in the street, or simple entrepreneurship, to one with high level of business investments that run across the world (<http://allafrica.com> – 24.03.2014).

Running a business is not an easy thing to do. In a business, the businessman or woman can lose their investment, sometimes permanently. So every business involves a risk. However, one cannot hope to make a living out of their products if they do not take risks. Risks are in fact a motivation for better planning. Businessmen and women take the initial risks when they invest their money into those businesses, out of which they hope to make returns on their investments known as profits. A business is a risk in the sense that sometimes investments may be lost permanently depending on how the

business was run. Therefore, while a business is a risk-taking venture, it is also a profit-making one (<http://allafrica.com> – 24.03.2014).

Small-scale farming can be categorized as small businesses in their own right. They grow their own crops, which they can sell for profit. Clearly, a farmer can engage in business in order to improve their standard of living as opposed to perpetually living in poverty situations. For instance, a number of small-scale farmers have been reported to be successful farming business people on account of their hard work. They eventually are able to take their children to school out of farming and marketing their farm produce (<http://allafrica.com> – accessed on 23.03.2014).

Allafrica.com reports that one farmer in Eastern Province of Zambia was shown on television showing off his guest house built out of the proceeds from the farming activities. So farming can, and does, give good opportunities for bigger businesses. Currently, there are a number of people who are busy thinking of better ways of investing their hard-earned money and others have gone into small-scale farming – farming for profit.

The site continues to explain that farming is not just about growing crops. Livestock is another avenue through which farmers can make business. “Poultry farming, dairy farming, pig rearing and gardening are other business avenues in which enterprising entrepreneurs are risking their investments” (Ibid).

2.5.1.1 *Farming as a business benchmarks*

In trying to deal with the problem of agriculture for small-scale farmers, questions arise as to what would best describe a peasant and a farmer in the agricultural business. It is general knowledge that most farmers in the rural areas grow maize for consumption as well as for sale to public marketing agencies or to private outlets. In the Farmer Input Support Programme alluded to in the introduction of this study, and earlier in this Chapter, most farmers who receive agricultural inputs through this Programme grow maize for consumption and for sale to the Food reserve Agency. Can these farmers be said to be engaged business with their produce? When does a farmer get be considered a

peasant, and when do they get to be considered engaged in farming as a business in their agricultural activities? The short answer to these questions is *when a person begins to grow food for profit*. This involves far more than just having access to agricultural inputs. So a farmer recruited under the FISP may not necessarily be called a farmer in business because many of them do not apply the business skills that would lead to growth of their farm activities.

Kahan, (2013) highlights a number of profit variables that qualify a farmer to be an entrepreneur in his farm business. He describes the key concepts of profit and efficiency in terms of relationships among inputs, costs, outputs and income; and this study adopts these as key benchmarks for the farming as a business dimension because of their potential to grow the farm business and keep it going..

Profit

Kahan describes profit as “the difference between the money that comes in to the farm business from the sales of a product and the money that goes out to produce it.” In other words it is the difference between total sales less total production costs. Profit is a determinant of whether or not the business is worth maintaining, changing, or abandoning altogether. The following is an excerpt from Kahan’s work from the Farm Management Extension Guide, that describes the importance of profit in farming as a business and how it can help to grow and sustain the farm business:

Profit is necessary to keep the farm business going.

If inadequate profits are generated the farmer will have to sell equipment, farm implements and other assets in order to find the money to cover everyday costs. If the situation carries on for too long the farmer may end up selling the farm. The farmer would then be out of business.

Profit is necessary for growth of the farm business.

A farm business needs money in order to develop and grow. Profit generates this money. The money accumulated from profits can be used to buy new machinery, equipment and implements. It can also be used to rent or buy additional land. In this way, the farm business can grow and expand.

Profit is used to measure the success of the farm as

a business. Profit can be used as an indicator showing the success of the business. The more profit the farmer makes the more successful the business is and the more likely it is to survive.

Profit is a reward.

Farmers and their families put in their time and effort to work on the farm to earn ‘benefits’. In most cases, the family members are not paid a salary like other workers. Profit represents their ‘wages’. It can also be understood as a reward for their energy, time and effort in managing and working the farm. Profit can be seen as a return for the time and capital invested.

Profit provides money for the farm family.

Profit provides the money farmers and their families need to buy additional goods and services and to pay for education and health care. The greater the profit, the more farmers can provide for their families. Profit is a wage, profit is a reward for effort, and profit is a return on investment.

Profitability

Profitability measures how well the farm business uses the resources available to generate income and profit. Profit and profitability are not the same. As mentioned before profit is the amount of money earned after total costs are deducted. Two farmers may show the same profits but may not be equally profitable. This could be a result of the way farmers use their resources. In order to compare these farms, we need to see exactly how the farmers make use of their resources to generate profits. As an example, if a farmer makes a profit of \$1 000 we do not know if this level is high or low. Could the farmer have earned more by using the resources differently? Using profitability as a basis for comparison instead of profit means that one can compare like with like. A farm of 2 hectares can be compared with a farm of 20 hectares.

It may well be that while the farm of 2 hectares makes less profit than the farm with 20 hectares; the small-scale farm may be more profitable. To compare profitability and performance, a farmer can use common measures such a gross margin, enterprise profit and farm profit *.

Efficiency

Efficiency is the careful use of the resources available to the farmer. While the farm business may generate profits and be profitable, an important question to ask is whether or not the farm business is efficient. A farm that is efficiently run is more likely to be profitable than a farm that is not. There are two forms of efficiency ...technical and economic.

Technical efficiency:

There is usually more than one way to grow a crop or raise livestock. It is possible to produce farm products by farming a small quantity of land very intensively, combining a lot of labour and capital. It is also possible to produce the same product by farming the same land area extensively, with only small amounts of labour and capital. Technical efficiency is producing farm products with the best combination of resources or inputs. Technical efficiency measures the farmer’s skill and success in producing the highest possible level of output from a fixed amount of inputs. It can be calculated by estimating crop and livestock yields, and the use of inputs such as fertilizer and labour. Technical efficiency is measured as yield per unit of a specific input as, for example, kilograms of fertilizer or seed.

Economic efficiency:

Economic efficiency measures the financial returns on resources used. Economic efficiency looks at the cost of using resources to produce a given level of output. The most economically efficient method of production is the one that costs the least. It should be mentioned that methods that are technically efficient may not be economically efficient.

Source: David Kahan, FAO, Farm Management Extension Guide, Book 4.

Kahan's analysis of the farm business is somewhat a reflection of what might have been the Ministry of Agriculture and Livestock's underlying consideration in formulating the FISP Policy of graduating, or weaning farmers once they had been served for a consecutive two year period under the Programme. It was likely assumed that by that time a respective FISP beneficiary farmer would have gained enough business experience and resources to be able to stand on their own, away from the government handouts of agricultural inputs.

Therefore, a farmer in business is one who practices the planning aspect of farming and records all the farm activities and expenditures as well as incomes in order to determine the profitability and efficiency of the farm industry. On the other hand, a peasant farmer would be one who scratches on a piece of land for a living in terms of consumption and even sales to marketing agencies, but without a focus on growing the farm business or sustaining the household food security. Such a farmer may even be on the FISP plan, yet lack of capacity and knowledge to function as a business can hamper their little efforts spent at taking farming as a business.

2.5.2 Small-scale Farmers' Challenges in the Agricultural Business

The Times of Zambia for 19th November, 2013 revealed that small-scale farmers in Zambia face numerous challenges and one of this is the marketing of their products. It is difficult for these farmers to find ready market for all their products. Farmers who grow maize have only one ready market through government. Most of them do not even have the necessary equipment like transport to ferry their maize to the market, so selling points called depots have to be established nearer to where they live to take care of this problem (*Annabel Davis, Transport And Sustainable Rural Livelihoods In Zambia: A Case Study*).

However, not all areas are lucky enough to receive these depots due to a number of reasons such as bad roads. Transporters are unable to reach such places with their trucks, so these farmers are usually left out. Their only market in their case is the "Briefcase Businessmen" who come to buy their maize at a negotiated price – and most

of the time they sell their maize more cheaply than government would buy it (<http://allafrica.com> – accessed on 23.03.2014).

2.6 The Agricultural Market in Zambia

In a Food Security Research Project conducted by Antony Chapoto and colleagues in July 2011, it was stated that one of the complications farmers find themselves in after harvesting their crops is the market. In looking at this problem, Chapoto et al (2011) categorised farmers into poor and non-poor, transient poor, and chronic poor farmers. This categorisation was useful in analysing market accessibility to the farmers.

According to their findings, farmers did not access the services and infrastructural facilities at the same level. In general, the non-poor group had the best access to infrastructure while transient poor and chronically poor farmers were somewhat further away from these services but covered less distances to the traders.

The possible explanation to this was that the poorer households did not have sufficient financial resources to transport their produce through long distances to the traders, thereby causing the profit-making traders themselves to travel nearer to the poorer farmers. However, such farmers had no choice but to sell their produce at cheaper prices than those who had the means to go in search for better prices.

These data show that on average the consistently non-poor and the one period poor are more commercialised compared to consistently poor households and households that fell into poverty twice, despite slightly increasing over the survey period.

These results suggest that increasing crop productivity to produce marketable surplus as well as creating market opportunities for the poor farmers may help in the fight against their chronic poverty.

Nevertheless, it must be re-emphasised that higher productivity alone may not be sufficient to result in sustainable poverty reduction among the small-scale farmers if they were not empowered with appropriate knowledge to run their farm activities as businesses. Accounting for all farm incomes and engaging in planned expenditure must

be regarded as requisites for farmer development and such outcomes consist in availability of appropriate communication strategies within the farming fraternity.

2.7 Farmer Focused Agriculture

Zambia, like any other well-organized country, has various ministries that oversee numerous strategic programs and policies for technological advancement, social and military security, political stability, economic development, and a host of other national aspirations in order to address various needs. Critical among these ministries is the Ministry of Agriculture and Livestock; and like other Ministries elsewhere, and in this country, this ministry has a number of objectives it intends to achieve. Chief among them is the need to ensure food security in the nation (<http://www.agriculture.gov.zm> – accessed on 27th March, 2015).

This implies that food production is the main emphasis for government through the Ministry of Agriculture and Livestock. However, there is need for those who produce this food to be able themselves to not only sufficiently subsist on the food they produce, but to also use the food production methods and techniques to spur them to higher levels of personal economic development through their objective participation in the agricultural marketing system. Rottger (2002) emphasises this point when he says: “...small farmers cannot remain only producers of foodstuffs but have to take on the additional role of entrepreneurs in order to improve their livelihoods and move beyond subsistence farming.”

2.8 CONCEPTUAL AND THEORETICAL FRAMEWORK

This section highlights the conceptual, as well as operational definitions and theoretical frameworks. The semantics ascribed to these terminologies are those that pertain to the study of communication for better agriculture as the researcher would have it and may not necessarily answer to the regular usage.

2.8.1 Conceptual and Operational Definitions

This sub-section describes conceptual and operational terminologies that the study will use. To operationalise is to describe how a variable is going to be measured in reality, and in contextual terms. A concept is a mental image that summarizes a set of similar observation, feelings, or ideas (Schutt, 1996:69).

2.8.1.1 Communication

According to Rogers (1992), communication is an important aspect of development, or social change, and is part of the myriad decisions that, taken together, constitute social change. Communication is a process of human interaction that is commonly used in everyday life. It is popularly understood when considering two people who are exchanging information or ideas about a particular issue of importance.

However, communication is a more complex process than the Shannon and Weaver (1949) model which suggests that communication was simply the transmission of messages or information from a source to a receiver using a chosen medium of transmission. For communication to pass as such, it must be complete and this can only be achieved if there was prompt and appropriate feedback.

2.8.1.2 Mass communication and development

A strategy refers to a specific plan laid down for using communication to achieve specific results. *Manish, (2009) defines mass communication as:*

“ . . . the message sent by a person or a group to a large anonymous audience through a specialized medium or a transmitting device.”

In other words, Mass communication is the transfer of a message or information to a large number of people, or masses at the same time using public communication tools or media such as radio, television, and the print media. A Mass Communication Strategy, therefore, is a well designed and planned tool intended for the use of communicating to large numbers of people at the same time.

2.8.1.3 *Poverty*

Gerald Nyasulu of James Cook University, Australia states that “defining poverty, how it could be measured and alleviated have always been contested issues. Over the decades, different authors have proposed different definitions and measurement methods that have been applauded for a while before being discarded as inadequate.” (Retrieved 17 November, 2015 from http://www.jcu.edu.au/sass/swcw/pg/JCUPRD_026064.html). Defining poverty, therefore, is a variant and proponent depended work.

According to Jakob (2011), poverty is the negative analogue of human development. If human development signifies the process of enlarging people’s choices and opportunities that are most basic to human development, poverty signifies their denial. Such deprivations include material deprivations in terms of food and nutrition, health, education and literacy, safe water and sanitation, clothing, and shelter (Retrieved 21 March, 2014 from <http://www.psmag.com>).

In addition, poor people are usually more vulnerable to external extreme environmental conditions such as bad weather, natural disasters, disease outbreaks, and economic shock that reinforce material deprivation.

A more elaborate definition of poverty, perhaps, is that given by the Jesuit Centre for theological Reflection (JCTR) which based its definition of poverty on the dimensions suggested by the Central Statistical Office (CSO). The CSO announced that Zambia’s poverty level had declined from 62.8 percent in 2006 to 60.5 percent in 2010 using what has come to be known in Zambia as the poverty datum line (PDL) or threshold (Retrieved 23 March, 2014 from <http://consumerdiaries.wordpress.com>).

The standard indicator of poverty is a measure of a daily’s cost of ration which has been pegged internationally to dollar-a-day threshold (now revised to \$1.25). According to this calculation, a poor person is one that lives in a household that subsists on less than a dollar and a quarter per day per person. “Going by this benchmark, the 60.5 per cent

poverty line means that approximately 8.1 million of the 13 million Zambians cannot afford living on 1.25 dollars per day and are considered poor (Ibid).

The CJTR continues to say that this 2.3 percentage points or 3.8 per cent reduction in poverty line was achievement that occurred under the Fifth National Development Plan – FNDP period (2006 – 2010). During this *plan*, the average economic growth was 6.1 percent. However, although this is supposed to be good news for a country in terms of its economic performance, it falls short of this claim. This is because these statistics clearly indicate that “efforts to translate this growth into improved living standards of the ordinary citizens have had limited impact on the lives of Zambians’ and so poverty continues to harass the Zambian people” including small farmers (Ibid).

It is important to note that even this internationally computed description of poverty indicators, does not sufficiently deal with poverty analysis argument. This is because it does not take into account some of the common things that people normally use as part of their basic lifestyle. For instance, the ‘food basket’ used to arrive at the poverty line is too modest and based on a predominantly minimal caloric food requirement that is vegetarian in nature and excludes meat, chicken, and fish. The Zambian measurement has also not fully factored in such basic needs of the people as shelter, education, health care, lighting, clothing, footwear, and transport. Human freedoms are also remotely linked to the current definition of poverty.

2.8.1.4 *Participatory communication and its role in social change*

In order to contribute to social change and transformation, the change agent must understand the power of participatory communication. According to Petit et al (2009), the growing emphasis on participatory communication, which involves stakeholder dialogue, consultation and bottom-up planning processes, community media, has created an enabling environment for people to express themselves fully and “give meaning to and claim their citizenship. Such spaces allow people not only to be heard but also to reshape boundaries and social and cultural norms that underpin knowledge and power relations.”

This is one way in which people can empower themselves with both expertise and a sense of ownership of a programme, improving the capacity for sustainability. He concludes that while:

“Mass communication and behavioural change communication are considered useful in themselves and for promoting pre-determined reforms, participatory communication may have greater potential to contribute to locally-owned reforms and sustainable change at various levels of society” (Ibid).

2.8.1.5 *Extension teaching method*

This may be defined as a type of communication or device that is used to create situations in which new information can pass freely between the extension worker and the rural communities.

2.9 THEORETICAL FRAMEWORK

The overarching influence of agricultural improvement is communication for development. This section deals with the communication theories that this study was carried out in, with the main one being the Diffusion of Innovations Theory. The other theories serve to support the focus of diffusion of innovations.

2.9.1 The Theory of Diffusion of Innovations

It is not possible to bring in a new idea to a community and have it adopted with relative ease. New ideas are normally held with suspicion by most of the community members until they get convinced in one way or another, that they stand to benefit from it.

Rogers (1983), in his *Diffusion of Innovations* illustrates this complex situation in very helpful terms. He defines diffusion as a process by which an innovation is communicated through certain channels over time among the members of a social system. The theory comprises three important elements that need to be understood: *Innovation*, *Communication Channel*, and the *Time* elements.

Innovation – this word refers to an idea, proposal, or an object that tends to suggest a change in the way of life of a group of people, community, or society, and is perceived to be new.

Communication Channel – is anything that bears a message from the sender to the receiver, such as phone, radio, mail, person and so on.

Time – is applied as it relates to the period it takes for an idea to be adopted or to be rejected by a group of people, or the community.

When a change agent comes into a community, he or she needs to recognize that people in a community are going to understand and appreciate the new ideas he or she brings, in very different ways in terms of both content and time. In other words, the adoption rate will differ from group to group and between individuals within the group.

Everett Rogers identified five characteristics of any group of people or community who receive and respond to an innovation. Knowledge of these categories on the part of the change agent will help reduce frustrations when the innovation seems to be hitting a rough and rocky adoption process from certain quarters of the community. These are: *The Innovators; the Early adopters; The Early Majority; The Late Majority; and The Laggards.*

The Innovators

These are characterised by shorter adoption time than any other adopter category. In fact most of the time they initiate innovations themselves. If and when a great and new idea is brought in by someone else, they quickly recognize the good in it and adopt it with ease. These people are also venturesome, risk takers, brave; and they belong to the more affluent group in society. This makes them able to absorb possible loss from unprofitable innovations.

Innovators also have numerous sources of information about new things such as radio, magazines, books, and so on; so they have the ability to both pursue their personal and

community interests and cope with highly technical and complex development ideas away from the change agent's influence. These form or account for 2.5% of any community or society.

The Early Adopters

These adopt innovations slightly slower than the innovators. They are very active when a new idea or innovation is brought up. Most of the leadership in the community comes from this group, and they serve as role models for other members of the community. They are generally successful people in their ventures and therefore, are respected by their peers. They are educated and very social people, forming about 13.5 percent of the community.

The Early Majority

These are the type of people who interact with the leadership and so they have less trouble in adopting new ideas, but they have to debate the ideas and understand it before they adopt it. They have no opinion leadership characteristics on their own. The early majority forms about 34.0 percent of the community or society.

The Late Majority

This group comprises people who are normally sceptical, cautious, traditional, and belong to the lower socio-economic status in the community. They do not easily accept new ideas, until others pressurise them. These also account for 34 percent of the community or society.

The Laggards

The laggards are those who have no opinion leadership within their group and are very suspicious of new ideas. They normally try to find a reason to reject innovation referring to the past programmes that, in their opinion, may not have worked and use those as leverage to resist the new ones. The laggards account for 16.0 percent of society. Their decision-making time for adopting an innovation is longer than any other group.

According to Rogers (1994), the adoption process is the mental process through which the individual passes, right through from hearing the message or innovation, to adopting it. He broke this process into five stages namely:

Awareness – a stage where the individual is initially exposed to the message or some innovation, but lacks sufficient information about it.

Interest – where the individual receives the innovation and seeks additional information about it,

Evaluation – where the individual now applies the idea to his or her present or futuristic situation. In addition he or she makes a decision on whether to try it or not,

Trial – at this stage, the individual convinces himself that the innovation is worthwhile and makes full use of it, and

Adoption – where the individual decides to continue the full use of the innovation.

From this theory, Rogers proposed the following five-stage model for applying the diffusion of innovation theory:

First he talked of **Knowledge** where learning about the existence and function of the innovation occurred. This was followed by **Persuasion** whereby a person becomes convinced of the value of the innovation. Thirdly, he talked about **Decision** by which the person adopts the innovation. This was followed by **Implementation** in which the person applied it or put it to use, and finally, **Confirmation** whereby a person finally accepts the innovation completely or rejects altogether.

This theory is relevant to the study of communication strategies used to teach farmers business skills in their farming activities in the sense that it teaches that adoption of an innovation is not a one day affair, but rather a multi-stage process that may take longer than is ordinarily expected. The change agents need to understand that when farmers show reluctance to adopt an innovation, it may not necessarily imply that the farmers

have rejected the innovation, but that they may possibly be operating in one of the outlined stages of the adoption process or the adopter categories; and that the agents may need to use effective strategies that would be more persuasive to the farmers.

For instance, one good strategy that a change agent could use in order to succeed with imparting knowledge in their methods of teaching, would be to focus on the innovators themselves, together with early adopters without crowding out the others so that when the late majority and laggards finally came on board, they would easily be influenced by the leaders. Generally speaking, it is easier for farmers to believe their own kind than to believe an agent who was, in their opinion, “an outsider” coming to them with an attitude and attempting to change their lifestyle which they may presently feel they have no problem with. Secondly, the agent may use knowledge from this theory to exercise appropriate patience, making consistent follow-ups to the farmers so as to eventually recruit their empathies in his or her development ideas.

2.9.2 The Theory of Persuasion

To persuade is to coax someone to agree to do something or to accept an idea which they would otherwise have not done or accepted. It embodies concepts that are complex. Sometimes persuasion succeeds; at other times it fails.

According to Dewey (2007), Carl Hovland of Yale University studied persuasion from the late 1940s through to the 1960s (<http://www.intropsych.com/> - accessed on 18.08.2014). and isolated factors which influenced success or failure of persuasion. He coined the three “Ws” phrase of “Who” says “What” to “Whom?” phrase from which he distinguished the following three variables:

1. Characteristics of the *communicator* (the person conveying the message) such as whether the person is an expert or not,
2. Characteristics of the *communication* (what information is conveyed) such as what arguments are employed, and

3. Characteristics of the *situation* (this describes the circumstances in which the message is conveyed) such as whether the person receiving the message is in comfortable surroundings or not; or whether the receiver of the message is psychologically ready to receive the message.

Hovland studied each of the variables systematically by giving two groups the same message, but crediting the message from “a reputable source” to one group; and to the other, from “a disreputable source.”

He discovered that the group which were told that the message came from a reputable source tended to accept the message as truth. On the other hand, the group which was told that the message was from a disreputable source tended to doubt its credibility. For instance, when a message, say about a new face of the HIV and AIDS, is heard from a person who is respectable such as former Zambian President H.E. Dr. Kenneth David Kaunda, or a Medical Doctor from the University Teaching Hospital (UTH), it is likely to be believed than if it were from a non-schooled drunkard from one of the shanty compounds in Lusaka City. In addition, simple things such as attractiveness of the communicator could positively affect the persuasive power of the message.

Hovland concluded that a number of factors affect the persuasive power of a message: The credibility of the source of the message such as an expert on the subject of discussion, the personal characteristics of the communicator, such as attractiveness, neatness, and sincerity. However, the theory further teaches that conversely, the persuasive power of an argument could be destroyed by attacking the credibility of the source as happens in courts of law when an attorney, for example, attacks the credibility of a witness by giving evidence of times when the witness lied.

This theory is relevant to the study about communication strategies used to teach farming as a business in as far as communication relationships between the Agricultural Assistant (AS) or Veterinary Assistants (VA) as change agents on the one hand, and the small-scale famers, on the other, are concerned. It is the job of the change agent to ensure that the innovations that the farmers need were well packaged and successfully

transmitted, and that the farmers eventually adopted them. Participation in the innovation in terms of applying them is critical for the development of small-scale farming into smallholder profit-making businesses.

To be successful, change agents need to observe the situations and the characteristics that make transfer of knowledge possible amidst differing conditions. For instance, he or she may need to look presentable to the community without necessarily standing out among them. Being an expert in the agricultural knowledge, the agent must realize that they already provide sufficient credibility to the farmers, but that other factors such as unkempt look, or a superiority complex, and so on, can either work to destroy this credibility or build it up. Further, the message and the manner of transmitting it could either encourage or inhibit reception among the listeners – the farmers.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter is concerned with the research design the researcher used. It describes the population of the study, the sample, and data collection and analysis methods used. This study was about *communication for better agriculture* with the view of finding out what communication strategies were used to teach farmers business techniques.

The study used both qualitative and quantitative data collection designs. This was because of the in-depth and descriptive data collection methods the researcher employed, and the need to quantitatively analyse some of the responses, especially those on the survey instrument – the questionnaire. The results from these data collection methods were triangulated. According to Alexander Jakob, triangulation is the combination of:

“Multiple observations, theories, methods, and empirical materials (used) to obtain confirmation of findings through convergence of different perspectives. The point at which the perspectives converge is seen to represent reality” (Retrieved 24 March, 2014 from www.qualitative-research.net).

3.2 Population of the study

The target population for the study was a tripartite arrangement that included *District Agricultural Staff* at Kabompo District Office (Ministry of Agriculture and Livestock) as well as *Agricultural and Veterinary Assistants* for the district. It also included *Crop and Livestock farmers* from the various Camps or Blocks in the Kabompo district.

3.3 The Sample and sampling procedure

The sampling procedure for this study was largely qualitative in nature much like the study itself was. It was important for this study to use this approach because as Miles and Huberman (1994:27-28) argue:

“ . . . qualitative sampling can provide the opportunity to select and examine observations of generic processes which are key to our understanding of new or existing theory about the phenomenon being studied.”

The samples used in this study were therefore obtained under the qualitative background of the data collection procedures to be used (Kuzel, 1992), except for the questionnaire administered to the Field Staff as outlined here-in.

Ghosh (2003) defines the sample as: “a subset of the whole population which is actually investigated by a researcher and whose characteristics will be generalized to the entire population.” A sampling procedure, therefore, is a method by which a researcher determines their sample without being extremely biased against the prevailing variables. In this study, the researcher used *Purposive sampling* which, according to Kulbir (2006:265), is a type of sample selection in which the researcher carefully determines who should be part of the sample.

In this study, samples from the three categories of the population were selected to participate in this study. From the category of *District Staff*, a sample of 5, who were Subject Matter Specialists (SMS) possessing information sought by the study was targeted purposively (Lisa, 2008), but only four (04) were on hand to participate in the study.

The second category was that of farmers. Thirty (30) farmers from different areas of the district were targeted for data collection through Focus Group Discussions (FGDs). A Focus Group Discussion is “... an informal discussion among a group of selected individuals about a particular topic” (Wilkinson, 2004). However, it was only possible

to organize one FGD although it was overwhelmingly attended despite inviting only ten respondents. Thirty (30) of them came to the FGD. Luckily for the researcher, there was a balance in terms of numbers by sex and so the researcher rationalised that it was imperative to go ahead with data collection to avoid the misunderstanding that would ensue in further dividing them as well as avoiding the fuss of doing so, including the resultant wastage of time indeed.

The data collected from these respondents was largely qualitative, which is “. . . essential to the knowledge development . . . disciplines” (Morse, 1994:2). These were sampled using stratified sampling which, according to Teddlie (2007), is a method by which “a researcher ... typically wants the sample to be representative of the population on some characteristic of interest (e.g., achievement scores).” In this case the population is divided into groups of similar characteristics, and then simple random selection performed from each group to form a study sample.

The third and final category purposively selected was that of Field Officers, or Extension Officers in the Ministry of agriculture and Livestock in Kabompo district. These were selected on the basis of being the persons at the extension methodology level who were in constant close contact with the small-scale farmers from whom important data was equally to be collected. Twenty-Five (25) Extension Officers (Agricultural and Veterinary Assistants) were targeted to be part of the study. There was a total of only Twenty-Three (23) Extension staff in the district, so all Twenty-Three became part of the sample.

3.4 Data Collection procedure

An *interview guide* was used to collect data from Respondents in the District Staff category. These were interviewed individually because they held different offices with different responsibilities that contributed information that responded to the objectives the researcher was seeking to achieve.

A *questionnaire* comprising a mixture of open-ended and closed ended questions was used to collect data from Agricultural and Veterinary Assistants since these were able to

read and respond to the questions by themselves. This was done to ensure that critical questions received original qualitative responses to avoid the error typical of quantitative studies in which some questions may receive quick multiple-choice responses that are void of deep personal reflection and involvement of the respondents.

Focus Group Discussion (FGD) method was used to collect data from farmers. This method is useful for bringing out in-depth information because of the free atmosphere of the deliberations and the augmented opportunity for the researcher's chance to probe the respondents for details about particular questions (Kozol, 1985).

3.5 Data Analysis Techniques

The Creswell (1998) *Data Analysis Spiral* in which the data are *organized, classified, and synthesised* to create meaning was used to analyse qualitative data from District Staff respondents and the Farmers.

The data from the Questionnaire for Extension Staff, though comprising qualitative questions or open ended questions, were analysed using the Scientific Package for the Social Science (SPSS). This was achieved by initially examining these open ended responses and assigning them into particular themes coming out, and then coding the themes for the purpose of inputting into SPSS together with the responses from the closed ended questions in the data collection instrument – the questionnaire.

As indicated earlier, the results of these analyses from the three groups of respondents were finally triangulated to determine if they had a converging point that would indicate validity of findings and create meaning in order to help the researcher come to a logical and relevant conclusion of the study.

CHAPTER FOUR

4.0 FINDINGS

4.1 Introduction

This Chapter deals with the findings of the study in terms of the objectives that the researcher set out to achieve. The main purpose of the study was to find out what communication strategies were being used to impart knowledge to small-scale farmers about handling agriculture as a business.

4.2 Why this Study?

This study was guided by four sub-themes to the purpose or main objective of the study as stated above, and these were:

Firstly, to find out the methods of instruction used to deliver agricultural extension messages to small-scale farmers in Kabompo District. *Secondly*, the study had hoped to find out what specific messages focusing on farming as a business were given to the farmers. *Thirdly*, the study intended to find out if farmers who had received these business innovations had adopted and were using the methods and techniques of farming as a business. *Finally*, through this study, the researcher hoped to find out the main communication channels that were used to transmit agricultural messages to small-scale farmers in Kabompo District.

The study was necessitated by the absence of economic growth and sustainable self-reliance of the small-scale farmers in their agricultural activities. This was of major concern to the researcher before he commenced this study. He had initially assumed that there was little or no serious communication going on between the extension workers and the farmers for whatever reason, hence the poor performance of the farmers and their perpetual poverty situation.

The questioning procedure used for all the three categories of respondents was based on the principle of asking similar questions so that the responses between the three groups

of respondents could be easily triangulated amongst each other in order to arrive at a more representative response for the study regarding the particular objective sought.

4.3 Preview of Findings

This study was aimed at finding out how effective the communication strategies used to teach agriculture as a business to farmers in Kabompo District were. According to the findings, *participatory extension approaches* were identified as the methods of instruction used to teach the farmers business skills. In terms of topics covered, although they were many, the most common topic covered was that of *business planning*, while the main channel of communication used was the use of *trained personnel* or Extension Officers.

Unfortunately, there was *no adoption* of the innovation of farming as a business despite the use of appropriate methods of instruction and topic of choice as well as channel of communication used.

4.4 Detailed Findings

4.4.1 Objective Number One:

The objective sought to find out the methods of instruction used to deliver agricultural extension messages to small-scale farmers in Kabompo District.

Management Staff's Responses

Four staff responded to this question. Three of them stated that Participatory Extension Approaches were used, while one said Lecture method (see Fig. 3).

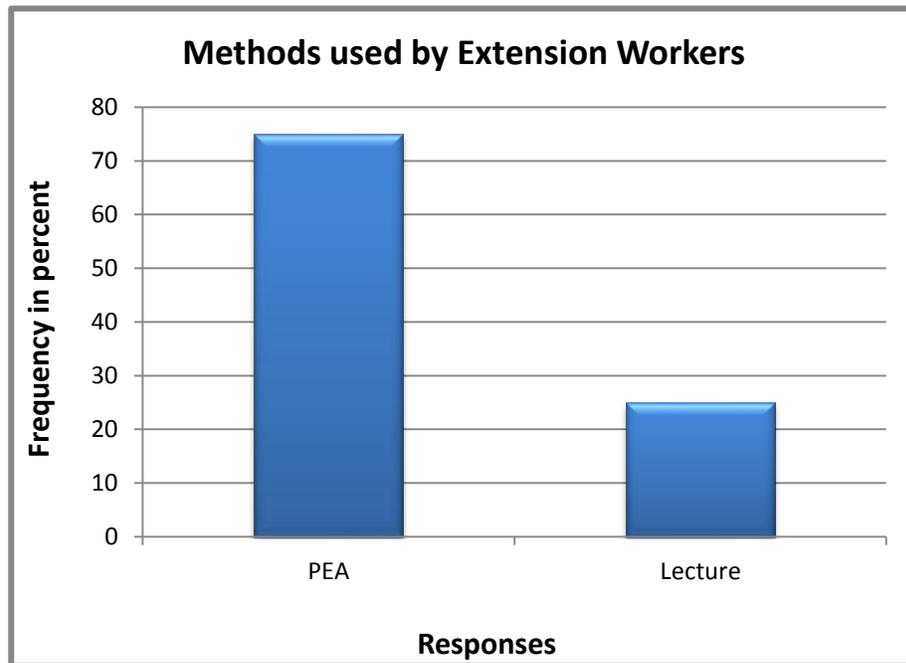


Figure 3. Responses from Management Staff on method of instruction used to teach Farming as a business.

Source: Field Data, 2015

The graph shows that 75 percent of the respondents stated that the Extension Workers used *Participatory Extension Approaches* or methods to engage farmers while only 25 percent said the lecture method was used.

Extension Workers' Responses

Of the 22 respondents among the Extension Workers on the same question, 77 percent of them said that they used the Participatory Approach Methods, 18.2 percent did not respond to the question because they did not train their farmers in anything at all in the last two years, while 4.5 percent said they used the *Lecture method* (See Table 2. below).

Table 1. Responses from Extension Officers on methods of instruction used to teach FAB to small-scale farmers.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Lecture method	1	4.5	5.6	5.6
Participatory Extension Approach	17	77.3	94.4	100.0
Total	18	81.8	100.0	
Missing System	4	18.2		
Total	22	100.0		

(Source: Field Data, 2015 through SPSS)

The Table 1.0 shows that the most common method Extension workers used to teach farming as a business to the small-scale farmers was the *Participatory Extension Approach*, standing at 77.3 percent. This was followed by Lecture Method 4.5 percent, and 18.2 percent said that they did not carry out any training to the farmers.

Farmers' Responses

Farmers also responded to this question of methods used by Extension Workers to teach them farming as a business. This was done in a Focus Group Discussion. One of the farmers summarised:

“Veci kututangisanga mwane nakutulweka mwakulingila. Kaha navatuhana lwola mangana tuhase kulinga muze vanatulweze.”(They teach us what to do, demonstrate it to us, and then they give us opportunity to try what they have shown us).

This account of their learning activities and experiences is descriptive of the *participatory nature* of the methods Extension Workers used to teach them these business skills.

4.4.2 Objective Number Two:

Through this objective, the researcher sought to find out what specific messages about farming as a business were given to farmers.

Management Responses

To this question all the four *management staff* respondents stated that the main topics covered was “*how to create a business plan*” because it was from this topic that farmers would be able to decide what to grow in order to make money as opposed to just eating. This represents 100 percent responses to this effect.

Extension Workers’ Responses

Two related questions were given for this objective:

1. Did you train your farmers in farming as a business in the last two years?
2. What was the main topic covered?

The Table below shows the responses from the Extension Workers on the two questions on whether or not training was done and what the main topics covered was.

Table 2. Responses from Extension Officers as to whether or not Extension Officers trained their farmers in FAB.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	4	18.2	18.2	18.2
Yes	18	81.8	81.8	100.0
Total	22	100.0	100.0	

(Source: Field Data, 2015)

Of the 22 responses obtained, 81.8 percent showed that the Extension Workers trained their farmers in “farming as a business” (FAB), while 18.2 percent said they did not.

As to the question of main topic covered during training, Table 3.0 shows the responses indicated that *planning* was the main topic covered during training.

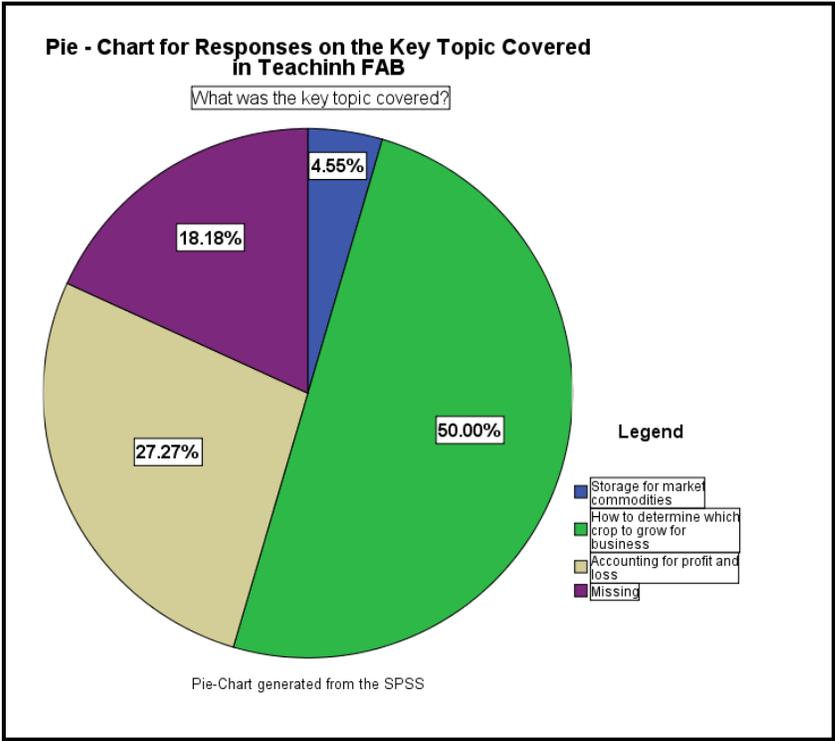


Figure 4. Pie-Chart of responses from Extension Officers on the key topics covered on FAB.

Source: Field Data, 2015

The Chart shows that the main topic covered by the Extension Workers in teaching FAB was “*How to determine which crop to grow for business*” at 50 percent, followed by “*Accounting for profit and loss*” at 27.27 percent. The *missing* 18.18 percent represents those who did not conduct any training at all, while “*Storage for market commodities*” stood at 4.55 percent of responses.

Farmers' Responses

To the question of what specific message for farming as a business was given to them, among other topics given them, a number of topics ranging from Business planning, Market research, through to crop diversification. Among these topics, however, business planning received more emphasis from them. They emphasized that for farmers to make good progress, they have to plan well and document their activities.

4.4.3 Objective Number Three:

This objective sought to find out if farmers had adopted and were using the methods and techniques of farming as a business that they received from Extension Workers.

Management Staff Responses

The response to this objective was sought in the question on 'Market Behaviour' particularly the 'utilisation of agricultural returns.' According to the management Staff, farmers are in the habit of selling more than three quarters of their produce, especially maize and become hungry later and seek to buy their own maize back from the FRA Sheds for food. In addition, most of them spend their agricultural returns on education (for their children) and the purchase of household goods on equal basis. Purchasing agricultural inputs for the next farming season comes as second priority to them according to findings. So farmers had not adopted the FAB innovation.

Extension Workers' Responses

The Extension Workers stated that farmers had understood and adopted the innovation of 'agriculture as a business,' attributing this response to evidence of its implementation of among the small-scale farmers in the area.

Table 3. Responses from Extension Officers on whether farmers grasped the topic on FAB.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	1	4.5	5.6	5.6
Yes	17	77.3	94.4	100.0
Total	18	81.8	100.0	
Missing System	4	18.2		
Total	22	100.0		

(Source: Field Data, 2015)

Table 4. Extension Officers' Justification for claim on farmers adopting FAB.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid There was evidence of implementation	11	50.0	61.1	61.1
There was participation in the training meetings	3	13.6	16.7	77.8
Farmers were satisfied with the content	3	13.6	16.7	94.4
There was no evidence of implementation	1	4.5	5.6	100.0
Total	18	81.8	100.0	
Missing System	4	18.2		
Total	22	100.0		

Source: Field Data, 2015

According to these tables generated from SPSS, Extension Officers claimed that farmers had adopted the FAB innovation, 50 percent of whom attributed this to “Evidence of implementation” while 13.6 percent attributed it to perceived “participation in the meetings” and “satisfaction with content” of the training program on equal basis. Only 4.5 percent thought farmers had not grasped the key topics of farming as a business ascribing this to lack of evidence of implementation.

Farmers’ Responses

Farmers in the FGD also responded to questions linked to this objective of finding out if they had adopted and were utilising the business skills learnt from the Extension Workers for profit-making ventures. According to the farmers, adopting the FAB innovation was not easy for them due to, among other things, the following factors:

- They have little or no means or capital to start business with.
- They only plant small portions of land due to limited quantities of inputs.
- They receive money from government very late and this disturbs planning.
- They do not carry out record keeping to monitor their activities

Therefore, farmers had not adopted the FAB innovation.

4.4.4 Objective Number Four:

The fourth objective sought to find out the main communication channels used to transmit agricultural messages to small-scale farmers in Kabompo district.

Management Staff’s Responses

This objective was based on the following question:

1. *What are the common sources of agricultural information?*

On the common sources of agricultural information, four (04) responses stated, “Extension Workers.” another one (01) response stated, “Seed Companies,” and one (01) response stated “Radio” (**Table 5**).

Table 5. Responses from Management Staff on common source of agricultural information.

SOURCE OF AGRIC. INFORMATION	SCORE	PERCENTAGE
Extension Workers	4	66.67%
Seed Companies	1	16.67%
Radio	1	16.67%
TOTAL	6	100.1%

Source: Field Data, 2015

The Table show that $4/6 \times 100$ responses, or 66.67 percent indicated “Extension Workers” as the most common source of agricultural information; $1/6 \times 100$ responses, or 16.67 percent indicated ”Seed Companies” while another $1/6 \times 100$ responses, or 16.67 percent indicated “Radio”.

The majority of Management Staff said that “Extension Workers” were the common source of agricultural information.

Therefore, Extension Workers are the main channels used to transmit agricultural messages to small-scale farmers in Kabompo district.

Extension Workers’ Responses

The responses for this objective from the Extension Workers’ category of respondents is reflected in the question of what sources of information on ‘farming as a business’ (FAB) these officers would recommend for the farmers. The Table below summarises the responses:

Table 6. Extension Officers' responses on source of information on FAB they would recommend.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Trained personnel	13	59.1	59.1	59.1
Electronic media	2	9.1	9.1	68.2
Agricultural Literature	5	22.7	22.7	90.9
No-Response	1	4.5	4.5	95.5
Local groups	1	4.5	4.5	100.0
Total	22	100.0	100.0	

Source: Field Data, 2015

The Table shows that Extension Workers favour “Trained Personnel” standing at 59.1 percent as the best source of information on FAB, surprisingly followed by “Agricultural Literature” at 22.7 percent and then “Radio” at 9.1 percent, while “Local Groups” trail at 4.5 percent, the other 4.5 percent was a non-response.

Farmers' Responses

To the question of the main communication channel used to transmit agricultural messages to the farmers, the farmers themselves indicated that Agricultural Extension Workers were the main communication channel used as well as radio. According to the transcribed material, farmers indicated that common communication channel used to transmit messages of farming as a business among them was through the “Extension Workers” themselves.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 Introduction

This Chapter deals with the discussion of findings. It highlights the purpose and the objectives of the study, offering an explanation of these findings in order to make the data useful to the reader.

In agreement with the idea of Creswell (2003), it is prudent that at the end of each inquiry, responses to research questions and those using objective phenomena related to the objectives are shown. The researcher saw the use of research questions as more appropriate than the use of objectives because questions help the researcher to maintain his or her thrust of search within the limits of the particular question, thereby mainstreaming the process that would achieve the objectives of the study though the two serve the same role in the end. Research questions act as tools to think with in generating information to fill the gaps that existed before the inquiry. So research questions are the “specific questions that researchers seek to answer” (Creswell, 2005:117). In other words, research questions “state what you want to learn” (Maxwell, 2005: 69).

This study had four research questions that contributed to the overall objective of assessing communication for the purpose of improving agriculture. These questions were aimed at finding out not only the communication strategies used to teach agriculture *as a business*, but to also find out what specific messages of farming as a business were given to the farmers, and discover if the farmers had adopted, and were actually using the lessons and skills they learnt. The study also endeavoured to find out the main channels through which agricultural messages were given to the farmers in the area of study.

5.2 Discussion of Responses to the Research Questions

In this study of *communicating for better agriculture*, which was a case of outreach to small-scale farmers in Kabompo district, the researcher discusses the responses to the research questions relating to the respective research objectives in this section.

5.2.1 Methods of instruction used to deliver extension messages to farmers.

According to findings, all three categories of respondents indicated that the methods of instruction used to teach farmers farming as a business were *participatory extension approaches (PEA)*. This term implies an established consortium of methods that many stakeholders prefer to other methods in imparting knowledge of a new innovation to the intended target for adoption, and these methods encourage participation of the learners in the decision-making process.

In this objective, the researcher wanted to find out the nature of the learning interaction that took place between the Extension Workers and the Farmers. Knowing this would help the researcher to arrive at a tentative conclusion as to the reasons why there is impact – or its absence – in a given outcome of an activity or programme and therefore, provide an apt understanding of the problem they were inquiring on. A method of instruction is part of the teaching tools that change agents use to impart knowledge of an innovation to the target audience(s). Participatory approaches, in their numbers, have been cited by scholars as the more vital to the facilitation of new innovations to target audiences for speedy adoption than are other methods and channels such as the media. Servaes (2002) makes this clear when arguing the effectiveness of diffusion and adoption of innovation between, and through the use of the media and participatory approaches:

“Mass media are important in spreading awareness of new possibilities and practices, but at the stage where decisions are being made about whether to adopt or not to adopt, personal communication is far more likely to be more influential” (p.13).

In the agrarian societies such as the one in the study area, it is the expectation of stakeholders in farming such as government through its Ministry of Agriculture and Livestock (MAL), to ensure that use of effective methods of facilitating adoption of agricultural innovations like “farming as a business” will be prioritised. In the recent years, many agricultural organisations and institutions have gradually begun to take up mutual modes of involvement in agricultural production methods that focus on increasing food security for the household and the country at large. Willem Heemskerck alludes to this when he says: “In the context of sustainable achievement of food security, many different farmer participatory approaches have been developed, which gradually moved from the consultative mode of participation in agricultural innovation systems to a collaborative and collegial mode of farmer participation and hence farmer empowerment” (Retrieved 23 March, 2015 from <http://betuco.be/voorlichting....pdf>).

According to him, some of these methods and techniques include; Farming Systems Approach (FSA), Participatory Rural Appraisals (PRAs), Participatory Technological Development (PTD), and so on (Sutherland et al, 2001). To this list we could include Focus Group Discussion (FGD), Participatory Monitoring and Evaluation (PM&E), Rapid Rural Appraisals (RRAs) all of which encourage participation of the learners in the decision-making process.

However, the responses to this question of methods of instruction came as a surprise. The researcher had anticipated that farmers’ inertia in adopting *farming as a business* so as to escape the poverty trap was a consequence of lacking information and knowledge resulting from a weakened Extension System. To the contrary, however, the result showed that despite using *participatory extension approaches* as the Extension Officers claimed they did, and to which method all stakeholders in the agricultural sector subscribe, farmers, nevertheless, had not implemented the “farming as a business” innovation, and so they continue to be poor and dependent on government for support.

Therefore we now know from this result that participatory approaches by themselves may not automatically result in adoption of innovation. The question still remains; why do farmers, despite receiving training in handling farming as a business; and receiving it

through the most effective method known, still not implement this self-development innovation? This is one question that remains to be answered.

5.2.2 Specific topics in farming as a business given to the farmers.

This question was designed to bring out the actual skills that farmers would be equipped with after receiving the training in farming as a business. The expectation was that if small-scale farmers received the right kind of training in the best communicative manner possible, there would be increase in their levels of implementing farming as a business; and therefore, poverty would consequently reduce.

According to the responses on this research question, one would perceive apparent discordance among the respondents. For instance, the *Management* indicated that “*how to make a business plan*” was the key message for the farmers, while *Extension Officers* ticked on “*How to determine which crop to grow for business,*” and the *Farmers* themselves responded that they were mainly taught “*Business planning.*”

However, a closer look at the responses, one sees little else but agreement among them. When the *management* responds “How to make a business plan”, they are simply talking the *farmers’* language who indicated “Business planning” as the key message – and both of these responses synonymous to each other, are no different in turn from the *Extension Officers’* response of “How to determine which crop to grow for business” because in both context and content, they describe agricultural *business planning* itself.

Therefore in this question of *main topic covered in teaching farming as a business* to farmers there is harmony in all the respondents’ answers in that they all converge on the aspect of teaching business planning to them. Planning is very critical in most sophisticated business undertakings. So is it with agriculture. Without proper planning, there can be no proper implementation of programmes and therefore, no desired results. Someone once said “If you fail to plan, you plan to fail.” (Franklin in Eliot, 1998). That is how important planning is because even when you avoid it because you think it is tedious, you still are engaging in it – only to the objective of failing!

5.2.3 Main communication channels used for transmitting agricultural messages to farmers.

Communication channels are avenues through which messages are transmitted from the source of the message to the receiver and *vice versa*. Without a channel, nothing that is transmissible can be transmitted. Acceptable channels of communication for this study included Radio Services, Personnel, and other media. All these are critical in getting agricultural messages to the farmers.

In responding to this question, however, respondents in *Management Staff* category indicated that the principal communication channel used to transmit agricultural messages were the “Extension Officers,” while the Extension Officers themselves indicated “Trained personnel.” Farmers indicated “Extension Officers” as the main channel used to get agricultural messages across to them.

Looking at these responses, one sees harmony among all of them. Although the Extension Officers stated “Trained personnel,” they were in fact referring to themselves and those outside mainstream agriculture who were serving a similar role. It is indeed true that there are extension staff from different sectors of government, Civil Societies (C.S.), non-governmental organisations (NGOs), and other units that deal with extension messages. However, the question on the table focused on *agricultural messages* and not any other messages. The fact is that those in the Health Sector deal in health extension; those in Civil Societies may confine themselves to social development issues; but agricultural messages are transmitted by the Agricultural and Veterinary Assistants, and to some extent, officers from agricultural stakeholder organisations such as the Zambia National Farmers Union (ZNFU) in the rural areas; hence that particular response “Trained Personnel” given by the Extension Officers. In other words, *trained personnel* is the broader term that covers Agricultural Assistants, Veterinary Assistants, and other Officers from organisations linked to agricultural extension like the ZNFU is.

The results of this question shows that responses from all the respondents converge on the aspect of *trained personnel* as the main channel through which agricultural messages are transmitted to the small-scale farmers in Kabompo district. Of course this

is not to suggest that this is the only channel in use, but rather, that it is the main channel used.

5.2.4 Farmers' adoption of methods and instructions in farming as a business.

This was a very critical research question to this study. The researcher hoped that through this question, he would get to know what economic impact the training in farming as a business had on the small-scale farmers' farming activities.

When asked to explain the thrust of the Ministry in the district in terms of agricultural innovations, *management* indicated that the main focus was on both diversification of farming activities and an increasing emphasis on the business aspect of small-scale farming systems. To this effect, the district, through the Department of Agri-Business and Marketing (ABM), takes time to include entrepreneurship training in its budgets and work plans. This complements the Extension Officers' training activities amongst the small-scale farmers whom they supervise.

As to whether the farmers had actually implemented the skills of farming as a business, *management's* responses were that the district had yet to establish a complete data base of the farmers' adoption processes of the farming as a business activities, but indications thus far were that there was little if any implementation of this innovation amongst the small-scale farmers in the district. The farmers themselves confirmed this during the Focus Group Discussion (FGD) organized for them to express themselves on this issue. According to them, much as they appreciated the innovation, they found it difficult to adopt and implement, citing lack of capital to start a farming business with; insufficiency of agricultural inputs to enable them cultivate large portions of land for more farm earnings; disturbance of the farm planning process and execution of farm activities because of late payment of their money by government (through the Food Reserve Agency); and not carrying out record keeping and management themselves to enable them monitor their own farm activities.

Interestingly, when the Extension Officers were asked whether farmers had adopted and were implementing farming as a business, they answered in the affirmative. Asked to

explain why they said so, the Extension Officers claimed that there was evidence of implementation of the innovation by the farmers. This gives us two positions from the respondents on this question:

1. That farmers had adopted and were using the methods and techniques of farming as a business.
2. That farmers had not adopted, nor were they using the methods and techniques of farming as a business.

The table below shows the frequency computations of these responses by SPSS.

Table 7. Responses of all respondents on whether or not farmers had adopted and were implementing FAB methods.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1	33.3	33.3	33.3
No	2	66.7	66.7	100.0
Total	3	100.0	100.0	

According to **Table 7.** above, there were 66.7 percent respondents who said that farmers had not adopted the innovation of farming as a business, while 33.3 percent said farmers had adopted the innovation.

From the table we learn that although the responses were in disagreement or not converging, it was generally felt that farmers had actually not adopted, that is they were not using the business skills despite having received appropriate training to that effect. This is a gap and it reveals that the communication strategies used to teach farming as a business were not effective. So while all the other three objectives were positively fulfilled according to findings, the question of farmers adopting the innovation of farming as a business was negative.

5.3 Summary of the results

The researcher set out to find out how effective the communication strategies used to teach agriculture as a business to small-scale farmers of Kabompo district were. The study targeted *Management staff* of the Ministry of Agriculture and Livestock in Kabompo district; the *Extension Officers* in the district; and the *small-scale farmers* themselves using an *In-depth Interview*; a *Questionnaire*; and *Focus Group Discussions* as data collection instruments respectively. To obtain information concerning this objective, the researcher used four research questions focusing on the methods of instruction used, main topics covered, channels of communication mainly used, and as to whether or not farmers had adopted the innovation of farming as a business.

This study has revealed that the methods of instruction used to teach farmers farming as a business were the *participatory extension approaches*. This implies that there is full participation of the intended target audience in the decision-making processes. Examples, among others, include Rapid Rural Appraisal, Focus Group Discussion, and the holding of Demonstrations on selected farm plots. These are established teaching methods that agricultural stakeholders at government and civil society levels prefer to other teaching methods such as *lecturing method* which are principally one way kind of communication that amplify movement of knowledge from only one privileged source.

Results from this question indicate a convergence of responses that suggest validity of the finding for this particular objective as all the respondents give similar responses.

Concerning the actual content of the agricultural messages given, the study revealed that “business planning” was the main topic covered. All the three categories of respondents were agreed on this in their varied styles of responses, suggesting validity of the data obtained. In other words *business planning* was the convergence of responses on the question of *main topic of farming as a business that farmers received* from the Extension Officers.

The study further revealed that these messages or the topics were transmitted to the farmers through *trained personnel*. This is in line with the participatory requirements

for interaction between the Extension Workers and the farmers since, unlike radio, television or newspapers, these officers have the capacity to respond to learners' specific concerns and needs (Retrieved 20.06.2015 from <http://www.fao.org/docrep/t0060e/T0060E05.htm>).

All these interventions were designed to communicate the need for adoption of the farming as a business innovation by farmers. Contrary to expectations, the study revealed a divergence of views on the question of whether or not farmers had adopted this innovation. Extension Officers claimed that farmers had indeed adopted this innovation based on evidence of implementation while *management staff* and *farmers* were in tandem with each other in their responses that farmers had *not* adopted the *farming as a business* innovation. Farmers gave reasons for this ranging from lack of capital, through limitations of agricultural inputs, to late payment of their money by government, including late delivery of agricultural inputs.

Clearly it is not possible for both the positive and the negative responses to be correct. But one positive response against two negative ones suggest insufficiency of truth in the lone response. This is known as *bias*. Research bias is defined as any influence, condition or set of conditions that singly or together distort the data (Leedy and Ormrod, 2001).

In our particular case, it could well have been the result of one of those research biases that come up now and then when a respondent gets the feeling they are being assessed (correctly or not) through the study; and that their integrity might be at stake if they were to give a truthful response. The presence of bias in this case had high possibility here considering that the Extension Officers might have perceived the researcher not as *the researcher* as required, but rather as one of their superiors within their system of employment who should understand them as effective change agents.

The other possibility is that the respondents might have meant well in their response – that as far as they were concerned they had reported what they regarded as truth and fact. For instance, in the farmers' FGD, one farmer clearly stated that from the time they

were trained in record keeping he had faithfully carried out careful records of all his farm activities from planning to sale of farm produce; and so he was able to calculate his expenses and subtract them from his total returns at the end of the season to find his net worth. This is an example of a true adoption and implementation of an innovation. However, it would be an assault on validity of research findings of this study to assume that the positive evidence of this one case of an adopter farmer could override the higher frequency of negative responses from other participants and use it to claim that there was adoption of the *farming as a business* techniques by small-scale farmers in Kabompo district.

5.4 Triangulation of results

Creswell (2003) suggests that when more than two methods of data collection have been used; or when different sources of information have been used, it is important to triangulate the results in order to determine congruence of data collected from these different sources using the various data collection methods. The following table is the researcher's attempt to conveniently display the triangulation mechanisms for the findings of this study (**Table 8**). In this table, the first column houses the research questions that the researcher used. The last three columns represent the findings from the three categories of respondents, that is, the agricultural *Management*, the *Extension Workers* and the *Farmers* respectively.

Table 8. Findings by Objective and their triangulation for determination of validity.

S/N	SPECIFIC OBJECTIVES	FINDINGS		
		MANAGEMENT STAFF	EXTENSION STAFF	FARMERS
1	Methods of instruction used to teach FAB *	Participatory Extension Approaches.	Participatory Extension Approaches	Demos
2	Specific topic of FAB given to the small-scale farmers.	How to create a business plan.	How to determine which crop to grow for business	Business planning
3	Main communication channel used to transmit agricultural messages to small-scale farmers.	Extension workers	Trained personnel.	Extension Officers
4	Whether farmers had adopted and were using innovation of FAB	No adoption of FAB	Adoption of FAB	No adoption of FAB

(Source: Field Data, 2015)

* FAB = Farming as a business

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This study investigated *Communication for Better Agriculture: A case of outreach to farmers on farming as a business in Kabompo District* focusing particularly on finding out what *communication strategies* were being used to impart knowledge of ‘farming as a business’ to small-scale farmers in the study area. This was done against a backdrop of a poor circle of small-scale farmers who, nevertheless, have been the cause of what has come to be called “maize bumper harvests” in the recent past successive farming seasons (William J. *et al* 2010); being responsible for the larger part of the agricultural sector’s 20 percent contribution to Zambia’s Gross Domestic Product (GDP). The study results, like all research outcomes endeavour to do, were also predicated on the need to establish a platform for further stakeholder communication policy reforms and structures that could more adequately address the prevalence of poverty among these small-scale farmers; and help raise the farmers’ economic level above the *poverty datum line*.

The process of passing any information from one person to the other person with the aid of some medium is termed as communication. Communication must be effective in order to produce good results and requires that appropriate feedback is returned. Effective communication is important in facilitating development in many sectors of the country and world at large. Needless to say, *communication strategies* are the tools that spell the direction of programmes in general and become the means through which specific programme objectives are achieved in all private and public organisations, hence the focus on communication strategies in this study.

6.2 Conclusion

The findings of this study considerably point to the fact that the methods of instruction used to teach “agriculture as a business” to small-scale farmers in Kabompo District are *Participatory approaches* and are the recommended methods of teaching. In the agricultural sector, these become handy when dealing with the introduction of new

innovations to would be users – in this case the small-scale farmers. All the respondents in this study were agreed on this issue. This study has, therefore provided information that the small-scale farmers in the study area receive their entrepreneurship skills in the most *participatory manner* as recommended by all agricultural extension systems in which there is a shift from teaching to learning with the farmers through practical application of content.

As Roling and Pretty (1997:183) put it:"It is important to recognize that local people are always involved in active learning, in (re)inventing technologies, in adapting their farming systems and livelihood strategies. Understanding and supporting these processes of agricultural innovation and experimentation have become an important focus in facilitating more sustainable agriculture with its strong locality-specific nature".

This approach as the duo further say, gives farmers the opportunity to not just *listen to lectures*, or watch demonstrations, but to also “observe, record and discuss what is happening in the field. This discover-learning approach generates a deep understanding of ecological concepts and their practical application” (Ibid).

The study also revealed that the main lesson or topic of “farming as a business” covered in farmers’ training programmes was “Business planning” as established from all the respondents in this study. From preparation for the coming season, actual farm activities, through to marketing of produce, a farmer needs to know how much of what resources they will require (including type of crop to grow); when to and when not to increase hectareage of cultivated land for maximum profit margins, and how to use these farm returns when they access them – all of which are part of agricultural *business planning*. This study has revealed that farmers in the study area have the opportunity to learn all these.

Interestingly, however, it also came to light that despite farmers having the privileges of receiving all these opportunities to learn and do business with their farm activities, no real

adoption of the innovation has taken place amongst them. This leaves a further question as to what could be missing that should have motivated the farmers to adopt. Fortunately, the study also brought to light information that while Extension Officers were able and willing to capacity build their farmers in entrepreneurship skills, there were insufficient monitoring mechanisms in place for them to keep the momentum for farmers to practice these business skills. Without a serious monitoring system in place, farmers would be lacking the necessary motivation for sustained implementation of the new knowledge gained from the learning system. They would also miss the opportunity to make necessary corrective measures to technical or operational challenges they may encounter in their business endeavours. Monitoring their progress can help them speed up and sustain the learning-implementation process.

In the words of Benor, et al (1984):

“Agricultural extension is not a one-shot effort. It entails a continuous long term process of contact with farmers to understand their production conditions and to guide research to develop recommendations that respond to farmers’ needs”
(Retrieved from
<http://www.fao.org/docrep/t0060e/T0060E05.htm>).

Failure to follow training with monitoring would result in what the researcher proposes to call *knowledge dumping*. This is a case in which clients of any training undertaking by any change agent(s) are left on their own to manage their own implementation processes after training. The monitoring gap that arises would in more ways than one cause so serious challenges among the clients that application of content may either be haphazardly implemented, or the project might be abandoned altogether.

In order to expedite and facilitate communication processes today, a number of channels in their varied forms are in use around the world, in this country, and this was so in the study area for this research. A channel of communication is an important ingredient for accelerated understanding of content of messages by clients and their call for practical implementation. While radios, newspapers, books, and so on are important in

communicating agricultural messages, it is generally agreed that in these forms of communication, there is little or no clarifying interaction between the source and the decoder of these messages; and this relationship tends to be less rewarding to the receivers of any message(s) so delivered.

This study has shown that the preferred mode of communicating agricultural messages in the study area is through the “trained personnel” in the name of Extension Officers. In this mode, there is increased participation of the farmers as they are enabled to react to the messages with their trainers and get maximum and instant satisfaction from the interaction. This is critical for learning to take place among the farmers because:

"Access to and control of information sources are essential for poor people to participate fully in decisions affecting their lives and communities. Sustained social change is impossible without their full participation" (Rockefeller Foundation, 2000:2).

The study continues to show that appropriate teaching-learning modalities take place in the study area, and considering non-adoption of the Farming as a business initiative, it gives further impetus for the need to investigate motivating factors for adoption of innovation in the study area or, indeed, elsewhere in this Republic of Zambia.

6.3 Recommendations

In order to address the gap seen in the process of delivering agricultural extension to small-scale farmers, innovation must commence at training level. Agricultural Extension Methodology in Agricultural Colleges and Universities must be blended with Participatory Monitoring and Evaluation modules as a single package. This will help capacity build all Extension Officers in blending farmer training with *monitoring strategies* at planning and implementation stages so that no training was done without sufficient backing from monitoring mechanisms for a particular training programme. Training and monitoring must be seen and used as inseparable complements as opposed to regarding monitoring as an extension methodologies add-on.

In addition, the means for monitoring of projects and programmes is an important factor in successful implementation of activities within the project cycle. Consequently, it requires that capacity in mobility issues is adequately addressed by implementing agencies. The Zambian Government, being the major stakeholder in the running of the extension system among small-scale farmers must ensure that adequate means and maintenance of transport is accorded the Extension Staff in the field. The study revealed that on average, an Extension Officer manages well over 300 farmers. The Veterinary situation was shown to be even worse, with some Camps measuring over 2000 Km² with farmers scattered around such area. When transport needs are not addressed, working under such conditions puts efficiency at a definite peril and serves to de-motivate the workers in the field. The need for government to refocus its priorities in providing adequate logistical facilities in the extension services under the Ministry of Agriculture and Livestock is critical both for sustaining food productivity from this sector, and expediting individual farmer development. Monitoring can also motivate the farmers to continue realigning the implementation processes of their skills and help reduce internalisation of errors as they grope for leverage to adopt the innovation.

In the Focus Group Discussion with farmers, it came to light that there was need to increase the agricultural inputs *packs* that farmers receive. The farmers felt the current one (1) pack of four bags of fertilizer and one (1) of maize seed that each farmer received had tended to limit farmers activities under the Farmer Input Support Programme (FISP), creating stagnation of agricultural productivity and perpetuating the dependency syndrome among the farmers.

The aspect of motivating farmers must also be critically addressed. Farmers complained of late payment by the Food Reserve Agency (FRA) when they took their maize for sale with this organisation. Therefore, if farmers sold their maize to the Food Reserve Agency, they must be paid on time to assist them with the planning process for the next farming season. Income for the farmers comes from the returns they get from sale of their maize and other crops to the FRA and other private outlets. If they are to practice farming as a business as per current study, they must be paid their money on time so that they begin real planning for the next farming season.

Crop diversification must also take centre stage in the farming systems of small-scale farmers without necessarily disrupting or weakening the district's food security plans. In the same vein, the management staff at Ministry of Agriculture and Livestock in the district must actively participate in the identification of market for other crops other than the FRA which is currently mandated to buy the produce.

Finally, this study must be replicated at a larger scale in order to provide for generalisation of findings to the entire population, that is, the farmers in Zambia so that poverty among small-scale farmers is adequately addressed.

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APPENDICES

APPENDIX A:

Survey Questionnaire for Agricultural and Veterinary Assistants.

Dear Respondent,

I am a University of Zambia student carrying out a study to address poverty amongst small-scale farmers in Zambia in order to help improve agriculture. You have been randomly selected to participate in this study by way of answering a questionnaire. Kindly answer the questions as correctly and as honestly as you possibly can. Your identity will be kept with utmost confidentiality.

Instructions

Kindly tick [√] in the appropriate box of your choice, or fill in the space provided for each question.

SECTION A BIO DATA

1. Age:

- 2. 20 years & below
- 3. 21 to 25 years
- 4. 26 to 30 years
- 5. 31 to 35 years
- 6. 36 to 40 years
- 7. 41 years and above

2. Sex:

- 1. Female
- 2. Male

3. Income per month

- 1. Less than K500
- 2. K500 to K1000
- 3. K2000 to K2,500

- 4. K3,000 to K3,500
- 5. K4,000 to K4,500
- 6. K5,000 to K5,500

4. Marital Status:

- 1. Single
- 2. Married
- 3. Divorced
- 4. Widow
- 5. Widower

5. Occupation:

- 1. Civil Servant
- 2. Farmer
- 3. Entrepreneur

SECTION B

RESEARCH DATA

6. How long have you worked for the Ministry of Agriculture and Livestock?

- 1. 5 Years and below
- 2. 6 to 10 years
- 3. 11 to 15 years
- 4. 16 to 20 years
- 5. 21 to 25 years
- 6. 26 Years and above

7. Do you like working for the Ministry of Agriculture and Livestock?

- | | |
|--------------------------|--------------------------|
| No | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> |

8. Do you like working in this Camp?

- | | |
|--------------------------|--------------------------|
| No | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> |

9. What is the reason to your answer in Q.7 above?

10. Do you hold extension meetings with farmers in this camp? (If “No,” go to Q.12).

- | | |
|--------------------------|--------------------------|
| Yes | No |
| <input type="checkbox"/> | <input type="checkbox"/> |

11. How often do you hold these meetings?

- One time per quarter
- Two times per quarter
- Three times per quarter.
- Four times per quarter
- Over four times per quarter

12. Do you hold training sessions/workshops with your farmers?

- | | |
|--------------------------|--------------------------|
| No | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> |

13. Do you have any knowledge of “farming as a business?” (If “No,” go to Q.15).

- | | |
|--------------------------|--------------------------|
| No | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> |

14. Where did you acquire this knowledge from?

- | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Training | Workshops | Colleagues | College training | Other (Specify) |
| <input type="checkbox"/> |

15. Do you think an Agricultural, or Veterinary Assistant need to have this knowledge?

- | | |
|--------------------------|--------------------------|
| No | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> |

16. What is the reason for your answer in Q.15 above?

17. Have you trained your farmers in “Farming as a business” in the last two years? (If “No,” go to Q.27 below).

No

Yes

18. What were the key topics covered?

- 1. Storage for market commodities
- 2. How to determine which crop to grow for business.
- 3. How to find market for your produce.
- 4. Accounting for profit and loss
- 5. Other (Specify).....
- 6. Not Applicable

19. What methods of instruction did you use in training your farmers in “Farming as a business”?

20. Why did you choose the particular method you have given in Q.19 above?

21. In your opinion, did farmers grasp the key points of their training?

No

Yes

22. What is the reason for your response in Q. 21 above?

23. Have you made any follow up action with your farmers after training? (If “No” go to Q. 27 below).

No

Yes

24. How often have you made these follow up actions?

25. What challenges, if any, have you encountered with your farmers’ implementation of the training in farming as a business?

26. How do you think these challenges can be addressed?

27. What sources of information on “Farming as a business” would you recommend to your farmers?

28. In your opinion, what is it that should be done in order to address poverty among small-scale farmers?

Appendix B:
Focus Group Discussion Guide
SMALL-SCALE FARMERS

- Good morning. My name is _____.
- We are very pleased you have agreed to join us today in this Focus Group Discussion where we will discuss **farming as a business**, and how it can best serve families now and in the future.
- Focus groups are part of our overall strategic planning process used to gather information informally from a small group of individuals who have a common interest in a particular subject—in this instance, you all either grow crops, or rear livestock that you want to make profit on.
- **There are no right or wrong answers.** We want to hear from **everyone** present. Don't hesitate to speak up when you have a point you would like to make.
- Your identity will be kept confidential and used only by our government to develop new services and programs that will better address your needs and those of other families in the future.

QUESTION ONE: I would like to begin by going around the table and asking each of you to tell us a little about yourself and your family and about the programmes and services you are using. **PROBE FOR AWARENESS.**

- *Sources of information about farming as a business,*
- *Sources most used*
- *Why only this service*

QUESTION TWO: Do you think it is important to have the following agricultural business skills in our community? Please state why you think it important.

- a) Business planning
- b) Profit and Loss calculations
- c) Market research
- d) Farm records

FOLLOW-UP: - *Does any one of you have these agricultural business skills?*
 - *Where did you learn them from?*
 - *How did you learn them?*

QUESTION THREE: What changes are taking place in our village that directly affects families with young children?

FOLLOW-UP: How can your agricultural activities respond to these changes?

QUESTION FOUR: In general, how satisfied are you with the variety and quality of programs and services that the media provides for you and your families?

QUESTION FIVE: How satisfied have you been with the staff who work with you? Do you feel comfortable asking them for assistance in your agricultural work?

FOLLOW-UP: What is it that satisfies/does not satisfy you about them? Or, if you became the government worker, how would you work with the farmers?

QUESTION SIX: What specific messages do you remember receiving a lot from your Agricultural or Veterinary Assistants, among the following business skills in farming?

- Business planning.
- Profit and loss calculation
- Market research
- Farm records

FOLLOW UP: Have you implemented any of them in the last two years?

QUESTION SEVEN: How much of maize or other crops did you produce this year?

QUESTION EIGHT: What radio channels do you listen to in this area?

QUESTION NINE: Let's pretend that the village could be changed in some way. Imagine yourself walking into this changed village. What is it you see in your imagination?

QUESTION TEN: We have discussed many programs and services concerning farming as a business. If you had to pick three that you personally think are most important, which three would they be?

QUESTION ELEVEN: Do you have any additional suggestions about how the farming as a business can be improved among the farmers in the area?

THE END

Appendix C:

Interview Guide for District Management Staff

TOPIC: FARMING AS A BUSINESS

1. DEMOGRAPHIC INFORMATION
 - a) Languages spoken in the district
 - b) Language most spoken.
2. PSYCHOGRAPHIC INFORMATION
 - a) Cultural Values, beliefs, attitudes of people in the community vs. agriculture
 - b) Radio stations accessed in the area
 - c) Sources of agricultural information
 - d) Popular sources of agricultural information
3. INFRASTRUCTURE
 - a) Road network condition
 - b) Storage – Public and private
4. PROGRAMS
 - a) Number of Radio Farm Fora Existing
 - b) Active
 - c) Not active
 - d) Other programs
5. CONTENT OF PROGRAMMES
 - a) General topics covered
 - b) Topics on Farming as a business mostly covered
 - c) How ‘farming as a business’ is addressed in the district
 - d) Adoption of farming as a business by small-scale farmers in the district.
6. TYPES OF CROPS GROWN IN THE DISTRICT
 - a) Types of crops grown in the district
 - b) Most common crop grown in the area
 - c) Market prices for crop in Q.6 (b)
7. MARKET AVAILABILITY
 - a) Main market available

Appendix D
ASSORTED FORMS
Time Chart

	2014							2015				
ACTIVITY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Proposal writing												
Data collection												
Data analysis and Report writing												
Preparations for handing in dissertation												

Authority Letter



THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF MASS COMMUNICATION

Telephone: +260-211-290035
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P.O. Box 32379
Lusaka, Zambia

8th August, 2014

Attention: The District Agricultural Coordinator

Ministry of Agriculture & Livestock
P.O. Box
KABOMPO

Dear Sir/Madam

RE: REQUEST FOR THE ATTACHMENT OF FREDRICK MWANAMUCHENDE - MCD STUDENT

I write to request the attachment with your organization of the above named who is a student on our Master of Communication for Development (MCD) programme. Fredrick is interested in pursuing a research study on "*Communication for Better Agriculture.*"

As part of the programme he needs to be attached to your organization so that he is able to, among other things get to know the communication strategies that are used by your organisation to disseminate information. The applicant is easy to mix with, and should with your help be able to contribute to our understanding of this subject in Zambia.

After he has written his report, it may be made available to your office.

Yours faithfully

Kenny Makungu

PROGRAM COORDINATOR

