THE UNIVERSITY OF-ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

RESEARCH ON THE EFFECTIVENESS OF FOOD RESERVSE AGENCY IN AGRICULTURAL INFORMATION TO THE PEASANT FARMERS OF NGERERE AREA.

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Research report to be submitted in partial fulfillment of a Degree in Library and Information Studies.
DEDICATION

To my parents, Mr. and Mrs. Banda for their love, spiritual, financial and social support and for bearing with my absence from home during the four years of study.
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First and foremost, I would like to thank my supervisor Mr. Hamooya for all the guidance and support that he has given me throughout my research up to the completion of my report.

Secondly, I appreciate the comments and suggestions made by colleagues and graduate students that have improved the accuracy and clarity of the report.

Thirdly, I would like to express my sincere gratitude to my fiancée, Tabo, for her love, for bearing with my absence through the time of this study and encouragement throughout my academic and personal life. I love you baby, you are the best.

Fourthly, to my Dad, Mum, brothers and sisters, thanks for all your love, your invariable support and for understanding my absence from home for such a long time. I love you all.

Lastly, to my friend Jonathan and all the family of bread of life fellowship Unza.
ABSTRACT

This study aimed at investigating the effectiveness of the food reserve agency (FRA) in providing agricultural marketing information to peasant farmers of Ngwerere area to achieve household food security. This report aims at showing the relevance of information provision in the agriculture sector as an instrument to increase agriculture productivity, efficiency and yields to the peasant farmers in Ngwerere area, hence achieve household food security. The objectives of this research include the general objective which is to investigate the effectiveness of the Food Reserve Agency (FRA) in providing agricultural marketing information to peasant farmers of Ngwerere area and the specific objectives which include the following; to find out if the information provided to the peasant farmers meets their basic needs of life, to find out the information needs of farmers and to establish the media to be used in the dissemination of information to the peasant farmers. The methodology used in this research was based on non experimental design as it involved a selection of a sample from Ngwerere area, using this method, the key findings included the following; the majority of the farmers in Ngwerere area find it hard to access market information from FRA information system due to the format through which information is provided and FRA was ineffective in the provision of market information. The recommendations for this research pointed out that, FRA should help the small scale farmers with relevant agriculture information, farming input, equipment and credit loans and to ensure efficiency and effectiveness FRA should establish a community information centre in Ngwerere area in collaboration with the Agricultural Information System and Farmers Union of Zambia to provide current, up to date and relevant agriculture market information. Therefore, in conclusion peasant farmers of Ngwerere area need relevant market information for them to trade and be able to raise an income which will improve their quality of life.
DECLARATION

I, Banda Agripa do hereby declare that this report is my authentic work and that to the best of my knowledge, information and belief, no similar piece of work has previously been produced at the University of Zambia or any other institution for the purpose of a Bachelors’ of Library and Information Studies degree. All other works referred to in this report have been duly acknowledged.

Banda Agripa

Date: 30th April 2009.
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(Supervisor)
Date: ..........................
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CHAPTER ONE

INTRODUCTION

Information is an important instrument in every aspect of economic, social, cultural, agricultural, technological and scientific development in every country. For a country such as Zambia to develop it requires reliable and relevant information for decision making, policy planning and policy implementation. Therefore, the peasant farmers in Zambia require agricultural related information on farming techniques’, market information and this information is supposed to improve agricultural production and productivity and in turn improve the living conditions of the peasant farmers. Critical to the farmer’s welfare is to have access to basic needs of food, clothes, education, health and shelter.

Information may be seen as those ideas, facts, imaginable works and data of value potentially useful in decision making, question answering as well as problem solving (Kaniki, 1989). However, Zambia today like many other African countries experiences problems of lack of accessibility to development related information.

Agricultural marketing information therefore includes the handling of the product at the farm, initial processing, grading and packaging in order to maintain and enhance quality and thus avoiding wastage.

FAO, 1997, Farmers require information in different areas and these areas include the following:
The Farmers of Ngwerere area need information on the current prices of crops. This is important to the life of the peasant farmers because most of the times farmers are forced to sale their agricultural produce at much lower prices than the production cost and this tend to compromise their ability to meet their basic food needs and further they may be driven out of the farming practice to look for other means of survival.

Farmers require information on the market. This is concerned with the place where the farmers are going to sale their produce after the harvest season .this information is important to the farmers as they will need to prepare for the transport costs and storage facilities. However, in most developing countries it is difficult to have access to market information.

The peasant farmers also require information on where they can best access cheap and affordable agriculture credit loans so as to expand their business. They further require information on the names of the companies providing such kind of facilities and their interest rates.

The peasant farmers of Ngwerere area need information that will educate them on the appropriate technology to be used to improve efficiency of the farmers in terms of product delivery to the market. Peasant farmers need to be aware of the quality of the product needed at the domestic market.

There is need for the peasant farmers of Ngwerere to access information on the agricultural marketing policies. These documents will contain important information on the prices, certain
incentives introduced by the government such as the fertilizer support program and in turn the farmers will avoid to be exploited by fake businessmen.

Peasant farmers also need information on soil management and climatic conditions. This will help them to increase their production and gain more from the market as a result of giving the quality product to the farmers.

The agricultural sector in Zambia is considered as one of the major sectors of economic growth and poverty eradication. In Zambia, the agricultural sector employs 50% of the population of Zambia. Much of the food in Zambia come from the peasant farmers, therefore peasant farmers attain household food security through the provision of agricultural marketing information. According to (Kaniki 1988) there are many information providers some of which act as sign posts to more suitable information providers. It is assumed that once an information need is met then people become productive and increase their production and also gain more profits from their practices and this factor enables the people to continue with farming as a professional or as an occupation. When the peasant farmers achieve household food security, it means that they will be able to increase their production, expand their land size and be able to stay in the practice for some time and eventually grow into small scale farmers. In Zambia, the majority of the population depends on agriculture as a means of survival.

Among the institutions providing agricultural marketing information in Zambia is the Food Reserve Agency (FRA).

**BACKGROUND INFORMATION**

The Food Reserve Agency (FRA) was created in 1996 as a statutory body after the enactment of the Food Reserve Act (1995) and this act was amended in 2005. FRA was mandated to purchase maize and other cereals for the national food reserve so as to ensure household and national food security among the poor in Zambia who in this case it is the peasant farmers themselves. FRA is one of the statutory bodies of the ministry of agriculture and cooperatives; FRA thus operates in line with the national agricultural policy. FRA is the institution mandated to achieve the objective of household and national food security through the provision of agricultural marketing information and it also acts as a market where the peasant farmers can sale their agricultural produce especially maize which is the staple food crop through which the government are able to achieve food security.

The mission statement for FRA is to be an organization that will efficiently manage sustainable national food security and income through the provision of complementally and high quality marketing and storage services, in line with international standards.

To achieve the above mentioned mission statement, FRA has lined up a number of objectives such as:

- To maintain and facilitate a market information system and promote the use of approved standards of weighing and grading for designated crops by 2010.
➢ To maintain an efficient and profitable management system for marketing equipment and storage facilities entrusted to FRA by government by 2010.
➢ To improve the institutional, management and coordination capacity of FRA during the plan period.
➢ To provide market access to farmers with a bias towards small scale (PEASANT) farmers and efficiently administer 100% of the national strategic Food Reserve requirement by 2010.

The functions of FRA among the others include the following:

➢ Administer national food reserve. National food reserve is meant to ensure a reliable supply of designated commodities for the country and to meet food emergencies caused by drought or floods or other national disaster and this should be declared by the president of the republic of Zambia. FRA is therefore mandated with the task of purchasing maize from the domestic market or to import from outside the country to ensure that Zambia achieves national food reserve.

➢ Establish and operate a market information system for agricultural food commodities and agricultural inputs. This information system is meant for the efficient collection and dissemination of market information. This includes making easily available on domestic and export prices of a designated commodity. This market information is meant to reach the peasant farmers in rural areas for good decision making in terms of pricing.

➢ Weighing and grading standards. FRA consults Zambia bureau of standards as provided for under the weights and measures act and standards act in developing and improving standards of quality, condition, quantity and grade of a designated commodity (food reserve act, 1995).

➢ Registration of traders and processors. FRA ensures that there is transparency and predictability to reduce the risks faced by public and private importers and domestic dealers.

➢ Assess storage requirements. FRA provides storage facilities throughout the country to prevent losses or damage of the agricultural produce by farmers.

➢ The Food Reserve Agency usually provides its information to the farmers through the FRA Market Information System through the radio and television programmes, newspapers, monthly/quarterly price bulletins and also using extension officers, agricultural publications and government gazettes. The potential users of market information are farmers, traders, processors, importers and exporters. Adequate and accurate market information is critical for correct decision making and planning.
STATEMENT OF THE PROBLEM

Peasant farmers of Ngwerere area’s problem is the price and the market to sale their crops in order for them to increase their income and ensure household food security. The lack of access to crop prices and a market for farm produce and unavailability of agricultural inputs among other factors have adversely affected the livelihoods of many peasant and small-scale farmers of Ngwerere and most of these farmers cultivate the country’s staple food, maize. Most of the peasant farmers of Ngwerere as a result do not have enough income to access the basic needs of needs of food, clothing, education and health. Thus, it is difficult for the farmers to get an income that will ensure household food security.

OBJECTIVES

General Objective;

➢ To investigate the effectiveness of the Food Reserve Agency (FRA) in providing agricultural marketing information to peasant farmers of Ngwerere area.

Specific Objectives

➢ To find out if the information provided to the peasant farmers meets their basic needs of life.
➢ To find out the information needs of farmers.
➢ To establish the media to be used in the dissemination of information to the peasant farmers.

RATIONALE OF THE STUDY

The research is important because once the information is collected, stored and packaged; the research findings can therefore be used by the FRA to improve their agriculture information system and to further improve easier accessibility of this information to all peasant farmers in this country.

Lastly, the study is important because it is targeted at solving the current problems faced by peasant farmers of Ngwerere area and to be able to establish the best methodologies of providing agricultural marketing information to the peasant farmers.
CHAPTER TWO

LITERATURE REVIEW

Amartya Sen’s (1981) entitlement theory of food insecurity forms the conceptual basis of all agencies approaches to assessing food security. Sen explained that food insecurity occur not because there is not enough food, but because people do not have access to enough food. According to Sen, people’s exchange entitlements or their livelihood sources reflect their ability to acquire food. Sen sub-divided these entitlements as follows, production-based entitlements (crops and livestock); own-labour entitlements (waged labour and professions); trade-based entitlements (trading artisan products and natural resources like forestry products and agriculture produce); and inheritance and transfer entitlements (from the state, or private gifts and loans). Food insecurity occurs when a large number of people suffer a complete collapse in their exchange entitlements (Sen, 1981).

The livelihoods theory of food security says the food insecurity in Africa reveals people intentionally suffering from lack of food rather than losing their assets. Food is not always the first priority of people living in food insecurity but one objective out of many. The Livelihoods perspective criticizes Sen’s entitlement theory because it does not take into account individual’s actions and choices; rather, it views the individual as passive (FAO, 1979:11).

The result indicators of food security views food insecurity by measuring the food consumption over a set of period of time as people may increase food consumption while the supply remain constant and this is followed by the Process indicators of food security which measures the vulnerability to food insecurity (FAO, 1979:15)

Chamber’s sustainable livelihoods theory of food security views food security by defining the following terms; Livelihood is defined as adequate stocks and flows of food and cash to meet basic needs. Security refers to secure ownership of, or access to, resources and income-earning activities, including reserves and assets to offset risk, ease shocks and meet contingencies. Sustainable refers to the maintenance or enhancement of resource productivity on a long-term basis (Chambers, 1988:17)
Lundu (1982) information is a national resource and the process of human communication as a common in ethnic, cultural, political, social, economic, scientific and technological and educational difference could bring home to everyone in Zambia the sense of sharing the fruits of the country’s national heritage.

In Zambia agriculture production is the main source of livelihood in the rural areas, were 96% of the households are involved in farming. The majority of these are subsistence small-scale farmers which are dominated by women. Zambia has a landmass of approximately 750,000 square kilometers of which 12% is suitable for arable use (CSO, 1996).

A research carried out by Riches (1996), in the U.S.A revealed that there were more males (51%) than females (49%) present in rural areas engaged in agriculture activities. The majority of the women were involved in taking care of the house and selling some commodities such as vegetables, cooking oil and sugar on the market to earn a livelihood.

The real growth rate in the agriculture sector has fluctuated significantly mainly due to the sectors high dependence on seasonal rainfall, reduced investment and the failure to strategically position the sector according to its comparative advantage. The sectors contribution to GDP averaged 18% over the past decade. Non-traditional export, mainly agriculture based export earnings increased from $46.5 million in 1995 to $33.9 million in 1999, thus demonstrating enormous potential the sector possesses. Some 75% of Zambia’s population is engaged in agriculture, largely subsistence farming which remains vulnerable to weather fluctuations (CSO, 2003).

There have been other studies and related research undertaken in the area of information repackaging. In Nigeria a study by Aboyade (1985) identified materials which are used to disseminate information to rural Nigeria. These include printed materials of various kinds like bulletins, circular, leaflets and newsletters. His study found that printed materials were the most effective, even more than lecturers, radio programmes and extension films, inducing change in a predominantly non-literate environment become common property of most villagers. Other materials identified are posters, and displays projected visuals like motion pictures, slides and film strips and presentation visuals. Information repackaging is the presentation of information in more understandable, readable, acceptable and usable forms.

The Census of Agriculture (2000) carried out in the United States showed that older age groups were more prevalent in the rural areas (35-65 years) than younger age groups (25-35) because younger age groups were still in search for employment, career and other opportunities of life in order to make a livelihood.
Agriculture production and productivity in Zambia is extremely low because most farmers lack the market infrastructure, information and support services at the same time incurring high production costs. Expanding markets, providing adequate support services, attracting investment and making agriculture competitiveness as a means to improve rural livelihoods. Zambia needs to improve agriculture production and productivity and market efficiency and competitiveness in order to come out of the poverty trap. (MOFND, 2002; P 54).

In Zambia, farmers can generally be categorized into three groups that are small scale (emergent), commercial and peasant (traditional) farmers. Its main staple food crop is maize and its therefore the major agricultural crop grown by all the three types of farmers alluded to above (Kaniki, 1989:48). Other agriculture products grown include tobacco which ranks high among the most cash crops, sugarcane and cotton. The variety of crops grown for sale mainly by peasants and small-scale farmers includes maize, groundnuts, vegetables and fruits.

Over 50% of Zambia’s population is in the agriculture and rural sector. Despite of the fact that such a large proposition of the population labor force is in the agriculture sector but the contribution of this sector to Zambia’s GDP is significantly low. This can be attributed to the fact that around one third of the population is vulnerable to food security, were this insecurity results from low agricultural productivity, limited access to agricultural information services and inputs on agricultural and over dependence on maize (ibid).

As noted by Kaniki, the agriculture research sector cannot afford to conduct research due to lack of resources, this can greatly hinder information provision to farmers in as far as agricultural research is concerned. Agricultural research in Zambia should as much as possible be directed towards meeting the information needs of the peasant farmers. According to Kelly (2000), rural communities have limited access to education and the majority of the people in the rural areas end their education in primary school.

Food Agency Organization (F.A.O) 1961 describes marketing in its widest sense as:” comprising all the operation involved in the movement of food and raw materials from the farm to the final consumer”. It stops short only at processing, grading and packaging in order to maintain and enhance quality and thus avoid wastage of the produce. Thus measures to transport produce from farm to local and central assembly points and for subsequent distribution to consumers are important features of marketing selling and pricing procedures, intermediary charges, institution fees, tolls and taxes help to determine the difference between the price paid by the consumers and that received by the producers.

An efficient marketing system is thus of critical importance to any country, Zambia included under all conditions and at each stage in its development. In areas such as Ngwerere where dense population live at subsistence levels the seasonal failure of a basic food crop can bring widespread famine and suffering while the other parts of the same requirements.
According to Annia (1985) on the basis of a study carried out on agricultural information needs of the farmers in six villages in Nigeria, showed that not only was a recognition of the importance of information among political leaders and researchers but that farmers too are requested for information on a wide range of subject, all of which were concerned with ways of increasing production. These farmers specifically required information on fertilizers, marketing of their produce and the prices of their produce.

According to Poel (1998), on the basis of a study carried out, it showed that for the peasant farmers to improve the skills of farming there was a need to come up with different and new formats of information provision to the farmers. This is because most farmers do not know how to read the handouts, books and pamphlets given by agricultural extension officers to improve their capabilities.

Ministry of Agriculture, food and fisheries (MAFF, 1988) carried out a research which revealed that farmers were not being provided with adequate information which can improve their well being. Usually no effective link exists between extension officers and agricultural research, a situation that is detrimental to the effectiveness of providing right information. Without a close link with extension offices and feedback from the field, research becomes excessively academic and does not relate to the farmers real problems of achieving basic needs of life. However, this is largely a result of insufficient delivery of information to farmers.

Relevant agriculture information will enable low-income farmers to change their farming patterns, innovate and reach beyond their own low-income environments to connect to higher income national and internal markets, yielding for many a larger and more affluent client base, higher sales and net incomes(Melkote,1991).

The study by the Food Security Research Project, (2003) which showed that the market information system of FRA was not viable in articulating the vision, goals, functions, objectives and mission of FRA to the public and this public included the rural farmers. There were little written documents on the role of FRA in the agricultural sector in Zambia

In order to be of use, research results have to be disseminated to the people who need the information, namely researchers, farmers and planners. In addition to updating and increasing their knowledge, agriculture researchers and policy makers need up to date information, at the required times and in usable form to keep them in constant touch with each other both locally and internationally. Agricultural information must thus meet the needs of the users, in this case the peasant farmers (Chifwepa1993).
Agriculture information must be for the research community and must be presented in the format that the peasant farmers are able to understand so that they can improve their living standards (Lancaster, 1981).

Increased agricultural productivity is key to national food reserve. Therefore, small-scale farmers need to be empowered with the necessary resources, inputs, tools, information and education to increase their productivity even as FRA increases into its purchasing capacity of these crops. FRA needs to support the farmers with a proper infrastructure (FRA, 2007)

Mwanumo et al, (2005) carried out a research on rural population accessibility to market information in the agriculture sector in rural Zambia and it the findings showed that it is difficult for the majority of rural farmers in Zambia to access market information and that the majority of the rural farmers ended up selling their produce without accessing market information from FRA.

A research carried out by the MAFF, (2004) which revealed that FRA was not effective in the provision of marketing information to the public in order to protect the small scale farmers who were been exploited by traders and some millers as they sold their produce.

CHAPTER THREE

RESEARCH METHODOLOGY

The research procedure was based on non experimental design as it involved a selection of a sample from Ngwerere area. This means that the study examined and revealed the lack of market information that the farmers of Ngwerere area experienced.

RESEARCH DESIGN

Description of research population

The population of Ngwerere area consisted of peasant farmers, medium and commercial farmers. For the purpose of this study only peasant farmers were the target group. Both female and male farmers were interviewed in this research. Ngwerere has an estimated population of over one hundred (100) peasant farmers (CSO 2000:15). The population considered for this study was the peasant farmers of Ngwerere (Chibombo district). Ngwerere is situated in Kabwe rural (six miles from Lusaka city) along the Great North Road.

Sampling criterion
The sampling criterion used in the selection of the respondent was the simple random sampling as a total of 25 respondents were sampled from a population of 6345 residents of Ngwerere area. The sample included only the households who were involved in small scale farming selected by using the simple random sampling criterion.

**Justification of using this sampling criterion**
The justification for this was that this study gave the sample population an equal and none zero chance of been included in the sample and there was no bias when picking the household to be interviewed using the questionnaire administered by the researcher. Further, this method was simple. It was representative since each unit in the sample frame had an equal chance of being selected. However, this method does not allow for equal representation of both male and female respondents.

**Sample size**
The sample size of twenty-five (25) peasant farmers were picked from the 100 peasant farmers for the research and the same were interviewed using the questionnaire administered by the researcher.

**Justification of sample size**
- The sample size 25 was highly representative of the population and thus allowed for necessary estimations of the population to be made on the basis of the sample.
- The sample 25 was manageable
- The sample size 25 allowed for easier subsequent data analysis.

**Data collection methods**
The data collection methods were the following;
- Primary data collection methods and
- Secondary data collection methods

Both the primary and secondary data collection methods were used in this research. The secondary source of data depended on data already collected or presented by other scholars in either books, bulletins, theses, magazines, journals, the internet and newsletters among other published and unpublished data sources. Although this source of data tends to have ethical issues concerning confidentiality of information and that this information may be provided in incomplete and may not be easily accessible. It is argued that through secondary data collection methods, it was possible to examine past trends, findings as data was available over past periods of time.

Primary sources of data depended on first hand data collected from respondents in Ngwerere farming community. This data was collected using questionnaires administered by the researcher using both closed ended questions and open ended questions.
Data analysis technique
The data collected was analyzed statistically using a software package called statistical package for the social sciences (SPSS). The data was subjected to presentation of graphs and numerical variables from which percentages were used to interpret the research findings.

Justification for employing this data analysis technique
➢ Considering the nature of the data that it will be quantitative, employing SPSS will suffice.

CHAPTER FOUR
PRESENTATION OF RESEARCH FINDINGS

INTRODUCTION
The study was carried out in Ngwerere area along Great North Road in Chongwe District. The sample consisted of 25 respondents which made 100 % of the total respondents and all the questionnaires in this research were answered. This is because all the questionnaires were administered by the researcher, and based on the collected questionnaires; the findings of this research will be valid as 100% of the sample responded.

CHARACTERISTICS OF THE RESPONDENTS
In this study background characteristics included sex, age, education attainment and marital status.

In determining the sex of the respondents the results indicated that 56 % of the respondents were males and 44 % of the respondents were females. On age, 40 % were in the age group 30 - 40 years, 32 % of the respondents were aged between 20 and 30 years, while 24 % were in the age group 40 - 50 years and 4 % of the respondents were above the age of 50 years. In terms of education attainment, 48 % were primary school leavers, 28 % of the respondents were secondary school leavers, 20 % of the respondents were college graduates and 4 % was a university graduate. On marital status, 68 % of the respondents were married, 12 % were single and 12 % were widowed.
In determining the place where the respondents sell their maize produce the figure 1 above shows that, 44% of the respondents used to sell their maize at city market, 32% of the respondents used to sell at the farm, 8% sold their produce to FRA agents and 16% sold to the millers.

In determining the price at which the farmers sold their maize, the results show that 56% of the respondents sold their maize produce at K50,000, 12% of the respondents sold their maize produce at K30,000, 4% sold their maize produce at K70,000 and another 4% of the respondents sold their produce above K100,000. In determining how much the farmers earned from their sales last marketing season the results indicate that, 12% of the respondents had earned between K100,000 to K500,000, 44% had earned between K500,000 to K1,000,000, 12% earned between K1,000,000 to K1,500,000 and 4 percent earned more than K2,000,000.

When the respondents were asked to say how many they were in their household, 8% said they were two in their household, 4% were three in their household and 8% were four, 44% were above five in their household.

In determining the equipment used to do farming by the farmers the results indicate that, 96% of the respondents used a hoe when farming while 80% of the respondents use animal plough. When asked the portion of land which people owned for farming the results showed that, 4% of the respondents owned land between 10 acres -50 acres, 16% owned between 50 acres -100 acres, 52% owned land between 100 acres -1 hectare and 28% owned land between 1 hectare - 10 hectares.
Figure 2: Type of Crop Cultivated

In determining the type of crops cultivated by the farmers, the results in figure 2 above indicated that 52% grew maize on their land, 8% of the respondents grew cassava, 20% grew vegetables, 4% of the respondents grew coffee, the other 4% grew tea and 12% grew beans.
INFORMATION NEEDS OF THE FARMERS

Figure 3: Type of Information Farmers Need To Farm

In determining the information needs of the farmers, the results in figure 3 above indicated that, 60% of the respondents were in need of information on cheap agriculture credit loans for them to do farming. 8% needed to access information on appropriate technology. 4% wanted information on agriculture marketing policies. 16% of the respondents wanted to access information on how to increase and improve their yields and 12% of the respondents wanted to access information on soil management.

Figure 4: Other Sources of Information Farmers use to do farming
When the farmers were asked to find out the information sources other than FRA the results in figure 4 above indicated that, 48% obtained their information from fellow farmers, 20% used information from cooperatives, 16% of the respondents used information from radio, 8% obtained information through television set and 8% obtained their information from NGOs.

**Figure 5: Availability of Information related to Farming**

When the respondents were asked to find out if information on farming was easily available, the results in figure 5 above indicated that, 4% of the respondents were of the view that information was easily available to the farmers, 40% were of the view that information to the farmers was quite easy to access and 56% were of the view that information to the farmers was not easily available.

**Figure 6: Rate of Information Sources**
In determining the rate of information sources the results in figure 6 above showed that, 8% were of the view that information sources were good to the farmers, 36% were of the view that information sources to the farmers were fair and 56% were of the view that information sources were poor.

EFFECTIVENESS OF FRA IN INFORMATION PROVISION

When the respondents were asked if they had heard about FRA in their area, the results indicated that the entire respondents which are 100% said they heard about FRA in their area.

Figure 7: Awareness of FRA

When asked to find out the channel through which the farmers had heard about FRA, the results as showed in figure 7 above indicated that, 56% heard about FRA through radio, 28% was through T.V and 16% it was through the newspapers.
When asked if the farmers knew the functions of FRA, the results in figure 8 indicated that, 60% of the respondents said they purchase maize from the farmers is the function of FRA, 8% said the distribution of fertilizer, 12% said giving money to farmers, another 12% said information provision and 8% said to give food to the farmers.

When asked to find out if FRA had provided information on the areas in figure 9 above, 12% said FRA had provided marketing information, 36% said information on crop prices, 24% said information on credit loans and 28% said increasing yields. In trying to find out how often the
farmers accessed marketing information from FRA, 12% said quarterly, 24% said annually and 64% said not at.

**Figure 10: FRA Sources of Information Provision**

When the respondents were asked to find out the sources through which they accessed marketing information from FRA, the results in figure 10 above shows that, 24% accessed information from FRA through bulletins and publications, 40% through attending cooperative meetings and 36% it through radio.

**Figure 11: Effectiveness of FRA in Provision of Agriculture Marketing Information**

When asked to find out how effective FRA was in the provision of agriculture marketing information to the farmers, the results in figure 11 above indicated that, 20% said it was effective, 52% said FRA was not effective and 28% said it was not very effective.
Figure 12: Effective means of Information Provision to the Farmers

When asked to find out the effective means FRA should use to provide information, figure 12 above showed that 56% said FRA should use radio, 4% said through T.V, 20% said through drama and another 20% said the use of community education.

Figure 13: Problems to access information from FRA

In determining the problems which farmers faced when accessing information from FRA, figure 13 above showed that 25% said they faced the problem of lack of information centers, 12% said distance to the information center, 16% said lack of information resources, 35% said the format
in which information was stored and 12% said the media through which information was provided to the farmers.

CHAPTER FIVE
DISCUSSION OF THE RESEARCH FINDINGS

The study was carried out in Ngwerere area along the Great North Road in Chongwe District. The sample consisted of 25 respondents, out of whom 56% of the respondents were male and 44% of the respondents were female. This implies that there were more males than females who took part in answering this questionnaire which made 100% of the total respondents in this research. This is because the majority of the males are involved in farming to provide for their families. This implies that there are more males involved in agriculture than females; it does not mean that there are more males in Ngwerere area than females. A similar research carried out by Riches (1996), in the U.S.A revealed that there were more males (51%) than females (49%) present in rural areas engaged in agriculture activities. The majority of the women were involved in taking care of the house and selling some commodities such as vegetables, cooking oil and sugar on the market to earn a livelihood.

The sampled population consisted of the majority respondents 40% who are in the age group 30-40 years and the minority 4% of the respondents were above the age of 50 years. This is because the younger age groups those between 20 – 30 years had left the rural areas to work in town and urban centers unlike the age group between 30-40 who settled down to engage in agriculture activities. Further, some of the younger age groups were employed in commercial farms in Ngwerere area. There were only a few beyond the age of 50 years and this could be due to the reduction in life expectancy in Ngwerere area and Zambia which was estimated at 34 years old for males and 38% for females (CSO, 2003:15). The Census of Agriculture (2000) carried out in the United States showed that older age groups were more prevalent in the rural areas (35-65 years) than younger age groups (25-35) because younger age groups were still in search for employment, career and other opportunities of life in order to make a livelihood.

In this survey it had been found that 48% of the sampled population had reached primary level and only 4% had been to university. The majority of school going children in rural areas does not complete basic education. Rural community access to education is limited as the majority of the rural people do not have enough income to send their children to school and other factors such as cultural beliefs contribute to non-completion of education among children in rural areas. According to Kelly (2000), rural communities have limited access to education and the majority of the people in the rural areas end their education in primary school.
In answering the question which seeks to establish the awareness of the existence of FRA, it was found that the majority of the farmers of Ngwerere area had heard of the existence of FRA. This is so from the findings which show that 100% of the respondents had said that they had heard of the existence of FRA. All the respondents asked said they had heard about FRA because they were involved in agriculture and FRA was in charge of announcing market prices for the maize produce every marketing season in different media, there are aware of the existence of FRA through friends and relatives, radio, and television set for those who owned.

The study revealed that some of the respondents did not know the functions of FRA. This is shown from the findings in that 12% of the respondents said that giving of money to farmers by FRA is a function of FRA and 8% said that the provision of food to the farmers was the function of FRA. Some Farmers do not know the functions of FRA because of the failure of FRA to disseminate information to the farmers in the format and media in which the people are able to understand and also due to FRA’s failure to market their activities in Ngwerere area. FRA was seasonal as its activities were only during the rain season and the marketing and its offices were not national wide. This is in line with the study by the Food Security Research Project, (2003) which showed that the market information system of FRA was not viable in articulating the vision, goals, functions, objectives and mission of FRA to the public and this public included the rural farmers. There were little written documents on the role of FRA in the agricultural sector in Zambia.

When the respondents were asked to find out if information on farming was easily available, the results indicated that, the majority 56 % of the respondents were of the view that information to the farmers was not easily available and the minority 4 % of the respondents were of the view that information was easily available to the farmers. This is because for a farmer to access information from FRA they have to go to FRA offices or buy a FRA gazette from government printers to check the prices for the produce or get the information from FRA radio and television sets but FRA programmes on radio and television were not constant and the majority of the rural farmers did not own television sets. Further, most of the farmers do not know the offices of FRA and government printers. Mwanaumo et al, (2005) carried out a research on rural population accessibility to market information in the agriculture sector in rural Zambia and the findings showed that it is difficult for the majority of rural farmers in Zambia to access market information and that the majority of the rural farmers ended up selling their produce without accessing market information from FRA.

In determining the rate of information sources by FRA, the results showed that the majority 56% of the respondents were of the view that information sources were poor and the minorities 8% were of the view that information sources were good to the farmers. This is because most of the information provided by FRA does not meet the needs of the farmers. The information provided
to the farmers by FRA is not relevant to improving farmer’s agricultural productivity and accessibility to the market so that they can obtain enough income to access the basic needs of life such as food, health and education. Most of the farmers produced little for their household and part of the produce they sell to FRA. Despite the many years that FRA provided information to the farmers and the public, the conditions of the farmers remained the same without any improvement. This implies that the information provided by FRA was not relevant as it was rated poor by the majority of the farmers of Ngwerere area and this is in line with Melkote’s (1991), study which states that relevant agriculture information will enable low-income farmers in rural areas to change their farming patterns, innovate and reach beyond their own low-income environments to connect to higher income national and internal markets, yielding for many a larger and more affluent client base, higher sales and net incomes. This implies that information provided is relevant to the farmers as they apply it in their agricultural activities.

The study revealed that the effective mode of information provision to the farmers used by FRA is the radio set programme presentations on agriculture marketing represented by 56% which was the majority and the minority 16% newspapers which were known to the farmers. This is because FRA provides its information through the public media which is cheaper to them according to the resources given to them by the government. According to Poel (1998), on the basis of a study carried out, it showed that for the peasant farmers to improve the skills of farming there was a need to come up with different and new formats of information provision to the farmers. This is because most farmers do not know how to read the handouts, books and pamphlets given by agricultural extension officers to improve their capabilities.

The research revealed that the most effective mode of information provision suggested by the respondents was agriculture presentations on local radio stations which represented 56% of the respondents, 4% said the use of T.V, 20% said the use of community presentation and farmer’s education and the remaining 20% said drama. This is because the majority of the farmers in Ngwerere area are illiterate and only reached primary school which makes it hard for them to read printed materials especially in English but will find it easier to listen to a radio program in local language, learn from watching drama and through community education. However, these findings are slightly different from a study which was carried out in Nigeria by Aboyade, (1985) on materials which are used to disseminate information to rural Nigeria. These included printed materials of various kinds like bulletins, circular, leaflets and newsletters. His study found that printed materials were the most effective, even more than lecturers, radio programmes and extension films, inducing change in a predominantly non-literate environment become common property of most villagers. Other materials identified are posters, and displays projected visuals like motion pictures, slides and film strips and presentation visuals.

When the respondents were asked to find out how effective FRA was in the provision of agriculture marketing information to the farmers, the majority of the respondents which is 52%
said that FRA was not effective in the provision of agriculture marketing information and the minority 20% said FRA was effective in the provision of agriculture marketing information. If the agriculture marketing information provided by the information system of FRA is not effective in meeting the information needs of the farmers of Ngwerere area it means that the information system in place is not doing its best in terms of information provision as shown by the responses of the respondents. This is line with a research carried out by the Agricultural Market Development Plan, (2004) which revealed that FRA was not effective in the provision of marketing information to the public in order to protect the small scale farmers who were been exploited by traders and some millers as they sold their produce.

RECOMMENDATIONS
The following recommendations are made in order to make FRA market information system become effective in disseminating agricultural marketing information to the people of Ngwerere area.

- The FRA market information system needs to engage into agricultural community education in Ngwerere area.
- FRA should help the small scale farmers with relevant agriculture information, farming input, equipment and credit loans.
- To ensure efficiency and effectiveness FRA should establish a community information centre in Ngwerere area in collaboration with the Agricultural Information System and Farmers Union of Zambia to provide current, up to date and relevant agriculture market information.
- There is need for FRA to develop an efficient and effective marketing, purchasing and input supply strategies. The number of agents authorized to purchase maize from farmers be expanded to include millers, small traders, small millers and livestock feed manufacturers.
- There is need to ensure that fertilizer and seeds arrive on time to the farmers and this should be accompanied by the right types and amounts of fertilizer and seeds sent to Ngwerere area. This will cause an increase in agriculture productivity.
- There is a need for the FRA market information system to be upgraded, improved and hire more information staff and extension offices who will reach the community.

CONCLUSION
This study aimed at investigating the effectiveness of the food reserve agency (FRA) in providing agricultural marketing information to peasant farmers in Ngwerere area. It has been discovered that FRA is not effective in providing agricultural marketing information to peasant farmers of Ngwerere area. This is evident from the findings of this research which shows that the majority of the farmers did not get any agriculture market information. This means that they are
not well informed by the information system which is supposed to provide information to them. The majority of the farmer’s source of agriculture market information is not FRA but friends and relatives.

This study has also revealed that the most prominent method of providing agricultural market information to the people of Ngwerere area is through radio programs. Even though the well known method of information provision is radio talks the most effective method is community presentations and education in local language. The reason why community presentations and education in local language is considered to be most effective is because it even encompasses those that do not have a radio set.

From this research it has been discovered that most of the farmers in Ngwerere area felt that access to market information through FRA was difficulty as the information was not easily available and this made them make decisions without relevant information and they ended up being exploited by the buyers on the market. There is need for FRA to provide adequate information to the small scale farmers as most of these depend on income from selling their maize produce for them to buy food, send their children to school and access medical care but the income from the sells of agricultural produce is not enough for the farmers in Ngwerere.
APPENDIX 1

THE UNIVERSITY OF ZAMBIA

SCHOOL OF EDUCATION

DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

LIS 422

QUESTIONNAIRE NO........

Dear respondent,

I am Banda Agripa, a fourth year student of the University of Zambia in the school of Education studying library and information studies undertaking a research which is part of the fulfillment of a degree programme.

The questionnaire you have just received is part of the research project in LIS 422: Development of Information System and Services whose topic is investigating the effectiveness of the Food Reserve Agency in providing agriculture marketing information to peasant farmers in Ngwerere area.

You have been randomly selected in a sample taken out of the whole population of farmers in Ngwerere and so you need not to worry as to why you have been 'picked on'. The information you give will be used for purely academic purposes and will not have any bearing on you as an individual. Please be rest assured that this information will also be treated with the strictest confidentiality.

As the success of this research depends on you, your co-operation will be highly appreciated.

INSTRUCTION

➢ Please answer as objectively and sincerely as possible.
SECTION A: BACKGROUND INFORMATION

1. What is your sex?
   1. Male
   2. Female

   . Age group
     1. 20-30
     2. 30-40
     3. 40-50
     4. Above 50

3. What is your level of educational attainment?
   1. Primary
   2. Secondary
   3. College
   4. University
   5. Other Specify ........................................

4. What is your marital status?
   1. Single
   2. Married
   3. Divorced
   4. Widowed

5. Where do you sell your (maize) produce?
   1. City Market
   2. Farm
   3. To FRA agents
   4. Millers
   5. Other Specify ........................................

6. How much did you last marketing season sell your 90kg bag of maize?
   1. K 20,000-00
   2. K 30,000-00
   3. K 50,000-00
   4. K 70,000-00
5. K 100,000-00          
6. Above K100, 000       

7. How much income did you earn from your last sells?
   1. K 100, 000- 500,000 
   2. K 500,000- 1,000 000 
   3. K 1,000 000- 1,500 000  
   4. K 1,500 000- 2,000 000  
   5. Above 2,000 000        

8. How many are you in your household?
   1. Two                      
   2. Three                    
   3. Four                     
   4. Five                     
   5. Above Five               

9. What equipment do you use in farming?
   1. Hoes                     
   2. Tractors                 
   3. Animal Plows             
   4. Other Specify.........................

10. What is the size of your land?
    1. Less than 10 arcs       
    1. 10 arcs-50 arcs       
    2. 50 arcs-100 arcs      
    3. 100 arcs-1 hectare     
    4. 1 hectares- 10 hectares 
    5. 10 hecture-20 hectares 
    6. Above 20 hectares      

11. What type of crop do you grow?
    1. Maize                    
    2. Cassava                  
    3. Vegetables              

4. Coffee
5. Tea
6. Beans
7. Other Specify

SECTION B: INFORMATION NEEDS OF FARMERS

12. What type of information do you need to do farming?
   1. To access cheap and affordable agriculture credit loans
   2. To access and use appropriate technology
   3. Information on agriculture marketing policies
   4. Information on soil management and climatic conditions
   5. Information on how to increase and improve agriculture yields
   6. Other Specify

13. Where do you get the information to do your farming?
   1. Fellow farmers
   2. Co-operatives
   3. Farming Magazines
   4. Radio
   5. T.V
   6. NGOs
   7. Other Specify

14. How easily available is information related to farming?
   1. Very easy
   2. Easy
   3. Quite Easy
   4. Not Easy

15. How do you rate the source of information?
   1. Very good
   2. Good
   3. Fair
   4. Poor
   5. Very poor
SECTION C: EFFECTIVENESS OF FRA

16. Are you aware of the existence of the Food Reserve Agency in your area?
   1. Yes
   2. No

17. If your answer to question sixteen (16) above is NO, proceed to question eighteen (18), but if your answer is YES, where did you hear about FRA?
   1. Radio
   2. T.V
   3. FRA
   4. Internet
   5. Filers
   6. Magazines
   7. Other Specify...........................................

18. Choose any three (3) functions of FRA from the following?
   1. To buy maize produce from the farmers
   2. To give fertilizer to the farmers on behalf of the government
   3. To give money to the farmers
   4. To give food to the farmers
   5. To disseminate agriculture information to the farmers
   Other Specify...........................................

19. What information has FRA provided in your area?
   1. Marketing information
   2. Information on crop prices
   3. Information on credit loans
   4. Information on increasing yields
   5. Other Specify...........................................

20. How often do you access marketing information from Food Reserve Agency?
   1. Weekly
   2. Monthly
   3. Quarterly
4. Annually
5. Not at all

21. How do you access this information?
   1. Through information bulletins and other publications
   2. Internet
   3. Attending cooperative meetings
   4. Radio Station
   Other Specify

22. How would you rate the effectiveness of FRA provision of agricultural marketing information to pleasant farmers?
   1. Very effective
   2. Effective
   3. Not effective
   4. Not very effective

23. Which media of information provision should FRA use to be effective in the provision of agriculture marketing information?
   1. Radio
   2. T.V
   3. Drama
   4. Newsletters
   5. School Quiz
   6. Internet
   7. Other Specify

25. What problems do you as farmers face in getting information from FRA?
   1. Lack of information centers
   2. Distance to the information center
   3. Lack of information resources
   4. Format in which the information is stored
   5. Media in which the information is presented
   6. Other specify
26. In your own assessment, what recommendations can you give to FRA to improve agriculture marketing information in your area? ............................................

Thank you for your cooperation