

AN ASSESSMENT OF THE NEED FOR AND AVAILABILITY OF
AGRICULTURAL MARKET INFORMATION AMONG SMALL-SCALE FARMERS
IN CHINGOLA.

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2005

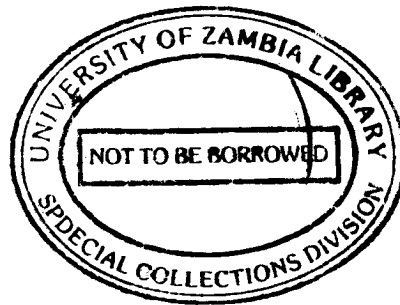
A Thesis Presented to The Department of Agricultural Economics and Extension
Education of the University of Zambia

Sum.

By

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LIST OF ACRONYMS

AMIC:	Agriculture Marketing Information Centre.
AMIS:	Agriculture Marketing Information System
CSO:	Central Statistical Office.
FRA:	Food Reserve Agency.
GDP:	Gross Domestic Product.
GOVT:	Government.
GRZ:	Government of the Republic of Zambia.
ICT:	Information and Communication Technology
LDC'S	Least Developed countries
MACO:	Ministry of Agriculture and Co-operatives.
NAIS:	National Agriculture Informational Services.
NAMBOARD:	National Agriculture Marketing Board.
NGO:	Non-Governmental Organization.
PRSP:	Poverty Reduction Strategy Paper.
WB:	World Bank.

ABSTRACT

AN ASSESSMENT OF THE NEED FOR AND AVAILABILITY OF AGRICULTURAL MARKET INFORMATION AMONG SMALL-SCALE FARMERS IN CHINGOLA.

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University Of Zambia, 2005

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This study evaluates the availability and needs of agricultural market information by small-scale farmers in Ipafu area, in Chingola District. The area was purposively chosen as it contained the representative features typical of small-scale farmers in other rural areas and findings in this area represent to a greater extent the scenario as it is in many other rural areas. Data collected from 105 farmers through a survey formed the empirical basis for the study.

The study findings show that the provision of agricultural market information in the area has not been up to standards. The information which is available is not adequate, accurate, clear and timely. This has greatly hampered the development of agriculture in the area as farmers are unable to access quality agricultural market information on which they can base their decisions such as what crop and variety to grow profitably in a given season. . Farmers' growth in agriculture is stunted as they can't find markets with fair prices from which they can get high profits to sustain themselves and advance in their agriculture. Factors that have contributed to this ineffective provision of agricultural market information include; insufficient funding to marketing organizations, lack of sufficient human resources to manage information systems, lack of access for staff to proper facilities and transport to collect, analyze and disseminate agricultural market information; telecommunication systems are not developed and this impedes good linkages in rural and urban information centres.

Based on the study findings, it is recommended that the process of collecting, analyzing and dissemination of agricultural market information system should be improved to ensure that information is available in standards as needed by farmers. It is also recommended that building and rehabilitation of the major roads of the country and feeder roads in rural areas can allow for easy flow of market information. Improved communication and quicker collection, analysis and dissemination of agricultural market information by relevant government institutions and other organizations should be promoted in order to contribute to rural poverty alleviation and food security.

CHAPTER ONE

INTRODUCTION

1 Introduction and Background

Agriculture plays an important role in Zambia. Livelihoods of many people depend on it. The rural majorities depend on agriculture for food and as a major source of income. Many urban-based agro-based industries also rely on agriculture for the supply of raw materials. In 2002, the agriculture sector represented 22% of GDP and accounted for 85% of total employment (CSO, 2003). Zambia has cultivable land of 42 million hectares of which only 20% is cropped. It poses many water bodies, which have remained unexploited with only about 6% being utilized for irrigation. Zambia also has a resource gift for a wide range of crops, livestock and fish due to its diversity in the agro-ecological regions. With this diversity, Zambia has the potential to achieve an annual sustained agricultural growth of 5% in the medium to long term (World Bank, 1996) and significantly increase its agricultural output.

The government has come up with a planned policy on promoting agriculture and maximizing agricultural output, for example under the Poverty Reduction Strategy Paper (PRSP), which government has adopted and is currently implementing, it views development of the agricultural sector as a critical pillar for growth and poverty reduction. Agriculture is given the highest priority in the PRSP for diversifying production and exports, creating employment, increasing incomes, and improving food security (World Bank, 2002).

Despite all that effort by government, the potential of Zambia's agriculture remains unrealized, previous researches have shown that the sector is still facing many problems such as, difficulties in availability and distribution of credit and inputs, lack of good storage facilities, unavailability of transport, low levels of mechanization, etc and as such has performed below its potential with about 4.6 million agriculturally dependent Zambians living in poverty FAO (2003), though they have a potential to redeem themselves and the country through agriculture. Many of these problems may be

attributed to the lack of a 'well' functioning marketing system in the country as evidenced by situations where some farmers have failed to find markets for their crops or to access inputs on time. A solution to this could be to improve the dissemination and availability of agricultural market to farmers. This will enable farmers sell their crops at fair prices and raise the much-needed revenue for improving their livelihoods. They will be in a position to buy inputs on time, construct and repair feeder roads, storage structures, and increase their output and allow small-scale farmers to graduate from small scale to commercial farmers and reap even more revenue. It is because of lack of sufficient revenue why just about 20% of Zambia's arable land is cultivated as farmers cannot access their own inputs on time, but have to rely on the government for subsidized inputs and this process is ineffective.

The process of providing agricultural marketing information involves collecting agricultural information, analyzing it and then disseminating it using either of the following channels; radio broadcast, news papers, monthly/quarterly bulletins, television broadcast, Internet etc. Agricultural marketing information is needed by such people as traders, small and large scale farmers, NGOs, the Government etc who may use it for easy identification of buyers and sellers, making informed decisions on how much to produce, knowing the price of inputs, products etc. It may also be used to make decisions regarding product diversification or the production of out-of-season crops.

Previously, the provision of agricultural market information was done by NAMBOARD until 1989 when it was abolished. Currently, it is been done by MACO, CSO and various organizations in the private sector. MACO plays the major role of disseminating agricultural information in the country through its components, National Agricultural Information Service (NAIS) and Agriculture Market Information Center (AMIC). NAIS is concerned with providing information to farmers on new agricultural technologies while AMIC analyzes and disseminates market information. The Food Reserve Agency (FRA) collects market information on grain trading, processing, stocks and prices and disseminates it.

Despite these institutions being in place, the provision of agricultural market information in Zambia has not been very effective due to a number of reasons some of which are insufficient funding to organizations concerned, staff is not well trained to analyze and utilize market information correctly. Production of bulletins and other sources of information are sporadic. Many farmers find it difficult to access market information such as on the cost price, who their competitors are, cost of transport etc. There was therefore a need to study the availability and farmers needs of agricultural market information so as to come up with recommendations to improve the agricultural marketing system, as that is key to revitalizing the agricultural sector and for economic growth and poverty reduction in the country and as a whole.

1.2 Problem Statement

Market information plays an important role of promoting efficiency in the operations of a market. Adequate, timely, clear and accurate market information is important for correct decision-making and planning. Information on prices, quantities and qualities help reduce risk of losses in market transactions. Traders, farmers, MACO/GRZ and other stakeholders, when they have timely and accurate information such as cost of inputs, markets and prices of products, etc, can make informed decisions on what to produce, how much to produce, where to sell, where to buy inputs, who their competitors are etc.

Currently, there is a serious lack of sufficient and timely market information on potential markets. This is evidenced by situations where some farmers have been stuck with their commodities, unable to find markets, resulting in them being exploited by undiplomatic agents /middlemen by selling commodities at low prices. Consequently farmers have been faced with situations of declining revenue leading to inability to pay back loans, buy inputs or advance to commercial agriculture or grow for export markets. Also, the scanty available information does not meet the needs of farmers. AMIC, NAIS and FRA have been assigned a major role of providing farmers with agricultural market information in the country by the government but their performance has not been up to standards, they are deficient in providing market information and the information is not readily

accessible, timely, and adequate and rarely meets the informational needs of many farmers, traders, agriculturists. These inadequacies may seriously have a negative impact on the growth and development of the agriculture sector and other stakeholders that are dependent on agriculture for income, employment and as a source of raw materials.

Also previous researches mainly focused on factors affecting the agricultural market information system and little had been done to find out the agricultural market information needs of farmers and if they were met.

1.3 Research Objectives

1.3.1 General Objective

The general objective of the study was to evaluate the agricultural market information system in to Ipafu (Chingola rural) in terms of availability of market information and its needs by small-scale farmers.

1.3.2 Specific Objectives

The specific objectives were;

1. To establish farmer’s agricultural market information needs and examine the level to which these needs are met by organizations.
2. To examine the quality, timeliness, accessibility and availability of agricultural marketing information concerned
3. To describe organizations involved in disseminating agricultural marketing information in Zambia

1.4 Significance of the Study

Enhancing the effectiveness of the dissemination of agricultural market information is important if the agricultural sector is to develop. This study was undertaken to look into this issue by studying the status of agricultural market information system with reference.

to Ipafu. The findings from this research will be used to inform relevant authorities on the gaps in the dissemination of agricultural market information and other problems being faced by the agricultural market information system and then come up with recommendation how the system can be improved to better serve the farmer. This will entail that various stakeholders involved in disseminating agricultural market information will have problems they face addressed so that they operate smoothly for an efficient agricultural market information system.

1.5 Organization of the Thesis

This thesis starts with chapter one which is mainly looking at background information of the study, statement of the problem, objectives of the study and significance of the study. Chapter two highlights on literature review, Chapter three looks at the research design and methodology used in the study, describing population and area of study, sampling design, data collection and analysis methods and limitation and problems of the study . Chapter four is about research findings and discussion and chapter five is on conclusions and recommendations from the research findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Agricultural marketing system encompasses all the participants in the production, processing and marketing of undifferentiated or unbranded farm products, including farm input suppliers, farmers, storage operators, processors, wholesalers and retailers involved in the flow of information. It also includes all the institutions and arrangements that effect and coordinate the successive stages of information dissemination such as the government and its parastatals, public and private media trade associations, cooperatives, financial partners, transport groups etc. This chapter reviews various research papers of relevance to the study and attempts to identify gaps that have not been addressed in the process of agricultural market information system and see how this study can improve on them. Documents reviewed documents include theses and other university research projects, books, government and international reports.

2.2 Review of Agricultural Market Information System in Zambia

Mwanaumo (1999) has found that use of AMIC information is currently limited, mainly due to poor funding. Bulletin production is sporadic. Information flow to the provinces and districts is constrained by logistical complexities and the district staff is not well trained to analyze and utilize market information correctly. The market information dissemination mechanism is not fully developed to allow for a smooth flow of data, particularly to the grassroots level. The data that are collected and disseminated by the Agricultural Market Information System (AMIS) are inadequate, untimely, and hardly meet the specific requirements of small-scale food processing operators. Enterprises do not have access to published market information. Major source of information is 'word of mouth', radio, and newspapers. Radio programmes are of poor quality and Zambian newspapers lack in-depth analysis on this topic and very little relevant information reaches these media agencies.

Rural households in the Southern African region including Zambia comprise a very high percentage of the national population, ranging from 30% to 80% in some countries Adam (1996). Therefore, in order for people to create a livelihood, they combine a variety of resources to enable them maintain a living standard. These include own farm production, wage labor and small business activities among others. This means that most rural farmers have very little opportunity to practice agriculture solely as a means of income generation and food supply. The challenge for agricultural market information, therefore, is to contribute to the improvement of livelihoods and employment in such a way that people can do it full time. If society's agricultural market information needs are identified, classified and analyzed, agriculturists can be in a position to select which kind and type of agricultural market information will benefit the people in the short or long term. Also the community has to be made aware of the characteristics of the local agrometeorological conditions, prevalent pests and diseases of the region, inputs that are available, prices and marketing conditions Adam (1996).

Durrani (1987:113); Kaniki (1988) found that appropriateness of the marketing system should be assessed in terms of the agricultural market information needs of the farmers and priority should be on relevant collection of both oral and published information, its organization, storage and dissemination through print, audio, visual, and audio-visual media. Agricultural information collected should reflect agriculturists' and farmers needs, including peasant farmers and should be available in languages spoken by the farmers.

Telecommunication facilities are not widely distributed in the rural areas. These facilities are necessary for quick transfer of market and other information relevant for boosting the rural local economies. The information centers are located in urban areas and are not easily accessible to small-scale farmers MAFF/FAO (1996).

Chisenga (1996) observed that, many information centers at district and rural area level are characterized by lack of adequate equipment, qualified personnel and access to the Internet. This hinders the collection, analysis and dissemination of agricultural market information.

Durrani (1987) notes that many information services still use print medium even though it is costly and not very effective especially in addressing the information needs of the rural farmers. In situations where information is offered free to farmers, the technical language of agricultural information contained in print media is incomprehensible to the rural populations. Some farmers, mostly illiterates do not care about them, hence the leaflets and newsletters are worthless. The transfer of technology; acquisition of information; retrieval and dissemination of information rely heavily on effective communications. The telecommunications and transport network, comprising railways, roads, air and water transport are inadequate, and in most cases these affect communication negatively. Another problem as pointed out by Durrani (1981) is that of lack of appropriate person – to person communication, such as between agricultural information workers and farmers. Information workers are unable to diagnose the information needs of farmers, who in turn cannot articulate their information needs.

Many countries in the LDCs have realized that good communication relies heavily on efficient telecommunication connections namely, electricity; reliable rail, road, air and water transport. However, as Harris (1990) observes, each country has to have a certain wealth before highways are developed, especially in rural areas. Advancement in telecommunications in the LDCs is not usually a priority, as other fundamental issues like food production take first consideration. Therefore, information dissemination is usually delayed due to inefficient telecommunication networks and transport facilities.

In the Zambia Private Sector Development Forum report, it was stated that construction of communication infrastructures and the strengthening of telecommunication system and regulatory framework is an important strategy for improving productivity in all sectors of the economy. It was also stated that Zambia has generally comparatively high costs of communication compared to other countries in the region. Though of late there has been an improvement in the road system, that has been limited to few areas and it is still bad in many areas especially in rural areas making it costly and difficult in marketing both inputs and outputs (Zambia Private Sector Development Forum report, 2004).

Figure 1: Respondents' Evaluation of Constraints to Operation

	Zambia	Kenya	Uganda	Tanzania
Telecommunication	32.9	44.1	5.2	11.6
Transport	30.4	37.4	22.9	22.5

Source: Zambia Private Sector Development Forum Report (2004)

According to Kaniki (1988), the financial problems of information centers in the LDCs lead to lack of resources and information sources, which again lead to limited information access in documents, books and journals. Costs are high and limited finance leads to poor services, as resources and sources that could be employed are not available. Ozowa (1995) found that information is usually not tailored to the agricultural information needs of the farmers and rural population. Ozowa (1995) also points out that, according to research, Agricultural Market Information and innovations are capable of changing agricultural production and building economies of many developing countries and this could be possible if all this information reach the farmers. Unfortunately, information dissemination and technology diffusion have not been very successful in most developing countries and the problem of the broadcasting media is that, many rural populations have limited access due to poor reception and limited area coverage. The broadcasting media, powerful as it may be, has its limitations in the developing countries, especially where telecommunication infrastructure is not very advanced.

According to Meyer (1996), extension services represent a very important link in the dissemination of information, as it is through them that Agricultural Market Information or technology can be transferred to farmers. Extension workers in the developing countries are the farmers' main information source and they assist farmers to increase their production. However, extension services experience some problems in many developing countries where the ratio of extension workers to farmers is too wide Ozowa, 1995). In Zambia for example, the ratio of extension workers to farmers is about 1:800-1500, (MACO). This scenario greatly affects agricultural information dissemination negatively.

Besides institutional constraints, the Zambian agricultural market also faces basic structural constraints related to the policy and legal environment. There is a lack of a comprehensive agricultural marketing legal framework to guide the functions of the agricultural sector. This comprehensive agricultural market legislation should provide for, among other things, a body of agricultural market experts to advise the Minister of Agriculture on market related issues.

There is confusion and misunderstandings between the private sector and government regarding government market interventions for especially maize and other grains, and therefore a distrust and disinclination to invest in stocks and forward trading. This is especially exacerbated by the unpredictable nature of such interventions. There is the belief that government sets minimum prices for maize and that government has a duty to protect farmers against outside forces. This stifles the farmers' ability and initiative to search for and take advantage of opportunities presented by the market, while exposing them to unnecessary policy risks. (Agricultural Market Development Plan, 2004)

CHAPTER THREE

METHODS AND PROCEDURE

3.1 Introduction

This chapter is about the research design and methodology which was used in this dissertation. It also briefly talks about the background of the study area and population, sampling method used, tools used in collecting and analyzing data.

3.2 Study Area and Population.

The complete numbers of respondents was 105 farmers and were drawn from Ipafu .A case study was used as an in-depth study of the area was needed. This design allowed for past and present status of the marketing system in the area to be studied. Ipafu is situated about 20 kilometers from Chingola town along the Chingola-Solwezi road. It is sparsely populated with about 500 people most of them involved in agriculture. The research targeted 120 respondents but only 105 were interviewed. This area was purposefully selected as it typical features of an agricultural rural area and therefore findings in this place can be extended to other areas.

3.3 Sampling Methods

Stratified sampling was used. Population was subdivided into homogeneous groups, each having similar characteristics like sex, training, education, and occupation .The selection of farmers was based on the type of farming they practice. No sampling frame was used; selection of respondents was done with help of a Key Informant was (an Agriculture Extension Officer in the area)

3.4 Data Collection

Primary data collected was through Guided interviews containing both open and closed ended questions, while secondary data was obtained from reports, policy and strategic

framework documents, and official documentation relevant to the study. The respondents' information requirements, their preferences, attitudes and methods used were investigated in order to see if there were any differences, similarities or problems. The question of information availability was addressed in order to know the frequency of access through many channels. Questions that require information on sources of agricultural information, use of information, document and information deliveries were based on attitude scale. Last section of the interview aimed to obtain information on the general attitude toward access, quality and dissemination of agricultural information in Ipafu. The interview guide also contained close-ended questions with scaled responses from which participants selected.

3.5 Data Analysis

The responses from respondents were coded before entering into the computer for data analysis. The data collected was analyzed using SPSS (Statistical Package for Social Sciences) to generate frequencies and sample descriptive.

3.6 Limitations and Problems

The research could not get a comprehensive coverage of all farmers in the area due to limited time and resources. Ipafu it being a rural area, it was not easy to locate all the farmers as they were far apart and the road system is not well developed to enable smooth travel to cover many farmers.

CHAPTER FOUR

PRESENTATION OF FINDINGS AND DISCUSSION

4.1 Introduction

This chapter shows the results that were obtained from the research, their analysis and discussion. The respondents were generally positive and helpful in discussing their agricultural market information needs and problems they encounter in obtaining it. The interview form assisted in getting valuable information through talking to respondents, who openly spoke about various problems encountered in their daily search for the latest agricultural market information. The first section on personal information gives valuable information on the type farmers in Ipafu, their age, academic qualifications, language used, and gender. This information was useful as it formed the basis of the caliber of respondents interviewed. Second and third section helped in actual evaluation of the availability and needs of market information by the farmers.

4.2 Respondents Background Information

This section presents respondents background information such as age, gender, marital status, languages used, farm size, farming activities practiced. This information is important as it will help in understanding respondents' lifestyle and level.

4.2.1 Distribution of Respondents by Age

Farming seemed to be practiced mainly by middle-aged people. The younger people, who are believed to be more energetic and could, advance agricultural produce, seemed not to be much interested in agriculture as an occupation. The reasons may be due to, lack of willingness to take risks in terms of financial loans for agriculture and the idea of leaving other seemingly well paying jobs such as Accountancy is not very appealing. Also few view agriculture as a business from which they can reap a lot of profits.

Table 1: Distribution of Respondents by Age

Farmers Age Group	Frequency	Percentage
Less than 35	27	25.71
35-50	41	39.04
50 and Above	37	35.25
Total	105	100

Source: Primary data

4.2.2 Gender of Respondents

A total of 64 males and 41 females were interviewed. Land ownership in Ipafu was found to be very gender-stratified, with many men owning land as compared to women. This was established from the fact that, respondents were also household heads and owners of the land.

Table 2: Gender of Respondents

Farmers Gender	Frequency	Percentage
Males	64	61
Females	41	39
Total	105	100

Source: Primary data

4.2.3 Level of Education and Training of Respondents

The majority of sampled farmers had up to secondary school education followed by those with primary school education and those without any education and lastly an insignificant number of them had a college diploma with none having a university qualification. Implication here is that with these low levels of education, farmers would find it difficult to read and interpret market information which might be in other language such as English other than their own local language.

Table 3: Level of Education and Training of Respondents

Farmers Educational Level	Frequency	Percentage
None	20	19
Primary	30	28.5
Secondary	49	46.6
College	6	0.6
University	0	0
Total	105	100

Source: Primary data

4.2.4 Marital Status of Respondents

The majority of the respondents were married and they represented 46 of the total number of respondents, 26 single while 15 were widowed and 18 were divorced. This therefore indicated that married people were mostly involved in agriculture as opposed to other categories of farmers and this could be due to the fact that married people tend to have a lot of responsibilities such as providing food for the family.

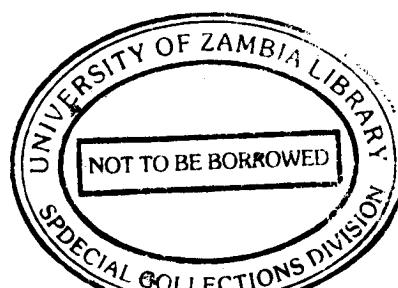
Table 4: Marital Status of Respondents

Marital status	Frequency	Percentage
Single	26	27.3
Married	46	43.8
Widowed	15	14.3
Divorced	18	17.1
Total	105	100

Source: Primary data

4.2.5 Languages Preferred

Bemba, Kaonde and Luvale were the preferred languages with non-preferring English, despite the fact that information in English is more readily available as research and



publications and broadcasts are usually available in English. Other languages some farmers preferred were Lamba and Chokwe. These also represented cultural groupings.

Table 5: Languages Used or Preferred

Communication Language	Frequency	Percentage
Bemba	39	37.1
Luvale	28	26.6
Kaonde	32	30.5
English	0	0
Others (Lamba/Chokwe)	6	0.06

Source: Primary data

4.2.6 Farm Size

The majority of farms were between 5 and 10 hectares in size and they were used mainly for subsistence farming with occasional extra harvest sold. Major farming activities practiced were subsistence farming of maize, sorghum, beans, cassava and sweet potatoes with a few farmers rearing goats and poultry. Farm sizes are important as that can determine whether farmers can go into cash crops or not and consequently determine what kind of agricultural market information they may need. However, in Ipafu farms are relatively small in size and this prevents large-scale farming and the need for market information. Some farmers are subsistence farmers, just growing enough for home consumption and not for sale. As such, they don't need market information.

Table 6: Farm Size

Size of Farm	Frequency	Percentage
5-10 Hectares	70	66.6
11-50 Hectares	35	33.4
Total	105	100

Source: Primary data

4.2.7 Farming Activities

The majority of farmers practiced subsistence- just growing for home consumption, followed by those growing crops such as maize and tobacco for sale. Others were involved in root crops mainly sweet potatoes and cassava. Few farmers kept pigs, goats and chicken. No dairy or beef cattle were kept.

Table7: Farming Activities

Farming Activities	Frequency	Percentage
Beef Cattle	0	0
Cash Crops	54	51.4
Dairy Farming	0	0
Piggery/Goats	45	42.3
Poultry	30	28.6
Root Crops	32	30.5
Subsistence Crop	65	62

Source: Primary data

4.3 Marketing Information Needs and Extent of Satisfaction

4.3.1 Market Information Needs

Market information needs of small-scale farmers in Ipafu included:

- Information on product planning. This is information on what crop and variety to grow at a given season with marketability of such a crop as an important deciding factor.
- Information on current prices.
- Information on forecast of market trends. This type of information assists farmers in planning which crop to produce next season.
- Information on sales timing. This assists farmers in ensuring that they do not cause a market surplus. It enables them to stagger harvesting and quantity for marketing.

- Information on group marketing: This enables small-scale farmers to have organized sales of marketable surplus and bulk transport of produce

Table 8: Marketing Information Needs.

Marketing information needs.	frequency	percentage
Product planning	57	54.3
Inputs Prices and Markets	70	66.6
Market Trends	62	59.0
Sales Timing	50	47.6
Product Prices and Markets	63	60
Others (Competitors)	55	52.3

Source: Primary data

4.3.2 Rating of Information Satisfaction

According to many farmers, the information available was rated as poor and satisfactory. Only a small percentage said it was good and excellent.

Table 9: Rating of Information Satisfaction

Rating of information satisfaction	Frequency	Percentage
Very poor	6	0.6
Poor	41	39
Satisfactory	40	38
Good	16	15
Excellent	2	7.4
Total	105	100

Source: Primary data

4.4 Analysis of Organizations providing Market Information

4.4.1 Organizations providing Market Information

Major organizations providing agricultural market information were Unions/Cooperatives, NGO's, MACO/Govt./ Oxfam partnership, with radio stations and print media providing scant information and FRA, CSO and TV stations providing none. FRA and CSO despite have been give the major role of providing market information, were non-existent in this area.

Table 10: Organizations providing Market Information

Organizations Providing Market Information	Frequency	Percentage
Maco/Govt/ Oxfam Partnership	64	61
CSO	0	0
Radio Stations	45	42.8
Print Media	10	9.5
Television stations	0	0
NGO's (Kapisha Development Network)	71	67.6
FRA	0	0
Unions/Cooperatives	80	76.2

Source: Primary data

4.4.2 Channels of obtain Market Information

Farmers obtained much of their market information through, personal surveys, billboards community markets, seminars, public education and advisory services. Bulletins and agricultural statistics were not used. Personal surveys, billboards Community markets, public education, advisory services and seminars were found to be effective in providing market information. Others such as bulletins and newspaper extracts were found to be ineffective as means of disseminating market information.

Table 11: Channels of obtaining Market Information

Channel	Frequency	Percentage
Bulletins	0	0
Statistics	0	0
Newspaper Extracts	10	9.5
Advisory Services	67	63.8
Public Education	60	57.0
Seminars	70	66.6
Community Markets	79	75.2
Posters/Visual Aids	60	57.1
Telephone	0	0
Billboards	87	78
Personal Market Surveys	85	78
Television	0	0
Radio	30	26

Source: Primary data

4.4.3 Organization Rating

Rating of organization performance in disseminations of agricultural market information was done in terms of the information accuracy, clearness, adequacy and timeliness. Unions/Cooperatives were rated as providing market information, which was accurate, clear, adequate and timely. Kapisha Development Network was rated as providing accurate and timely information though it was not very clear and adequate. With Radio stations, the information was found to be on average, accurate and timely but not clear and adequate. MACO/GOVT/ OXFAM partnership was rated as providing information, which was clear and adequate, averagely accurate but not timely. Print media was rated, as below average in all criteria, while CSO, FRA and TV stations didn't have any score, as there are non-existent in the area.

Table12: Organization Rating

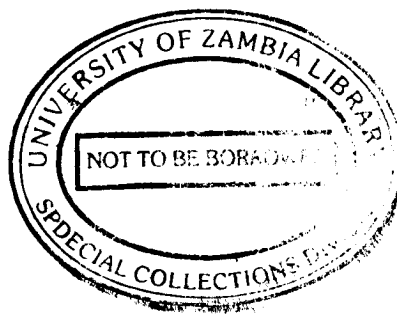
	Accurate	Clear	Adequate	Timely
Organization Performance	%	%	%	%
Maco/Govt Oxfarm Partnership	56	63	64	46
CSO	0	0	0	0
Radio Stations	53	42	45	56
Print Media	40	43	48	43
Television Stations	0	0	0	0
NGO's (Kapisha Development Network	66	49	47	63
FRA	0	0	0	0
Unions/Cooperatives	75	66	68	70

Source: Primary data

4.4.3.1 Problems faced by AMIS

The agricultural market information system on average did not provide the needed market information effectively and efficiently due to various problems they face, respondents outlined some of them as the following;

- *Lack of political commitment* because of competing demands for the allocation of scarce resources by politicians and policy makers despite good agriculture policy.
- *Technical constraints* resulting from lack of sufficient human resources to manage information systems, and lack of access for staff to proper facilities and transport in Ipafu to collect and disseminate information. Telecommunication systems are not developed in the area and this does not facilitate good linkages in information centers. Also other infrastructure such as feeder roads and markets are not well developed. It has been found that the development of infrastructure, and particularly transport infrastructure, is extremely important as it will increase access to markets and the flow of market information and decrease the cost of marketing. (Currently the Solwezi – Chingola road is been repaired,). Upgrading of trunk and feeder roads should be regarded as a high priority, especially in areas of high agricultural production potential.



Financial constraints, which significantly reduce the effective operation of information systems, in particular the collection and analysis of primary data and other information

4.4.3.2 Problems of using Radio for obtaining Market Information.

Not all farmers own radios and those who own rarely find time to listen to radio broadcasts. Only 56 percent indicated that they own radios. The regional differences in terms of language, agricultural practices, potential markets, local infrastructure seems to make it difficult to use information transmitted by ZNBC. In some parts of Ipafu, radio reception is poor. This means that some farmers miss on agricultural information broadcasts.

No feed back system is available, or program evaluations to find out whether the programs broadcasted reach the intended target group with adequate timely information.

Radio programs, such as *Farmers' Corner* is broadcasted on Monday at 6:45 AM, this time is too early for many farmers to listen to them or they might already be in the fields. Others such as *Ifyabulimi Pamwela* and *Farm Magazine* are broadcasted on Sunday at 8:30AM and 9:00 AM respectively. Farmers feel that Sunday morning is not a good time since at this time many farmers are at church. The best time was found to be 18:00-19:00hrs when farmers are at home relaxing with their families, but no agricultural program is aired at this time. This is a peak time for other programs such as Main news.

A good number of the farmers interviewed belonged to an association such as local farmers cooperative through which workshops, seminars, meetings etc, are conducted and farmers are there by able to access key market information they need.) This poses a problem for the individual traders, who often are very small and lack the ability to fully understand the market, and adequately represent their interests to decision makers. An association that brings all the traders together has the potential to provide the competent voice of traders and all the market information they need. Much of the market information is obtained through a farmers association called the marketing committee

that collects prices from various markets in Chingola and Solwezi and then bring to farmers attention in Ipafu by posting them on specially designed billboards, which are sponsored, by MACO and OXFAM. One problem that farmers raised in relation to billboards as a means of disseminating market information is that they tend to have outdated prices and few farmers follow them, Brief case traders also don't follow them as they come with their fixed prices from urban areas.

Many farmers in Ipafu are currently weak sellers of maize and other products and therefore suffer unduly poor prices for their produce. They tend to offer their produce in small quantities, they do not grade their produce, and they are cash strapped at time of harvest. Some farmers deliver their commodity to markets in Chingola and Solwezi, this type of marketing chain involves farmers bringing maize to the market place or as in many cases to the road side, where traders go to buy on a cash basis. Farmers usually tend to be price takers since they don't know who other potential buyers are or the prevailing prices. They have insufficient market information, which is untimely, and inaccurate. Many farmers trade individually without any consideration to market information as long as they sale. If local farmers are organized together it can be easy for them to market their produce together and even construct infrastructure in important collection centers where it can't be possible for individual farmers. Farmers groups can bulk up produce together and market collectively. Reasons why farmers don't form groups are lack of trust and transparency in running the cooperatives.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

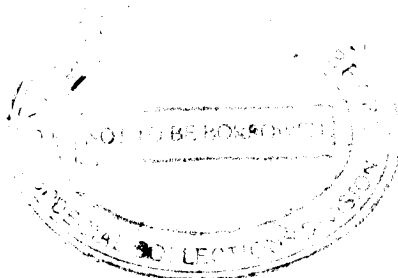
5.1 Introduction

This chapter presents conclusions that were drawn from the research findings .it also gives the recommendations that were made to improve the agricultural marketing system in the area based on gaps that were identified. Conclusions and recommendations are very important as they can be used by policy makers such as the government and other stake holders like foreign cooperating partners who usually fund projects to improve on the situation.

5.2 Conclusions

The main purpose of this study was to evaluate the availability and needs of agricultural market information by small-scale farmers in Ipafu. Agriculture, which often provides the engine for driving the initial stages of economic and social development, is a vital component in any community. For development purposes, agriculture provides the backbone of a society; hence agricultural market information is important to sustain production and develop economies .Its an integral part in economic and social development of any society and is very fundamental to the achievement of food security, poverty alleviation and overall sustainable development. Agricultural market information system are charged with the collection, organization, analyzing and dissemination of agricultural market information to both agriculturists and farmers, and hence their success is marked by their ability to provide accurate , adequate, clear and timely market information to actual and potential users.

From the research, the following were established; Farmers in Ipafu have a wide need of market information such as information on product planning, current prices, forecast of market trends, sales timing and group marketing much of which are not met to farmers satisfaction by organizations concerned. There is therefore a serious unavailability of market information in Ipafu and the little available information is not very accurate, adequate, clear



and timely. This was attributed to ineffective organizations mandated to provide market information. A wide range of reasons were also revealed as to why these organizations perform below expectations and they included; Lack of political commitment, Technical constraints, financial constraints, etc. It can therefore be concluded that the dissemination of Agricultural market information is not effective and needs to be strengthened in order for the agricultural sector to realize its full potential. This implies that factors that enhance agricultural market information dissemination should be adopted and adapted. If agricultural market information is made available to farmers, this might motivate them to enhance their practice and farm commercially.

5.3 Recommendations

(1). Greater efforts need to be given towards building the major roads of the country and feeder roads in producing rural areas. Developing the human capital and related communication and marketing information tools from rural to urban markets will enable better and quicker local and international market information analysis and dissemination and a better success in local and international market. The improvement of the road and market information infrastructure and subsequent training and orientation will certainly help in enhancing the current very weak bargaining power of the peasants and help them get better prices for their produce.

(2) Government departments, non-governmental organizations and independent organizations need to be empowered so that information generation, acquisition and dissemination can be improved. This can be done through timely and adequate funding of agricultural organization by both government and donor agencies. Timely data on stock levels, stock location and prices should be readily available to Consumers, producers, millers and traders.

(3) It was found that none of the farmers preferred English as a means of communication, to counteract this, agricultural information may be re-packaged for semi-illiterate and illiterate users in order for the information to have a significant effect. Re-packaging means translating technical and scholarly information into simpler language that could be understood by

anyone. Acquisition and dissemination of agricultural market information should be organized and made available to farmers in various formats suitable for them.

It could be much simpler if organizations such as MACO and NGO's could encourage the production of material by local agriculturists who will take into consideration the language and other local factors. Agricultural information would also be produced in Bemba, Luvale and Kaonde, as this will reduce translation costs of materials.

(4) AMIS must ensure that information provided is of quality by making sure that it is. Timely; information is made available on time and not outdated, but current and latest. Accurate; reflecting true scenario and without errors. Adequate; containing enough details to enable farmers make correct decisions. Clear; easy to understand and use.

(5) Gatherings in cooperatives/unions should be encouraged as that will enable farmers to share knowledge and experiences, which will facilitate the exchange of accurate market information between organizations, communities and individuals. There should be an effective crop marketing system for the small-scale farmers in Ipafu who are currently being heavily exploited by urban business people/brief case businessmen.

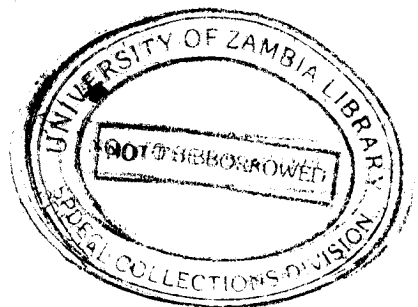
(6) The concerned government bodies (CSO and MACO), in cooperation with the local and international partners of development, should demonstrate high commitment and practical deeds by working towards enhancing the crucial role of well functioning agricultural markets as an incentive to a sustainable increase in agricultural production and productivity and also making the agricultural sector play its traditional roles in facilitating national economic development.

(7) Local farmers should be encouraged to become stronger sellers by building their capacity in the following areas:

- Encouraging the development of farmer groups and cooperatives to bulk-up the farmers' produce, to clean and grade it. this can be easy to market by marketing organizations

- Assisting such groups and cooperatives access finance to enable them construct structures, such as, roads and markets, this can help in marketing.

(8) The growth and development of information and communication technologies (ICTs) should be encouraged and promoted by government and donor agencies through adequate funding and material support as that will led to wide diffusion and application of market information, thus increasing economic and social impact amongst farmers and all citizens at large. The ICTs include use of mobile phones, handheld computers or digital personal assistants (PDAs), CD-ROM, geographic information systems (GIS), Global Positioning System (GPS), digital TV and radio, low- and high-frequency radio frequency technologies, imaging and acoustic technologies, websites and web logs, and email-based information services in collecting, analyzing and disseminating information.. Though expensive, they can be very effective.



BIBLIOGRAGHY

- ASIP Consultative Forum (ACF) (1999). **Proposed Marketing Mechanisms for Fertilizer for 1999/2000 Season**, Lusaka, Zambia.
- Durrani, S. (1987). **Agricultural Information Services in Kenya and Third World Needs**. Journal of librarianship.
- Kaniki, A.M. (1988). **Agricultural Information Services in Less Developed Countries**. International library review,
- MACO and FSRP (2003). **“Improving the Transfer and Use of Agricultural Market Information in Zambia: A User Needs Assessment.”** Food Security Research Project (FSRP), Lusaka, Zambia.
- MACO and FSRP (2003). **How will the Proposed Crop Marketing Authority Affect Food Market Performance in Zambia?** Food Security Research Project (FSRP), Lusaka, Zambia.
- Meyer, H.W.J. (1996). **Impact of User Behaviour on the Transfer of Information**. South African journal of library and information science,
- Ozowa, V.M. (1995). **Nature of Agricultural Information Needs of Small Scale Farmers in Africa: The Nigerian example**. Herald of library science,
- Thurlow, J. (2004). **“Growth Options and Market Opportunities for Zambian Agriculture”**. International Food Policy Research Institute. Washington

APPENDICES

APPENDIX I: QUESTIONNAIRE

The University of Zambia
School of Agricultural Sciences
Department of Agricultural Economics
P.O Box 32379
Lusaka

Dear respondent

I am pleased to inform you that you have been randomly selected to answer this questionnaire.

I am 5th and final year student at the University of Zambia in the School of Agricultural Sciences and hereby carrying out a research for my final year Thesis. The study is looking at Agricultural Market Information; Availability and Needs of Small Scale Farmers in Ipafu.

Data collected will be highly confidential and will strictly be used for academics purposes.

Your cooperation will be highly appreciated

.....

Yours faithfully
Davies Chansa Sumaili.

STRUCTURED INTERVIEW

The purpose of this research was to establish the agricultural market information needs of farmers, its availability and the extent to which the agricultural market information needs of farmers in Ipafu (Chingola rural) met.

1. Personal information

1.1 Age Group

- Less than 35
35 – 49
50 – More

1.2 Gender

Male Female

1.3 Marital Status

- Single Married
Widowed Divorced

1.4 Communication/language(s) preferred

- English Bemba
Kaonde Luvale

Other (please specify) _____

1.5 Size of farm(s)

- Small (10 hectares and below)
Medium (11 – 50 hectares)

1.6 Major farming activities practiced (you can select more than one)

- Beef cattle
Cash crops
Dairy farming
Piggery
Poultry farming
Root crops
Subsistence crops

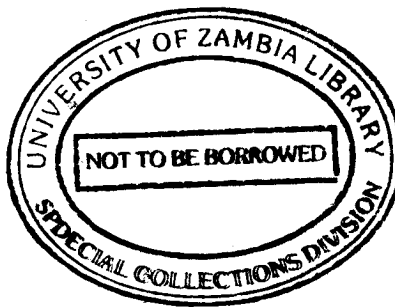
Other (specify) _____

1.7 Level of education of farmer

- None
Primary school
Secondary
College diploma
University degree
Post-graduate degree

Other (please specify) _____

2. Need and Use of agricultural market information



2.1 For what purpose do you need agricultural market information? (Can select more than one category if applicable)

- Market Production decisions
- Accessing inputs
- Processing of primary products
- Policy development
- Other (please specify) _____

2.2 What type of agricultural marketing information do you need? ? (Can select more than one category if applicable)

- Agric-commodity prices
 - Input price
 - Potential Markets
 - Competitors
 - Others (please specify) _____
- 2.3. How are your needs for market information met? Not met
 Partially met
 Fully met

2.4 if not satisfactorily met, how and in which was has that affected you as a farmer?

2.5 In what ways do you get information? ? (Can select more than one category if applicable)

- Bulletins
- Statistics
- Newspaper extracts
- Advisory services
- Public education
- Seminars
- Community markets
- Others (please specify) _____

3 Organizations providing information and information satisfaction

3.1 From which organizations do you get agricultural marketing information?

- MACO/Government
- CSO
- Radio stations
- Print Media
- TV stations
- NGOs
- FRA
- Agricultural unions/co-operatives
- Other (please specify) _____

3.2 How would you rate the agricultural market information obtained from these organization(s)?

	Timely	Accurate	Clear	Adequate
MACO/Government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CSO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radio stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Print Media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TV stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NGOs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Yes No

