AGRICULTURAL PRODUCT MARKETING: CHALLENGES TOWARDS A COMMERCIAL APPROACH WITH PARTICULAR REFERENCE TO CEREAL CROPS (A CASE STUDY IN BAHIR DAR ZURIA WOREDA)

BY: ABEBE KEBIE HUNEGNAW

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University In Partial Fulfillment of the Requirements for the Degree of Master of Arts in Regional and Local Development Studies

July, 2007

Addis Ababa

AGRICULTURAL PRODUCT MARKETING: CHALLENGES TOWARDS A COMMERCIAL APPROACH WITH PARTICULAR REFERENCE TO CEREAL CROPS (A CASE STUDY IN BAHIR DAR ZURIA WOREDA)

BY: ABEBE KEBIE

Approved By Board of Examiners

Chairman of graduate committee	signature
Issac Paul	Iscaet T.
Advisor	signature
Gezahegn Ayele	
External examiner	signature
Worineh Negash	
Internal examiner	signature

Acknowledgement

I would like to express my gratitude and appreciation to any one who have contributed to the study one way or another. Specifically I would like to thank the following individuals and institutions.

First I would like to express my special thanks to my Thesis advisor Issac Paul (PHD) for his invaluable suggestions, advice and constructive criticisms he be has been giving from the inception to the completion of the study.

Secondly I would like to express my gratitude to the data collectors and enumerators who participate in the study and have done their job with due care. In addition I would like to thank staff members of 2A computer center in BahirDar particularly w/Z Etsegenet Asrat for her typing and computer related help she rendered for me. I am also indebted to GAMBY College of Medical Sciences for it has render computing services for me during the study.

I am also grateful to farmers who have been covered in the study for they have taken time to respond to the questionnaire administered to them. in addition I would like to express my special thanks to different institutions mainly Ministry of Agriculture, Ethiopian Livestock Research institute (ILRI), Amahara Credit and Saving Institution (ACSI), and Amahra Region Agricultural Bureau for they have provided me with different data and library accesses which I was in need during the study.

Finally, I would like to say thanks to **God**.

Table of Contents

List of Tables and Graphs

Page

Tables

Graphs

ACRONYMS

AAU: Addis Ababa University

ACSI: Amhara Credit and Saving Institution

ADLI: Agricultural Development Industrialization

AMC: Agricultural Marketing Corporation

ANRS: Amhara National Regional State

BOF & **ED**: Bureau of Finance and Economic Development

CADU: Chilalo Agricultural Development Unit

CSA: Central Statistics Authority

EGTE: Ethiopian Grain Trade Enterprise

EOPEC: Ethiopian Oil and Pulses Exporting Agency

FDRE: Federal Democratic Republic Of Ethiopia

GDP: Gross Domestic Product

MPP: Minimum Package Program

MFI: Micro Finance Institutions

IDR: Institute of Development Research

IFPRI: International Food Policy Research Institute

ILRI: Ethiopian Livestock Research Institute

RGDP: Real Gross Domestic Product Growth

WADU: Wollaita Agricultural Development Unit

Abstract

Agriculture is the main stay of Ethiopia's economy and it is the point of concern in today's policy arena. The present government has given a due and prior importance to the sector and have subscribed to Agricultural Development led Industrialization policy as basic strategy of the economy. However, Ethiopian agriculture is intertwined with multiple problems such as traditional means of farming along with minimum use of modern imputes; ever increasing population and consequently small amount of plot per household; poor market infrastructure which is characterized by insatiability of prices, financial and credit problems, post harvest losses, transportation and communication problems, high and exorbitant transaction costs etc. Market among other things play a make or break role in agricultural development and transformation since increase in production is no more than useless in the absence of efficient markets.

This study aims to asses the challenges of agricultural product marketing with reference to cereal crop producing farmers in Bahir Dar Zuria woreda in terms of production, pricing and distribution of agricultural crops and identifying the major actors in the sector at the woreda. To this end a survey was made on 200 farm households selected from the woreda and the data obtained from the survey (from184 valid cases) was analyzed using descriptive statistics such as percentages, frequencies and graphs.

It was learned from the study that farmers who produce the products, consumers who purchase the products for consumption (both rural and urban), retailers and assemblers who purchase the products for profit purpose are the main actors of agricultural product marketing at the woreda level. Majority of farmers in the study woreda are subsistence oriented in their production decision and hence their business/commercial motive is low. They mostly select the products that they cultivate in line with crop rotation needs, land suitability for the crop under consideration and food habit of the family members and the society around. Their consideration of market prices is low. Land scarcity and lack of finance to buy agricultural imputes are the main problems of the farmers. When it comes to pricing most farmers are not informed about the price of similar products in other woredas due to lack information and communication technologies. Distribution wise majority of the farmers transport their products by traditional methods mainly through animal backs such as donkeys and mules.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

For long time in the past development, policies and strategies have been biased in favor of the urban population. In developing nations like Ethiopia given that the majority of the population, around 85 percent lives in rural areas and depends on agriculture for its livelihood from this sector, subscribing to urban biased development paradigm was found to be un recommendable (Lipton cited in Fasil G/Kirstos, 1993). Accounting for over 40 percent of the GDP, 80 percent of the export, 85 percent of the labor force and remaining the major source of food for urban areas and raw materials for the manufacturing sector agriculture remains the main economic sector of Ethiopia (Birhanu, 2003).

> *According to CSA 2002 10, 7380,000 small farm holders cultivated 9,153,510 hector in 1999 / 2000 that comprises 93.7 percent of annuals, the rest permanent crops at an average area of 0.79 hector per house hold. About 95 percent of cultivated land is under smallholder agriculture the rest under state and commercial farms. Therefore, Ethiopia's development and food security is dependent on the performance of smallholder farming system. (Workneh and Roth, 2002).*

Agricultural productivity is low in Ethiopia even as compared to other sub Saharan nations (Birhanu, 2003. The present government of Ethiopia has given a due prior emphasis to the agricultural sector and has designed Agricultural Led Industrialization (ADLI) as basic strategy of the economy (Brhanu, 2003). This strategy gives a prime importance to the rural

population and the agricultural sector. Among other things the government believes that the development of the agricultural sector depend on the existence of efficient market system. Therefore, emphasis has been placed on market and market related issues in order to enhance sustainable development driven by the agricultural sector.

The type of economy that we live in today is called market economy because no matter how many other factors are introduced to the commercial process, market will be the final adjudicator in such economic system at least theoretically. Even if other factors play a critical importance in economic activity, market remains the motive for all activities. In the absence of effective market, production no matter how it increases is less than useless.

Market function is essentially critical in allowing new farmers in to the main stream and their success and sustainability in the system will be determined much more by their participation in markets rather than by their increased competitiveness in production. Therefore, it should be noted that creation of appropriate market system plays a pivotal role for agricultural development and transformation (Workineh and Roth, 2002).

As part of furthering the enforcement of market liberalization, market centered agricultural development, aims at linking small holders to both international and domestic market through improving their productivity and competitiveness.

The marketing of agricultural product is unique that desires special attention, due to perish ability, bulkiness and seasonality of products involved. The fact that agricultural products are basic food staffs whose price and distribution are considered strategic by government also lead to the establishment of parstatal institutions with the agricultural marketing

sector. Of course, the establishment of such parstatals has been a point of debate for long.

For example, in Ethiopia during the pre 1991 Dreg regime due to the socialist ideology of the government the private sector was replaced with a government parstatal called the Agricultural Marketing Corporation, (AMC) which was the prime actor is the sector. However, in the post 1990's market liberalization has lead to restructuring of the former state monopoly the (Agricultural Marketing Corporation), the removal of quotas and movement restrictions and price setting (Kuma and Mekonen, 1995). Yet according to Mohammed (2004), the above reforms did not spontaneously lead to the emergence of market order due to poor infrastructure, weak and highly fluctuating terms of trade, inefficient input and output marketing, lack of market information, inadequacy of developed financial markets and other related factors.

Although agriculture is the main stay of the Ethiopian economy agricultural productivity and production is among the lowest in the world leading to poor economic growth and chronic food in security in some part of the country. The reasons for the poor performance of Ethiopian agriculture are many. The traditional methods of farming with minimal use of modern inputs, lack of favorable pricing and marketing polices, poor infrastructure, mistaken policies of past governments bear much responsibility (Tegenge,1995). Cognizant of this fact and the potential of agriculture as an engine of economic growth the present government of Ethiopia had launched an Agricultural Development Led Industrialization policy. In due course, however it was recognized that productivity growth alone could not ensure poverty alleviation and agricultural transformation. The role that efficient markets play in this regard has become a point of concern to policy makers and other stakeholders in the sector. Now a days there is a consensus that poverty alleviation cannot be recognized unless the farming sector is transformed from subsistence farming to market oriented production of agricultural products that have higher market demand.

Policy documents like Revolutionary Democracy Development Directions and Strategies (text in Amharic 1992 E.C.), Rural Development Polices and Strategies (2003) and Sustainable Development and Poverty Reduction Programs emphasis the importance of agriculture in the development endeavor of Ethiopia.

From the two approaches towards commercialization, that is state farm approach and peasant agriculture approach, peasant agriculture is given a prior importance in the policy documents. The policy documents however rationalized that although priority is given to peasant agriculture, large scale modern farming should not be by no means ignored.

1.2. Statement of the Problem

Though Agriculture is the prime economic sector in Ethiopia, and has been given a prior attention in different strategy and policy documents(FDRE 2002), the sector is intertwined with multiple problems such as recurrent droughts, environmental degradation, population pressure consequently low agricultural land per individual household, low private investment in the sector and lack of appropriate marketing system and institutions.

Among other things, this study focuses on the marketing problems of agricultural products. In the development strategy of Ethiopia, it is expected that agriculture will bring about structural change in the economy of the nation via its forward and backward linkages with other sector of the economy. However, given the above problems it is hard to expect that agriculture will achieve its objectives.

Market among other things is an important factor. Given that there are varieties of climatic zones in the nation, a crop that is well cultivated in some parts of the country may be in a meager supply in other part of the country. Consequently, if the market is not working well some people will

suffer hunger in some areas while some people are suffering due to lower prices (lack of demand) for their products at another place. Therefore, in the absence of appropriate marketing system, farmers will be less motivated in intensification of their products and increase in production will not be more than useless. Éleni and Wolday have expressed the importance of markets in agricultural development as:

> *When markets function, efficiently agricultural products can be converted in to cash through sells and in return, cash will be used to purchase food, input and other goods. This offers scope for specialization and increased productivity through realizing the gains of commercial advantage (Eleni and Wolday, 2003).*

However if the agricultural marketing system did not work efficiently it will be difficult for the nation (Ethiopia) to achieve modern commercial agriculture. Though agriculture is given a pivotal position in Ethiopia, the Ethiopian agriculture is subsistence oriented. Product commercialization is low. commercialization is defined as:

> *Deliberate action on the part of agricultural producers on their own free will or by means of coercion to use the land, labor, implement and other input (owned, purchased, hired, borrowed, obtained on credit or on customary arrangements reciprocal or not) in such a way that a greater part of the crop produced and / or animals raised is for exchange or sell (Workneh and Roth, 2002).*

The point here is transforming this subsistence based agricultural in to commercial agriculture via creating market opportunities and making farmers activities market driven. Therefore, improving market access and functioning of markets themselves is pivotal for increasing agricultural

commercialization. Market access implies that small holders and other in the market chain have the necessary information along with physical and financial means to purchase inputs and sell out puts. Markets that are more competitive imply lower marketing costs, better prices for farmers and consumers, more efficient market service, transport, and communication net works are essential for an efficient market system for farmers and traders to conduct their marketing activities effectively. Access to credit is of vital importance for working capital. Timely and reliable information is also required for accessing both domestic and external markets (Bekele, 1995).

However, the market system in Ethiopia is characterized by instability of prices, financial and credit problems, postproduction losses, transportation and communication problems, grading and standardization problems, lack of information, high and exorbitant transaction costs, low motivation of farmers to produce for market etc...

1.3. Objectives of the Study

General Objective

The general objective of the study is to assess the challenges of agricultural product marketing in terms of production, pricing and distribution and its implication on transforming agriculture towards a commercial based approach.

Specific objectives

The specific objectives of the study include:

1. To identify the main actors of agricultural product marketing and their roles and relationship at woreda level.
2. To identify the main challenges that producers face in marketing their products with regard to their production, pricing and distribution decisions.

3. To assess factors that determines farmers' choice of products and the relative importance of market in this regard.
4. To assess the factors that determine the amount of marketable surplus that farmers produce and provide to the market
5. To identify the main factors that affects commercialization and intensification of agricultural product and determines the relative importance of market in this regard.
6. To give policy recommendation based on the finding of the study.

1.4. Research Questions

1. What/who are the main actor in agricultural product marketing, and their relative roles at woreda level?
2. What are the key challenges that farmers face in marketing their agricultural products in terms of production, pricing, and distribution?
3. What factors determine farmers' choice of portfolio (different kinds of products they produce)? , and to what extent marketing affects their decision?
4. Is lack of market a major reason that affect intensification and commercialization of agricultural crops?
5. What are the factors that determine the amount of marketable surplus that farmers provide to the market?

1.5. Scope of the study / Delimitation of the Study

Agricultural products encompass a wide variety of products. It will be difficult, if not impossible to deal about all kinds of agricultural products, which have variety of nature, and specific marketing challenges in a single research like this. Therefore, the scope of this paper / study is delineated to agricultural products that are called cereal crops. Geographically this study focuses on Amhara National Regional State, Bahir Dar Zuria woreda.

1.6. Justification /Significance of the Study

Agricultural is a prior issue and a point of debate in today's policy arena of Ethiopia. Establishing efficient agricultural product market is also emphasized to foster agricultural development. Therefore, the result of this study will have important contribution to the policy arena. Individuals or institutions working in this policy arena will get important lesson out of it. In addition, the study will add its part in terms of knowledge in the area and hence future researchers' and policy makers can use it as a springboard.

1.7. Organization of the Study

The paper is organized in to five major chapters. The first chapter of the paper is the introduction section of the study. After the Introduction in chapter two the research methodology and a brief description of the study area is made. The review of related literature and analytical framework are presented in chapter three. Chapter four include discussion and analysis of the research results while chapter five gives conclusion and recommendations based on the results of the research.

1.8. Limitations of the Study

This research endeavor has been challenged by different factors and hence it has its own limitations that have to be taken into consideration. In the first place, as it is common in many surveys response biases in the side of respondents, in this case farmers, has to be expected since mostly individuals may understate or overstate their responses. In addition, resources such as time and money were in scare supply. Particularly in terms of time, the research was expected to be completed in a period, which at most is not more than half a year, which was highly demanding. Moreover, some farmers and offices have shown resistance to give information at the data collection phase of the research.

CHAPTER TWO

LITERATURE REVIEW

2.1. The Evolution of Agricultural Marketing in Ethiopia

In the past decades, Ethiopian agricultural marketing system has gone through a number of structural changes and transformations. Like any policy arena the policy environment in agricultural marketing was highly related to the kind of governments and the type of economic policies those governments were adopting. These the agricultural marketing system in the nation changes at any time of government change since policy making in Ethiopia is not mostly incremental in approach. Therefore, agricultural marketing has gone through both evolutionary and revolutionary changes and transformations (Dejene, 1995).

The different historical stages through which the Ethiopian agriculture marketing has gone through can be divided in to three basic periods. These periods include the imperial period which is pre 1974, the socialist period which is 1975 to 1990 and liberalization and deregulation period which is 1990 to date. Each stage has got its own strategies and policies towards the development of agricultural markets in the country.

2.1.1 The Imperial Regime (Pre-1974)

It was in the 1950s that the initial policy attempts were made to regulate grain marketing in Ethiopia and hence the Ethiopian Grain Marketing Board (Proc. No. 113 / 1950) and the Ethiopian Grain Corporation in 1960 (legal notice number 207 /1960) were established by the then imperial regime (Wolday,1995). In addition the emphasis given to the development of agricultural market development was marked by the subsequent development of strategies and policies such as the third five year Plan (

1968 - 73) that gives a great deal of attention to the strategic importance of agricultural marketing in the economic system of the nation. During this period, different agricultural development programs such as (CADU, WADU and others) were introduced in the rural development strategy of the then imperial regime. The objectives of these projects as stated by (Gezahegn, 1995) were:

> *The project were aimed at protecting farmers in their respective operational areas from exploitation by private traders through purchasing their products at prices higher than local market prices during harvest season and storing them until saling prices are favorable.*

However, according to Gezahegn (1995), the projects were not as successful as expected in achieving their market related objectives. In the first place, these projects handled only an insignificant proportion that only amounts 5 percept of the marketable surplus in their respective operational areas which makes their impact on the market insignificant. Secondly the operational costs of these projects were found to be exorbitant than the private sector it self. Therefore, due to these couple of reasons the projects could not achieve in transforming the agricultural marketing sector towards a developed, systematic and viable one.

2.1.2. The Age of Market Regulation/ Before Market Liberalization (1975 – 1990).

Clear to every body, this period in Ethiopia was most remembered for its socialist ideology thereby subscribing to command economic policy paradigm and hence the fate of the agricultural marketing sub sector was not different. The period was characterized by massive government/state intervention in the agricultural marketing activity of the nation as it does in other sectors too. The private sector played a minimal role in the sector. The

two government giants the then Agricultural Marketing Cooperation (AMC) and Ethiopian Oil seeds and Pulses Exporting Enterprise (EOPEE) were the two government parstatals that were involved in marketing of agricultural products in between 1979 to 1990.

During this period producer's /farmers/ were forced to sell their produce on quota basis to AMC at a price that is most of the time lower than the private marketing price. Moreover, there was an imposition on grain traders to supply to AMC from 50 to 100 percent of their grain purchases. Besides there were strong strict control on the free movement of grain from place to place with the so called "kellas"/cheek points (Alemayehu, 1987). In addition, Wolday (1995) stated the situation as:

> *During 1980 to 1989 domestic grain marketing in Ethiopia had been regulated by the government to control wholesell trade as part of the socialist economic policy. Policy instruments used to enforce regulation include among others compulsory delivery of grain by farmers/producers and traders to the Parstatal (AMC) at a fixed price, the banning of private traders and the restriction on inter regional grain trade. These measures suppressed private grain trading and have a far reaching impact on grain production and movements of grain from surplus areas to food deficient areas.*

These all regulations have negatively affected the income of farmers thereby decreasing their motivation of production. Moreover the policy had limited the spatial / and temporal integration of markets. Subsequently, the quota policy at low fixed prices combined with restriction of private grain trade and free movement of grains from place to place had resulted in different effects. Some of the effects include depressing rural income, transferring resources from rural house holds to relatively small groups of urban

households through artificial cheep food prices, depressing cereal production in the nation at large and decreasing the motive of farmers to increase production (Fasil G/Kirstos, 1993).

The government's prime motive in fixing prices may have been to hold down food prices in urban areas; however be the price system for agricultural products has not been favorably received by a large number of peasants with out a comparable policy with regard to manufactures and other items of peasant consumptions. It will be difficult to expect peasants to be well disposed to what is offered to them for their produce.

The main issue here is not that just peasants are unhappy about the price policy but the repercussion it will have on rural production. If peasants were dependent on the market system as well as on the national economy a price structure unfavorable to them might be tolerated for a while, peasants however do have an option, and they can hold back their surplus from the market at any time and all their motives for increasing production will decrease (Desellngn 1984).

2.1.3. After Market Liberalization / Post Liberalization (1990 to Date)

In March 1990 due to sustained donor and internal political pressure compounded with the worsening economic condition forced the government to deregulate the market. Deregulation caused several effects; both desirable and undesirable on the structure and performance of grain markets structure. According to Alemayehu (1998), the major effects of deregulation on the gain market structure include a whole sell shrinkage of the public grain purchase network and substantial decline in parstatal grain procurement and sells on one hand and increased proportion of the market handled by the private sector. The deregulation has forced the parstatal (AMC), to accept new marketing conditions and make new institutional

reforms such as closure of zonal offices, the leasing out of excess storage capacity and the laying of surplus labor. In contrast deregulation has prompted grain trade by restoring traditional grain markets by putting the experienced people in their jobs, by allowing new farms to enter to grain trading, by creating employment opportunity to thousands of people, by enabling traders earn greater profits and by instilling confidence with respects to credit advances and investment in further grain trading.

Like traders' grain, producers/ farmers have benefited from a significant increase in grain prices, availability of information. However, consumers have lost in terms of price because of reforms due to removal of subsidy and subsequent increase in prices of produce. Generally, after deregulation the private sector expands and largely becomes competitive and more efficient than the parstatal.

However Mohamed (2003) argues that despite the extensive liberalization policies in the agricultural marketing sector such as dismantling of the former state monopoly (the Agricultural Marketing Corporation), the removal of quotas and movement restrictions and price settings ... It didn't lead to a spontaneous emergence of market order nor has it benefited the small holder farmers.

Ethiopia after 1990s, has subscribed to 'free market' approach towards the agricultural marketing. The major bottlenecks of the agricultural sector such as quota system, fixed Prices, restrictions on free movement of grains from place to place via 'Kellas' and other regulatory mechanisms which were in place during the socialist period are abolished. In addition to the above reforms the main governmental parstatal, AMC, which played the main role during the socialist period was restructured. As part of the restructuring, AMC was recognized as Ethiopian Grain Trade Enterprise (EGTE) with more or less similar objectives in the past. However, this time it was recognized as

an autonomous public enterprise and it was exposed to market forces to freely compete for survival with out any government backing (Wolday, 1995).

Presently the Ethiopian government has given a prior emphasis to agricultural sector and has designed Agricultural Led Industrialization (ADLI) as a strategy of the economy. In addition, emphasis is given to the importance of market. Today there is even a move towards the establishment of commodity exchange markets on selected agricultural products mainly on cereal agricultural products (Eleni, 2007).

2.2. Challenges of Agricultural Marketing

Different Studies have been made in the situations of Ethiopian agricultural market (Eleni and Wolday, 2003; Alemayehu, 1998; Grmia, 2003; Muhamed, 2003) however all these studies approach marketing in a narrow perspective, which they mostly adhere to the process of exchange. In reality, marketing goes much more than simple exchange process.

Among the different market systems in Ethiopia grain marketing is the largest one in terms of the volume of products transacted, the number of producers /farmers, consumers and other stakeholders involved. This is simply because the Ethiopian economy is highly dependent on the agricultural sector that amounts 80 percent of the labor force and 40 of the GDP of the nation (Kuma and Mekonen, 1995). No wonder that millions of farmers / producers, consumers and private agencies are involved in the production, consumption and marketing of grain and the provision of different marketing functions such as buying, selling, transporting, storing, processing of grains.

Though the grain market is of a lion share in Ethiopia, it is intertwined with multiple problems. According to Mohamed (2oo3) the agricultural product marketing sector in Ethiopia is characterized by problems such as

instability of prices, finance and credit problems, post production losses, transportation and communication problem, grades and standards problem, lack of storage capacity, lack of processing, Lack of adequate and timely information, higher and exorbitant transaction costs.... Even if there are many problems that agricultural marketing in developing nations in general and in Ethiopia in particular face as stated in many literatures, the major problems are the following.

2.2.1. Inadequate Modern Storage Facility

After products are produced they have to be stored until they are consumed or time comes for sell. Lack of modern storage facility is one of the key problems that agricultural producers in Ethiopia face. Modern and appropriate storage facilities have important marketing advantages such as keeping the quality of the products, avoid post production loses etc.

Since most of the time Ethiopian farmers produce for consumption / subsistence/ they retain their grains in poor quality traditional stores that causes damages to the grain caused by different insects such as termites rodents, moisture and other pests (Gebremeskel cited in Wolday, 1995)). According to him, even the privately owned grain stores of traders are also poorly constructed which most of the time are substandard, with dirty floors, mud plastid and with poor ventilation facilities.

2.2.2. Grain Quality problem

Quality remains the focal point of any marketing activity. As far as Ethiopian agriculture is concerned it uses traditional technologies that may lower the quality of products one way or another. Poor quality of agricultural products in Ethiopia is attributed to mismanagement at farm level by the producers themselves and lack of standard and appropriate warehouse storage facilities both at the levels of producers and traders (Gebremeskel

cited in Wolday, 1995)). Lower quality of agricultural products will cause other marketing problems such as increasing the transaction costs in the marketing channel since clearing of grains before delivery may be recommended by some buyers. In addition, poor quality of grains may cause inconvenience on the side of consumers and others who are part of the marketing channel.

2.2.3. Inadequate Market Information

Information plays a critical role for efficient marketing system. However, the Ethiopian agricultural marketing system is characterized by lack of right information at the right time. That is the Ethiopian agricultural marketing system has poor marketing information system (MIS). Commercially useful data is in a scarce supply in the sector.

Decision by farmers and traders on what crops to produce and trade; where and when to purchase and sell; what kind of investments to make all depends on access for accurate and timely information. According to patric D. and Daniel (1995), improving farmers and traders' awareness of prices in various markets through out a nation promote market efficiency by:

> *encouraging grain flows from relatively surplus areas to relatively deficient areas, improving farmers / producers decision and confidence regarding what to plant, how much to invest and where and when to market their products, promoting a more competitive marketing system which will benefit both producers and consumers.*

Particularly small scale farmers and traders especially in remote areas might benefit from better dissemination of information, improving their negotiation power and their ability to make production investments and marketing decisions.

In addition to price data farmers and traders need also better information on stock levels for various crops in various markets as well as information on alternative technologies and income earning opportunities. Lack of good information for market participants leads to relay on relatively low productivity subsistence production for their food needs. Dissemination of information is thus one of the important elements to transform Ethiopia from subsistence and low productive agriculture based economy in to modern exchange oriented commercial agriculture that will be base for industrialization (FDRE (2003).

Farmers also lack timely and accurate information to strength their bargaining power with grain traders. Traders in the interior receive current prices information through brokers located in the terminal market. Such information is usually received through telephone calls, and messages delivered by truck drivers.

Grain marketing is an important link between producers (selling grain) and consumers (buying grain). Over 85 percent of the population living in rural areas particularly those producing grain benefit as sellers (if they produce for market) while 14 percent of the population living in urban areas benefit from efficient grain markets as buyers (Alemayehu, 1998). Grain merchants, transporters, and those involved in processing industries could also benefit. However, this all benefits can be materialized if an appropriate information system is in place.

2.2.4. Transportation

Poor infrastructure is one of the constraints for efficient market system in the agricultural sector. In developing nations in general and Ethiopia in particular, the agricultural sector highly depends on roads as means of transport (Giorghis, 1999). The fact that Ethiopia is one of the nations with

the lowest road densities makes the problem worse. Eleni and Wolday cited in Tegenge, 2005) explain the transportation problem as follows:

> *The fact that almost all agricultural products are transported by roads implies that access to roads is an important factor in agricultural product marketing. Ethiopia with an average of only 21 km per1000km or 0.44km per1000 persons has one of the lowest road net works in Africa. Limited road network increase consumer price and penalize producers. Market level survey shows that rural markets are connected with the central market by poorly paved roads and many of the roads to villages are not motor able during the rainy season.*

In adequate road networks will lead to inadequate access to input and out put markets and services, higher transaction costs, disincentives for adoption of new technologies etc

2.2.5. Transaction Costs

All the problems mentioned above contributed to higher transaction costs one way or another. Transaction costs play a prohibitive role in efficient marketing activity.

Transaction costs among others include the bureaucratic costs associated with managing and coordinating integrated production, processing and marketing, the opportunity cost of time used to communicate with farmers and co-ordinate them, the costs involved in establishing and monitoring long term contracts. It also include issues like the screening costs linked to uncertainties about the reliability of potential supplier or buyers , the uncertainty about the actual quality of the goods, the transfer costs

associated with the legal / physical constraints on the movement , transfer of goods and handing and storage costs and so forth (kotler ,2001).

2.2.6. Lack of Credit and Appropriate Agrarian Reform

In addition to the above problems, agricultural marketing system in Ethiopia had been seriously impaired by lack of appropriate credit facilities and agrarian reforms in the previous regimes. If agrarian reform is required to create the conditions for a vibrant economy, it must begin to meet the needs of the peasantry and to satisfy its interest. Many scholars argue that a system combining attractive prices for agricultural products, better marketing services, and inducement towards greater reliance on exchange will be important to improve productivity of farmer there by their commercial participation. The major goal of agrarian reform mainly transformation of peasant agriculture will occur if the market acts as a productive force and the main purpose of production becomes commercialization rather than consumption (Desellgn, 1994).

Lack of credit will in return lead to lack of inputs including fertilizers, improved seeds, pesticides, oxen and farm implements and other technologies (Bekele, 1995). Of course, today different cooperatives and micro finance institution are working in rural areas to minimize this problem of finance. However, these financial institutions have their own limitations and problems such as exorbitant interest rate, in appropriate payment period, group collateral that ignores the poorest of the poor. Farmers have serious credit problems for their household requirements (Gebrehiwot, 1989).

During the imperial period, the development of the agricultural marketing sector was retarded by a number of factors, including tenancy and land reform problems, the government's neglect of the agricultural sector (agriculture received less than 2 percent of budget allocation even though

the vast majority of the population depend on agriculture), low productivity, and lack of technological development. Moreover, the emperor's inability to implement meaningful land reform perpetuated a system in which aristocrats and the church owned most of the farmland and in which most farmers were tenants who had to provide as much as 50 percent of their crops as rent (Alemayehu, 1987).

Although the issue of land reform was not addressed until the 1974 revolution, the government had tried to introduce programs to improve the condition of farmers. In 1971, the ministry of Agriculture introduced the minimum package program (MPP) to bring about economic and social changes. The MPP included credit for the purchase of items such as fertilizers, improved seeds, and pesticides, innovation extension services, the establishment of cooperatives; and the provision of infrastructure, mainly water supply and all- weather roads. The program, designed for rural development, was first introduced in a project called the Chillalo Agricultural Development Unit (CADU). The program later facilitated the establishment of similar internationally supported and financed projects at Ada (just south of Addis Ababa), Wolita, and Humera. By 1974, the ministry of Agriculture's Extension and Project Implementation Development (AEPID) had more than twenty- eight areas with more than 200 extension and marketing centers. Although the MPPS improved the agricultural productivity of farmers, particularly in the project areas, there were many problems associated with discrimination against small farmers (because of a restrictive credit system that favored big landowners) and tenant eviction (Desellngn, 1984).

Imperial government policy permitting investors to import fertilizers, pesticides, tractors and combiners free of import duties encouraged the rapid expansion of large-scale commercial farming. As a result, agriculture continued to grow, however below the population growth rate. According to

the World Bank (cited in Fasil, 1993) agricultural production increased at an average annual rate of 2.1 percent between 1965 and 1973, while population increased at an average annual rate of 2.6 percent during the same period.

Agricultural productivity under the Derg continued to decline. According to the World Bank (cited in Fasil, 1993), agricultural production increased at an average annual rate of 0.6 percent between 1973 and 1980 but then decreased at an average annual rate of 2.1 percent between 1980 and 1987. During the same period (1973 - 87), population increased at an average annual rate of 2.6 percent (2.4 percent for 1980 - 87).

The poor performance of agriculture was due to several factors including drought; government policy of controlling prices and the free movement of agricultural products from surplus to deficit areas; the unstable political climate; the dislocation of the rural community caused by resettlement, villagization. In addition, conscription of young farmers to meet military obligations; land tenure difficulties and the problem of land fragmentation; the lack of resources such as farm equipment, better seeds, and fertilizers; and the overall low level of technology also contributed to the poor performance of agriculture.

The 1990 decision to allow free movement of goods, to lift price controls, and to provide farmers with security of tenure was designed to reverse the decline in Ethiopia's agricultural sector. There was much debate as to whether or not these reforms were genuine and how effectively they could be implemented. Nonetheless, agricultural output rose by an estimated 3 percent in 1990-91, almost certainly in response to the relaxation of government regulation. This modest increase, however, was not enough to offset a general decrease in GDP during the same period (Fasil, 1993). Presently government is claming that the continuous economic development

gained in the past four years is due to the Agricultural led Industrialization policy it adopts.

2.3. Marketing and Its Functions

Traditionally marketing is considered as selling and advertising, hence no wonder every day we are bombarded with television commercials, newspaper ads, and direct mail and sell calls. People are always trying to sell us something. Therefore, selling and advertising are only the tip of the marketing iceberg. Although they are important, they are only two o among many marketing functions, and often not the most important once. Today marketing must be understood not in the old sense of making a sell "telling and selling" but in the new sense of satisfying customer needs. If the marketer does a good job of understanding consumer needs, develop products that provide superior value and prices, distributes and promote them effectively these products will sell very easily.

Thus selling and advertising are only part of a larger marketing mix – a set of marketing tools that work together to affect the market place and hence marketing is a social and managerial process by which individuals and groups obtain what they need and want through creating exchange products and values with other.

Therefore an appropriate marketing mix should be developed. Marketing mix is the set of controllable tactical marketing tools that a firm / company blends to produce the response it wants in the target market. It includes every thing that a marketer does to influence the consumer for its products. The many possible activities in this regard may be collected in the form of important variables known as the $4p_s$, namely Products, price, place/ distribution) and promotion.

Product refers to the goods and services that a producer/ service provider offers to the market for attention, acquisition or sell. Price is the amount of money consumers have to pay to obtain the products or service. Place refers to all efforts of the producer that makes the product available at the place of the target consumers. Promotion refers to all kinds of activities that communicate the merits of the product and persuade target consumers to buy it. An effective marketing program blends all of the marketing mix elements in to a co-ordinate program designed to achieve the companies marketing objectives.

One has to bear in mind that the marketing activities of an organization/producer are under the sphere of influence of what is called the marketing environment. Marketing environment refers to the actors and forces outside marketing that affect marketing management's ability to develop and maintain successful transactions with its target customers.

Any marketing activity is exposed to two kinds of environmental forces. The first is the microenvironment - the forces close to the company that affects its ability to serve its customers such as the ability and strategy of the company it self, market channels, customers, competitors. The second is the macro environment -the larger social forces that affect the whole micro environment- such as demographic, economic, natural, technological, political-legal and cultural forces in the larger economic environment (Kotller,2001).

In modern marketing, the agricultural produce has to undergo a series of transfers or exchanges from one hand to another before it finally reaches the consumer. This is achieved through marketing functions such as assembling, preparation for consumption and distribution. The produce may be taken direct to the market or it may be stored on the farm or in the village for varying periods before its transport. Either it may be sold as obtained from the field or may be cleaned, graded, processed and packed by

the farmer or village merchant before it is taken to the market. Some of the processing is done not because consumers desire it, but because it is necessary for the conservation of quality. At the market the farmer direct may sell the produce to the consumer or more usually through a commission agent or a broker. Traders, wholesalers or retailers may also purchase it (workneh, 2005).

2.4. Analytical Framework

Marketing is defined as the commercial functions involved in transforming goods from producers to consumers. Marketing is not just the final transaction of receiving a check. The acts of buying supplies, renting equipment paying for labor, advertising, processing and storing are all parts of the marketing plan. Thus agricultural product marketing is a process that starts with a decision to produce a stable farm product and involves all aspects of market structure or system, both functional and institutional, based on technical and economical considerations. It pertains to decisions such as on production, pricing and distribution of agricultural products.

Of course, the concepts of market and marketing have been given different definitions by different scholars at different time. For example, some people consider market as a place where such as a village corner where buyers and sellers meet for an exchange and they consider marketing simply as a process of exchange between and among buyers and sellers. However, market and marketing are more broad concepts than this. Fore example, market refers to group of people having needs and wants to satisfy, having the ability and willingness to pay for a product and service (referred as demand). As the same time marketing goes much more than exchange process it self. Exchange is just a part of the marketing process; and hence marketing is the process of planning. , executing the conception, pricing, promotion and distribution of goods services, ideas to create exchange with

the targeting groups that satisfy customer and organizational objectives (kotler, 2001).In other words marketing is said to be the kinds of decisions pertaining to the four Ps [product, place (distribution), promotion and pricing of goods and services.]

There are two competing models mostly used to evaluate the performance of a given market system be it agricultural or industrial market system. These are the neoclassical perfect market model and the environment- behavior-performance model. The former is too ideal that contains assumptions such as large number of sellers, large number of buyers, and all buyers and sellers having perfect price and other information. However, these assumptions are rarely present in the actual world(Workneh,2005).

This study is conceptualized on the environment– behavior- performance model developed by Shaffer in1980 (cited in workneh, 2005) that takes in to account different internal and external environmental factors that affect the marketing activities and behaviors of producers one way or another. Therefore the concern of this study is conceptualized in terms of the factors that affect all kinds of marketing decisions of farmers in line with production, pricing and distribution of their agricultural products.

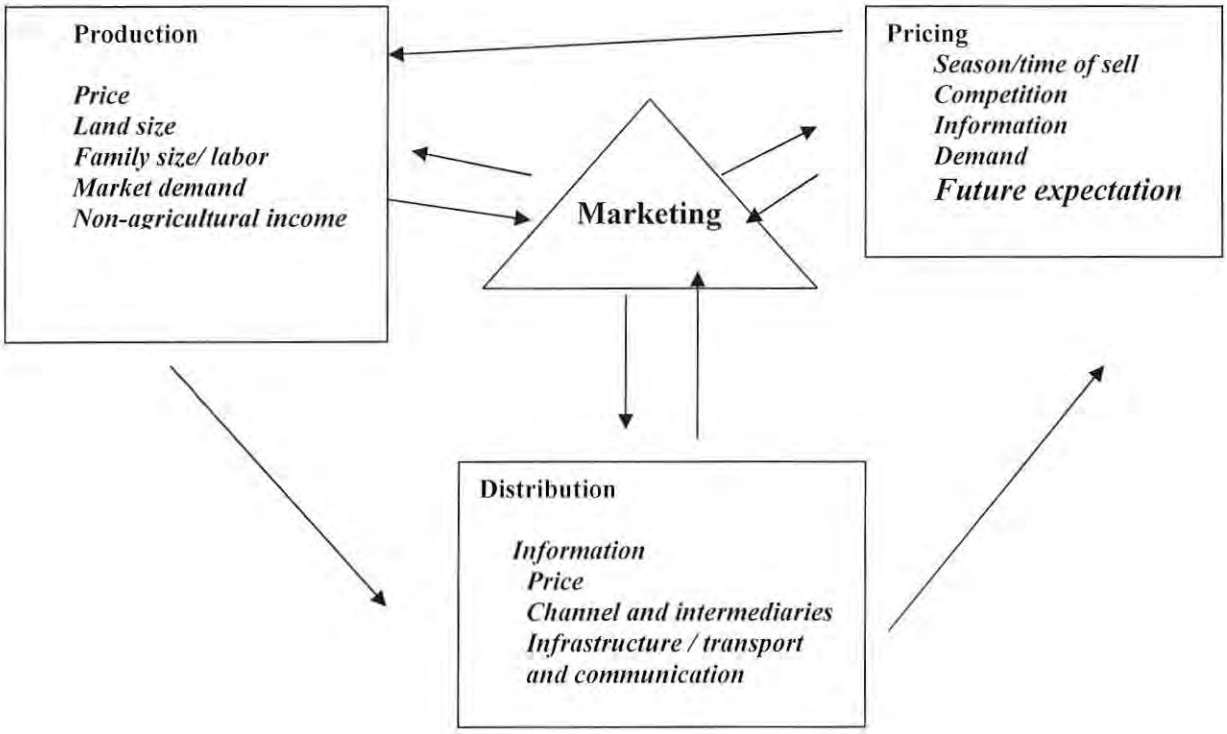
production decisions such as how much to produce and what to produce are affected by land size of the household, family size, market availability of the intended product, presence or absence of nonagricultural income, means of production such as oxen, food habit of the society etc.

Pricing decision is affected by amount of production, season of selling such as immediately after production or waiting fore some time for price rise, price of competitors producing similar or substitute crops. In addition, availability of information about the market situation and future expectation about it also affect pricing decision. Distribution is affected by many of the

above factors plus information, channels and intermediaries involved, availability of infrastructures and means of production.

Generally, the essence of this paper is conceptualized in terms of the decisions pertaining to production, pricing and distribution of agricultural products particularly cereal crops in the study area, BahirDar Zuria Woreda. Factors that affect the production, pricing and distribution decisions of farmers are conceptualized as follows.

Schematic presentation of marketing functions and the environmental factors that affect them



Source: Adapted from kotler, 2001

CHAPTER THREE

RESEARCH METHODOLOGY AND STUDY AREA DESCRIPTION

3.1. RESEARCH METHODOLOGY

3.1.1. Samples / Subjects/ Participants

To make the research out put rigorous a triangulated list of methods of data collection and analysis were applied. Among others, sample survey and unstructured interviews were made with the farmers. In addition, key informant in depth interview was made with officials at Amhara Region Bureau of Agriculture and Rural Development.

Since the objective of the study is to assess the challenges that farmers face in intensifying commercialization and marketing of their products in terms of production, price, and distribution data were collected from individual household cereal agricultural product producers. This means the unit of data collection and analysis is at household level. To this end from the total population a reasonable amount of sample, size that amounts to 200 house holds were selected for the research purpose. Specifically the five kebles included in the sample, the total population each kebele at house hold level and the sample size taken from each kebele is as shown below.

Name of Keble (peasant association)	Total population at house hold level [a]	Sample size taken
Robit Bata	1820	40
Sebatamit	1526	40
Yinessa	1783	40
Kinbaba	2527	40
Maji Debre Nigest	1056	40
Total	8712	200

[a] Total population data is obtained from Bahirdare zuria administration office

3.1.2. Sampling Method

A multistage sampling method was used to reach at the household level. Since it is difficult to include all kebeles in the woreda in the sample, first five kebeles were randomly selected from the woreda for the research purpose. Then to get each individual sample household, unit of data collection, to be included in the sample, a systematic random sampling method was applied. To this end, respondents were selected from the kebele dwellers list of the kebeles under consideration.

3.1.3. Methods of Data Collection

Since the main data collection tool of this research was a questionnaire that contains the pertinent variables to be studied, a cross sectional survey was administered to the selected sample subjects of the study. In addition to this in depth interviews with officials at Amhara Region Bureau of Agriculture and unstructured interviews with farmers were made.

3.1.4. Procedure of Data Collection

In the actual data collection phase of the study, data enumerators collected the data along strong supervision of the researcher. Prior to actual data collection, the enumerators were given mini-training on the basics of data collection. In addition to the data enumerators, the assistances of development agents in each kebele were used.

3.1.5. Data Analysis

Once after raw data is at hand, quantitative and qualitative methods of data analysis were used. Particularly with the quantitative data collected via the survey questionnaire a mix of descriptive statistical tools such as frequency tables, percentages, graphs and diagrams were applied. For The data

gained through key informant interview and unstructured interviews qualitative analysis were applied. Of course, the data gained through these methods is used for backing the information gained through the main tool of the research, which is sample survey questionnaire, and hence no separate portion is dedicated to it.

3.2. Study Area Description

3.2.1. Amhara National Regional State

The Amhara National Regional State is geographically located in the northwestern part of the country having a surface area of 170752 square kilometers (BOFED, Amhara Region), which covers 15 percent of the country. The region is sharing boundaries with Tigray region in the north, Oromiya region in the south, Benishagul Gumuz region and the Sudan in the west, and Afar region in the east. Regarding its altitude there are three major agro-climatic zones, namely 'Kolla' areas with altitude below 1500 meters; 'Woinadega' includes area of 1500-2500 meters and '*Dega*' that includes areas with 2500-4620 meters above sea levels (BOFED,2005).

Mostly starting from mid-June up to mid-September the region receives the highest percentage of rainfall. The situation of rainfall is unreliable and due to this, there is a frequent occurrence of drought since 1960s, which created a very serious problem on the rural population and overall agricultural activities. Especially in the eastern and northeastern part of the region, the magnitude of the drought and the environmental degradation caused by a high rate of population growth increase the vulnerability of the region to drought.

By 2005/6, the population size of the region was estimated to be 19.12 million (BoFED, 2005). The annual population growth rate of the region is

2.67% (ANRS BOFED, 2005). It is the second largest region in the country in its population size.

According to officials from the Amhara Region Agricultural office, the major proportions of the people who are affected by the recurrent drought in the country are found in this region. There are many areas susceptible to famine in the region particularly the northern and eastern parts of the region are identified as drought prone areas. Agriculture remains the dominant economic sector of the region. Structurally in 1995/96-2004/5 it accounts 57.91 Percent of the regional GDP and 88.7 percent of the population makes its livelihood from agriculture and related activities (BOFED, 2005). In the past years agriculture has been given a due emphasis as it is expected to be the source of primary surplus to fuel the economy.

Crop production is the major agricultural activity under taken in the region. In this regard different crops such as cereals, pulses oil seeds, fibers and root crops are grown in different parts of the region. Administratively, the region is divided into 11 Zones and 105 woredas. The Woredas are divided into 3070 kebeles by the year 2002. of course, some arrangements are made in this regard recently that resulted in additional woredas which is meant for efficient administration purpose. Among the zones and woredas, this research is conducted in Bihar Dar Zuria Woreda.

The RGDP of the Amhara region in the years1995/96-2004/5 is composed of 61.7 percent from agriculture and its allies, 22.9 and 5.4 percent from industry and service sectors respectively. It grew annually by average of 5.2 percent over those years. Even if the growth is a bit higher than the population growth, a lot have to be done for a reliable economic growth (BOFED, 2005).

3.2.2. Bahir Dar Zuria Woreda

The woreda, Bahir Dar Zuria, shares boundaries with lake Tana in north, Achefir woreda in the east, Dera woreda in the east, and Yilmanana Densa woreda in the north.

Like that of the region, the *woreda's* dominant economic activity is agriculture, mainly farming. There are also some other off-farm income generating activities like fishing particularly around Lake Tana and Blue Nile river. Some historical places that have tourist's attractions are also found in the Woreda. 'Tesis Esat' or the Blue Nile Falls, different Monasteries in the Lake Tana such as 'Dega Estifanos', 'Kibran Gebriel' and 'Ura Kidane Mehret' are the tourist attraction areas of the woreda to mention few.

The woreda's surface area covers about 116,672 hector among which 47413 is arable while 69259 is a combination of non-arable, grassland, water and others. According to the information from Bureau of planning and finance, the total population size of the Woreda is estimated to be 259,960 with a population density of 122 persons per square kilometer by the year 2005 (BOFED, 2005).

The agro-climate conditions of the woreda are like that of the region, all the three types i.e. 'Dega', Woynadega' and 'kolla' are found. Areas found in 'Kolla' are malaria endemic through out the year. There were 32 kebeles in the woreda by 2002. However presently there are 30 kebeles since some Kebles namely Zeghe, Meshenti, Tis abay and Zenzelma are made under the city administration of BahirDar while some large kebles are divided in to two for administrative efficiency (BOFED, 2005).

The Disaster Prevention and Food Security office of the region has divided woredas of the region in to different categories depending up on their

vulnerability status to food insecurity. In line with this Bahir Dar zuria is one of the woredas, which is under the category of food secured and surplus producer woreda. It is due to this reason that I choose this woreda for the study purpose.

CHAPTER FOUR

ANALYSIS AND DISCUSSION

4.1. Background Information of Respondents

As it was mentioned in the methodology section of the study that a sample of respondents were selected systematically from the target population that is under study, i.e. farmers who engaged in production of cereal crops in Bihar Dar zuria woreda. The personal background information of the respondents/ sample elements/ of the study is as shown in table 4.1.

Table 4.1. Personal background information of respondents

Sex	**Frequency**	**Percent**	**Cumulative percent**
Male	162	88.0	88.0
Female	22	12.0	100.0
Educational status			
Illiterate	83	45.1	45.1
Elementary school complete	22	12.0	57.2
Read and write	75	40.8	98
High school complete	4	2.2	100
Marital status			
Single	41	22.3	22.3
Married	112	60.9	83.2
Divorced	18	9.8	92.9
Widowed	13	7.1	100.0

Source: own survey, 2007

As it can be noted from table 4.1, the sample respondents were from different socio- economic backgrounds. As far as sex is concerned 88.0 percent of the respondents which account the majority were male while the rest 12.0 percent were composed of female. When it comes to educational status the majority of the respondents that account to 45.1 percent were

illiterate. There is no wonder that the majority of the respondents were found to be illiterate since there is high level of illiteracy in rural areas of Ethiopia. 40.8 percent of the respondents were able to read and write, 12.0 percent were elementary school complete, while only 2.12 percent of them were found to be high school complete.

The fact that majority of the respondents are illiterate have a far-reaching impact on agricultural development and transformation. It is clear that technology diffusion is easier in an educated society than illiterate society. More over educated people will be more market oriented in their production decisions than illiterates do. Therefore, both formal and informal education has to be given a due emphasis. Farmers should get informal and formal training on different marketing decisions such as production, pricing and distribution to increase their market awareness and hence transform agriculture from subsistence orientation to business /commercial /orientation.

As far as the martial status of the respondents is concerned 22.3 percent were single, 60.9 percent were married, and 9.8 percent were divorced while 9.1 percent were found to be widowed.

4.2. Major Actors of Agricultural Product Marketing in the Study Woreda

There are different actors in the marketing sysem of agricultural products in the woreda. Farmers who produce the products, consumers who buy the products for consumption purpose /either rural or urban/, retailer and assemblers who buy the products to sell it at a profit are among the major actors in the marketing process. Farmers sell their products for consumers or traders in the near by local market. Traders in return transport and sell the products anywhere prices are attractive given that transportation

facilities are there. In regard with this the following table shows to whom the respondents (farmers) mostly sell their products after production.

Table 4.2. To whom do farmers' sell their products?

To whom sell	**Frequency**	**Percent**	**cumulative percent**
Directly to rural consumers	13	7.0	7.1
Directly to urban consumers	124	67.4	74.5
To retailers and assemblers	47	25.5	100.0
To wholesalers	-	-	100
Total	**184**	**100.00**	

Sources: Own survey, 2007

It can be easily traced from table 4.2 that the majority of the respondents that account to 67.4 sell their agricultural products directly to urban consumers in small towns. Only small amount of respondents, that accounts to 7.1 percent sell their products directly to rural consumers. This may be due to the fact that most of the rural population is engaged in agricultural production so that they fulfill their consumption from their own production. In rural areas, only few people who are landless or those who prfer to engaged in non-farm activity for different reasons will purchase agricultural products for consumption. 25.5 percent of the respondents sell their products to retailers and assemblers who purchase the agricultural product for profit purpose.

In choosing to whom to sell their products farmers consider factors such as offering of good competitive price than others, the purchaser may be located in near by location or it may be due to absence of other buyers. However most of the time agricultural product produces sell their products in a near by location due to two couple of reasons. In the first place, the amount of products that they sell to the market is too small that did not justify the transaction cost of going to distant markets such as to other woredas.

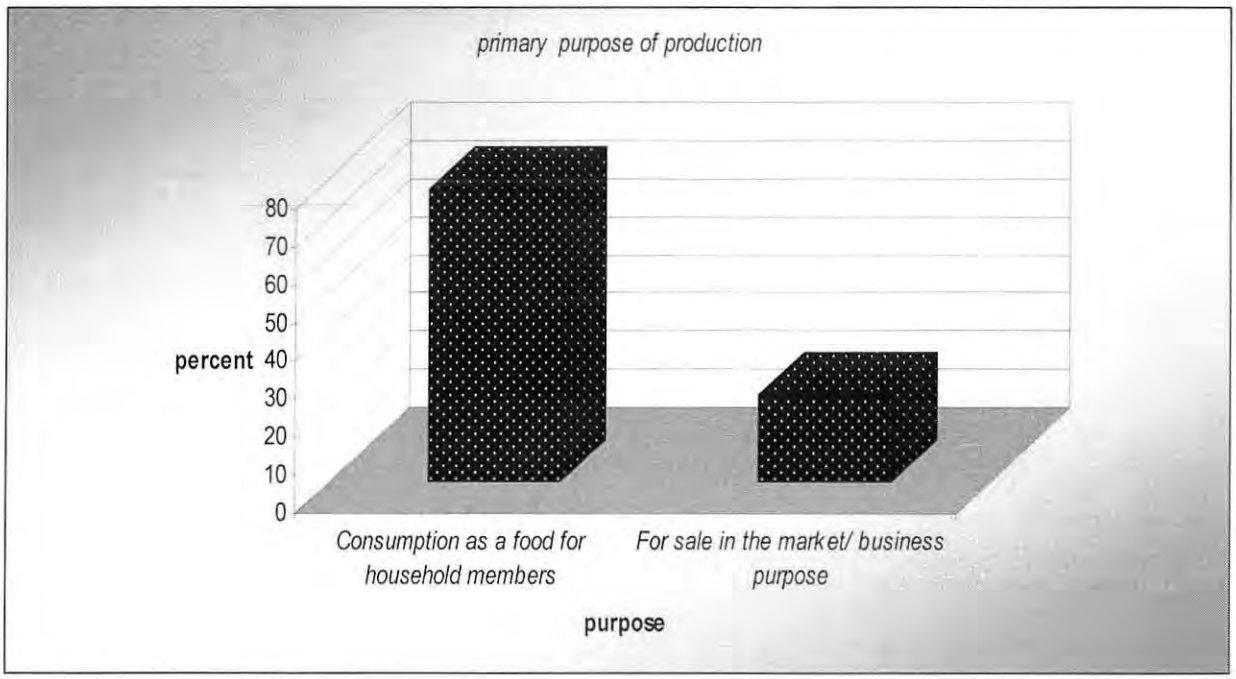
Second information and transportation facilities are not well developed to induce farmers to go to distant market places.

4.3. Production Decisions

4.3.1. Primary purpose of production (consumption versus commercialization)

The primary decision of farmers in their production decision is the purpose/ objective of production. Much of the time farmers in Ethiopia produce for consumption for family members as it is common in subsistence agriculture. The number of farmers who produce for commercialization (market purpose) is low and hence we can safely say that the level of commercialization in Ethiopia is low. Particularly in the study woreda the percentage of farmers producing primarily for consumption or commercialization (market) is shown in graph 4.1.

Graph 4.1.Primary objective/purpose of production by farmers



Sources: Own survey, 2007

As it can be noted from graph 4.1, only 22.8 percent of the respondents have primarily a business /market motive in producing a particular cereal crop. The majority of the farmers that account to 77.2 percent of the respondents have consumption motive that is to feed their family members and hence we can safely say that most farmers give a prior emphasis for consumption. In an interview made during the data collection phase of the research it was learnt that farmers mostly sell their surplus after they meet their consumption needs. Such a situation where farmers sell their surplus after meeting their consumption needs cannot transform agriculture in to a competitive commercial sector. For agriculture to be business rather than simply a way of life farmers should have a primary motive of producing for market and their production, pricing and distribution decisions should be all market driven. However, facts in the ground do not support this situation.

It has been mentioned by different scholars that Ethiopian agriculture is subsistence one. The data from this survey from the study woreda also confirms that Ethiopian agriculture is subsistence oriented. The simple sell of surplus (incidental surplus of farmers after they meet their consumption needs) will not transform it in to viable commercial sector and hence farmers should get different incentives to make their production market oriented. Given that farmers in rural areas are confronted with problems such as acute shortage of land, minimal use of agricultural inputs such as fertilizers whose supply mostly fails behind demand and is untimely), large family size that leads to high consumption requirements it seems rational for a farmer to opt in favor of production for consumption than commercialization.

4.3.2. Factors that Affect Farmers Choice of Product

Whether the objective of production of farmers is for consumption or market they will take in to account different factors in to consideration to select the

specific kinds of cereals they want to produce/cultivate in a given production year. Farmers consider many factors such as food culture of the family and society around, land suitability for the crop under consideration, price expectation, land availability, crop rotation needs, input requirements such as labor etc. Table 4.3 shows the different factors that farmers primarily take in to consideration to select the particular cereal crops that they need to cultivate in a given production season.

Table 4. 3. Factors that farmers take in to account in product selection

Factors	**Frequency**	**Percent**	**Cumulative percent**
Food culture of the family and society around	28	15.2	15.2
Land suitability	41	22.3	37.5
Price expectation	21	11.4	48.9
Land availability	29	15.8	64.7
crop rotation needs	43	23.4	88.0
Input requirements	22	12.0	100.0
Total 184	**184**	**100**	

Source: Own survey, 2007

As shown in table 4.3 the decision of farmers on what to cultivate in a given production season is under the influence of many factors. 15.2 percent of the respondents consider food culture of the family, 22.3 percent consider land suitability for the crop under consideration, 11.4 percent consider future price expectation, 15.8 percent consider land availability, 23.4 percent and 12.0 percent consider crop rotation needs and input requirements respectively. The fact that a minor amount of the respondents that is only 11.4 percent consider price expectation to select the product to be cultivated in a given production season implies that market orientation is low and hence Production of farmers in the study woreda is not market driven and price sensitive.

In a commercial agriculture farmers will deliberately on their own free will or by means of coercion use the land, labor, implement and other input (owned, purchased, hired, borrowed, obtained on credit or on customary arrangements reciprocal or not) in such a way that a greater part of the crop produced and / or animals raised for exchange or sell. Moreover, production decisions will be market sensitive.

Crop rotation is used as a traditional mechanism to keep the fertility of the soil and hence reasonably large percentage of respondents practice it. Fallowing which Ethiopian farmers used to practice as a traditional method of keeping soil fertility and reserving pastureland for their animals in good days has almost became history due to the increases in population pressure and consequent expansion of land under cultivation. Given that farmers have acute shortage of land they will give priority to suitability of the land for the crop under consideration, crop rotation needs and related factors at least to feed their family members rather than aspiring for markets.

4.3.3. Factors That Determine Farmers' Effort to Increase Production

The amount of marketable surplus that a farmer brings to the market for sell is directly related to the amount of production. To supply to the market farmers have to first produce. The higher the production of farmers the higher the marketable surplus provided to the market under normal conditions. Particularly in subsistence agricultures like Ethiopia where the majority of farmers give priority to consumption than commercialization and farmers only bring to market their surplus after meeting their consumption needs increase in production in is critical factor. However, farmers cannot simply increase production, as they want. A decision by a farmer to increase production is constrained by different problems. Table 4.4 shows factors

that primarily constrain the effort of farmers to increase production and hence marketable surplus.

Table 4.4. Factors that impede farmers' efforts to increase production

Factors	Frequency	Percent	Cumulative percent
Small land size plot	86	46.7	46.7
Lack of implements	43	23.4	70.1
Lack of labor	9	4.9	75.0
Land ownership security problem	6	3.3	78.3
Lack of appropriate extension support service	40	21.7	100.0
Total	184	100.0	

Source: own survey, 2007

As it can be noted from table 4.4 small land size plot, lack of implement and appropriate extension support services play a major role in impeding farmers' effort to increase production. Lack of implements is aggravated by lack of finance to purchase the implements. A great deal of respondents responded that they have financial problems to purchase farm implements such as fertilizers and improved seed. The major problems that farmers face in their attempt to increase production and hence marketable surplus particularly lack of finance and land scarcity are a bit discussed in the flowing pages.

4.3.3.1. Financial problems

Capital by definition is scarce however; the scarcity of capital is more acute in developing nations particularly in rural areas. Therefore, capital should be deployed as efficiently and effectively as possible in order to maximize the amount of new jobs created and production of goods and services aimed at the satisfaction of domestic market. Rural people mostly depend on their

traditional financing strategies like the 'iqub'[b] ,'idir, and the like. Modern means of financial intermediation is not as such common in rural areas.

Table 4.5. Responses of farmers as to whether they have financial problem to purchase agricultural implements or not

Response	Frequency	Percent	Cumulative percent
Yes	156	84.8	84.8
No	28	15.2	100.0
Total	184	100.0	

Source: Own survey, 2007

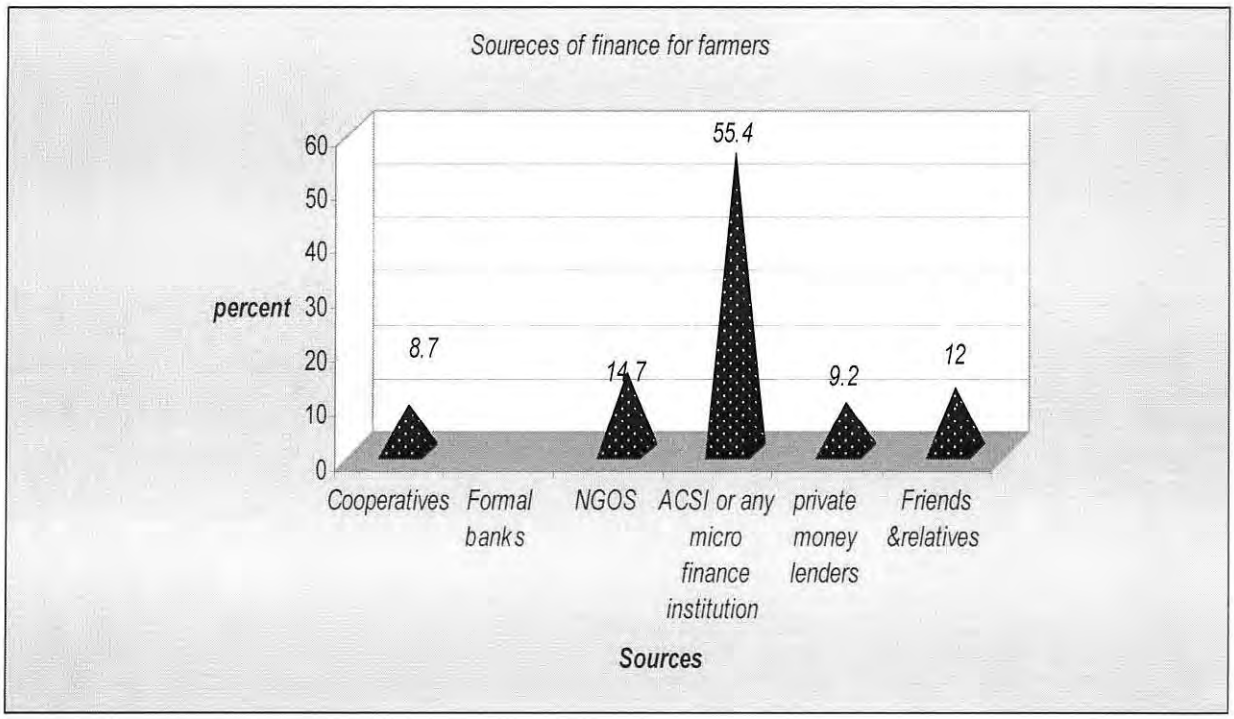
As it can be clearly seen in table 4.5 a lion share of the respondents which account to 84.8 percent have financial problems to purchase agricultural implements mainly fertilizer, improved seeds and pesticides . Only 15.2 percent of the respondents did not face financial problem to buy agricultural implements. Of course, these days' different Microfinance institutions and co-operatives are working in rural areas to improve financial access to the rural population. Therefore, farmers can make use of agricultural loan from these institutions even if these institutions have their own limitations.

Among the different sources of finance for farmers in the woreda a lion share of the respondents that accounts to 55.4 percent of the respondents reported microfinance as their major source of finance as indicated in table 4.5. This shows a great move in the performance of micro finances since in the previous years personal saving and credit from friends and relatives were identified as the main source of finance particularly in rural areas according to interview made with some farmers. 9.2 percent of the respondents reported private moneylenders as their source of finance while 8.7 percent of the respondents reported different co- operative as their source of finance. 14.7 percent of the respondents reported different NGOs

[b] Traditional form of rotating finance in Ethiopia, [3] a traditional insurance like arrangement in Ethiopia

as their source of finance. No respondent reported formal banks as their source of finance. Microfinance are the major sources of rural finance even if they have their own limitations such as exorbitant interest rate as compared to formal banks, inappropriate payment schedule, short gestation period of the loan, and small amount of loan as shown in table 4.7. However, along with their limitations microfinance's particularly ACSI is the major source of finance for the rural population in the study woreda.

Graph 4.2. Sources of finance for farmers



Source: Own survey, 2007

Given that farmers gain loan from different formal and informal sources the purpose for which the loan is meant for is a critical importance. Farmers use the loan for different purposes such as to by agricultural inputs, to buy livestock, to pay for hired labor, to pay different taxes and obligations, to start off farm income generating activities etc... as shown in table 4.6.

able 4.6. Purposes of the loan that farmer get from different sources.

Purpose	Frequency	Percent	Cumulative percent
To buy agricultural inputs	73	39.7	39.7
To by livestock	41	22.3	62
To pay for hired labor	8	4.3	66.3
To pay rent and taxes	17	9.2	75.5
To start off farm business	33	18.0	93.5
To spend for consumption	12	6.5	100.0
Total	184	100.0	

Source: own survey, 2007

As it can be noted from table, 4.6 farmers use the loan for different purposes. The majority of the respondents that account to 39.7 percent use the loan to buy agricultural inputs such as fertilizers, improved high yielding varieties etc. 22.3 percent of the respondents use the loan to buy livestock such as cow and oxen for farming or fattening purpose. 18.0 percent of the respondents use the loan for starting off farm businesses such as weaving, pottery, leather and tannery, petty trading etc. other purposes for which the farmers use the loan include to pay for hired labor, to pay rent and taxes, and to spend for consumption as reported by 4.3, 9.2 and 6.5 percent of the respondents respectively. The amount of respondents who use the loan for payment for hired labor is low. This shows that there is low level of commercialization. The fact that the majority of the farmers use the loan for buying agricultural inputs is an important indicator that farmers are willing to invest in their agriculture activity if they get resource.

Formal financial institutions in Ethiopia include commercial banks (private or public), Development Bank of Ethiopia and Business and Construction Bank of Ethiopia. These financial institutions are not interested in financing rural agricultural producers. Even in this case study no farmer has reported formal banks as a source of finance as it is shown in graph 4.2 This is because agricultural producers are considered to have higher

transaction cost and are considered as risky borrowers. The formal banks in Ethiopia deliver credit fully depending upon physical assets such as house and car as a means of collateral which most of the rural farmers lack.

Microfinance is considered as an innovative approach in financial service delivery to the rural poor since it avoids problem of farmers related to collateral through its group collateral approach. Of course microfinance are not a panacea, they are intertwined with problems such as short loan period (mostly a maximum of 12 month), allowance of only group collateral that is applications for loan that did not fit to the group model are not entertained, and limited amount of loan that mostly did not exceed 5,000 birr. One peculiar advantage of the micro finances is that they did not require physical property as collateral for extending the loan unlike banks in Ethiopia. However, according to the respondents micro finance institutions have their own limitations. Table 4.7 shows the different problems that farmers are not happy in using the loan service of micro finances particularly ACSI.

Table 4.7. Problem of microfinance institutions

Problem of MFIS	**Frequency**	**Percent**	**Cumulative percent**
High /exorbitant interest rate	18	7.8	9.8
Inappropriate payment schedule	56	30.4	40.2
Short gestation period of the loan	32	17.4	57.6
Lack of friends to be member of a group	30	16.3	73.9
Fear of bankruptcy and confiscation of other assets	48	26.1	100.0
Total	**184**	**100.0**	

Source: own survey, 2007

According to the respondents, the microfinance services have different problems with which they are not happy with as indicated in table 4.7. The lion share of the respondents that amount around 30.4 percent complained

about in appropriate payment schedule followed by 17.4 percent who complained about short gestation period of the loan. Mostly farmers are required to pay their loan during harvest season called 'meher' where price of their products are cheaper. Had the farmers have time they could have benefited from higher price in summer season. The gestation /maturity period of the loan that is mostly one year is also another problem.

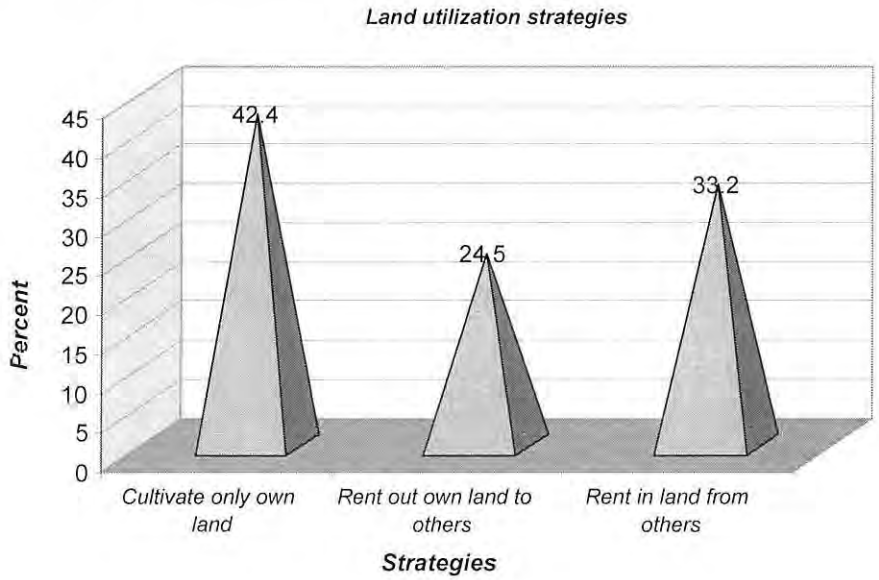
One important indication of table 4.7 is that 16.3 of the respondents responded that they lack friends to be a member of a group. Since the loan in micro finances is given in a group collateral strategy that leads to common liability of the group members, farmers inclined to choose a viable person as member of their group and hence the poorest of the poor are ignored. This is evidence that microfinances are mostly blamed for ignoring the poorest of the poor even if their motto is 'reaching the poorest of the poor'. Despite the presence of the above problems, farmers use the service of micro finance institutions for two reasons. Frist they are better sources than private moneylenders that need an exaggerated exorbitant interest rate that some times goes up to 50 percent of the principal. Second farmers have no accesses to formal banks since mostly they do not have the collateral required by banks and are considered as risky borrowers from business point of view.

4.3.3.2. Land Scarcity Problem

Land is a basic resource in agriculture. Issues on land policy and tenure have remained a point of debate for long. For an economy that depends highly on agriculture the vale of agricultural land is immense. Given that Ethiopian is a highly populated nation where the majority of the population is living in rural areas and makes its livelihood mainly from agriculture and its allies, land scarcity is a crucial issue, which needs to be addressed.

Given that Ethiopian farmers use traditional agriculture with minimum application of modern inputs, the strategy of farmers to increase production is mostly towards increasing land under cultivation via different strategies. Concerning this, a farmer may have different strategies towards the utilization of land resource.

Graph 4.3. Strategy of farmers towards land utilization



Source: Own survey, 2007

Majority of the farmers in the study area reported shortage of land as main primary problem in their attempt to increase production. In this regard, farmers may adopt different strategies to curb the problem. Farmers cultivate their own land, rent out their land to other farmers or rent in land from other farmers as a strategy as shown in graph 4.3.

As it can be seen from graph 4.3, 42.4 percent of the respondents cultivate their own land while 24.5 percent and 33.2 percent of the respondents rent out own land to others and rent in land from others respectively.

In scientific view given that, land is scarce resource and its supply is inelastic two major strategies have to be considered. In the first place, depopulation of rural land through creation of non-farm income generating activities both in rural and urban areas should be considered (Tegegn Gebre egziabher, 2003) After all, there is no reason that a farmer's offspring should share land from their parents and remain farmers in a small plot of land. Second intensification (attempts to produce more from a given land size via application of modern agricultural technologies) should be emphasized rather than attempts to concur more land.

The decision to cultivate own land only, rent out land to others or rent in land from others is attributed to a certain reason. Given that the livelihood of the rural population is highly dependent on land decisions on land such as to rent in and rent out are considered as strategic once. Table 4.8 shows reasons behind renting out land to others and renting in land from others.

Table 4.8. Reasons to rent in and rent out land

Rent out		**Frequency**	**Percent**	**Rent in**		**Frequency**	**percent**
Reasons	Have no oxen	30	66.7	**Reasons**	Do not have own land	19	31.1
	Have more than enough land				Have too small land to feed family	21	34.4
	Cannot buy inputs	12	20.7		Need to increase production and sell the surplus in market	32	52.5
	Have other non farm activities to perform	3	6.7				
	Total	**45**	**100**			**61**	**100.0**

Source: own survey, 2007

As shown in table 4.8 farmers who rent out their land to others and who rent in the land of others have their own respective reasons. Among those

who rent out their land to others 66.7 percent of them reported lack of oxen as a reason while 26.7 and 6.7 percent of them reported in ability to buy agricultural inputs and engagement in other non farm activities as a reason to rent out their land to others.

In the opposite among those, who rent in land from others 57.5 percent reported aspiration to increase their agricultural production and sell their surplus in the market. 31.1 percent of those who rent in land from others reported lack of own land while 34.4 of them reported limitedness of own land to feed family members as a reason to rent in the land of others. The fact that the major amount of farmers that account to 57.5 percent rent in land to increase production and make the surplus available for market has an important indication for commercialization.

In addition to the above major problems (land scarcity and lack of finance), low level of training and hence low level of technological application are also factors that impede the production of farmers.

Intensification (application of different agricultural technologies) should be emphasized given that Ethiopia is a nation with large number of population and ever decreasing cultivable land per head. However, the application of technology such as fertilizers is affected by different factors such as land size, availability of oxen, education of the framer, labor units/ number of families (labor), existence of non oxen livestock and non farm income generating activity engagement of the household etc. table 4.9 shows the factors that primarily affect application of technology particularly fertilizer in the study woreda.

Table 4.9. Factors that determine application of technology such as fertilizers

Factors	Frequency	Percent	Cumulative percent
Land size	66	35.9	35.9
Availability of oxen	21	11.4	47.3
Education of the farmer	35	19.0	66.3
Heads age	9	4.9	71.2
Labor units	13	7.1	78.3
Existence of non oxen livestock	23	12.5	90.8
Non farms income engagement	17	9.2	100.0
Total	**184**	**100.0**	

Source: Own survey, 2007

As it can be noted from table 4.9 the majority of respondents that accounts to 35.9 percent reported that their decision to use fertilizer or not is affected by land size. The higher the land size the more the fertilizer applied. This may be attributed to what economists call economies of scale. Moreover, farmers with a large size may be in a better financial position to acquire finance to buy agricultural input such as fertilizers. Educational background of the respondents is also one of the factors that affect application of fertilizer. It is clear that educated farmers will be more responsive to technology than those who are not educated and they will be willing to take calculated risk as compared with the illiterates. Technological diffusion is highly related to the educational level of the farmers. Other factors that affect application of fertilizer include availability of oxen, heads age, labor units, existence of non-oxen livestock and non-farm income engagement as shown in table 4.9.

As the educational background of Ethiopian farmers in low, training on different issues will play paramount of importance in transforming the farmers thinking in to business orientation. Farmers need training on different issues like fertilizer application, chemical application, credit and

saving associations and cooperatives, family planning, storage, harvesting, transportation of crops, weeding, planting and irrigation etc.

Tables 4.10 show the number of respondents who gain any of the above services from the sample respondents in the past three years.

Table 4.10. Different kinds of training gained by respondents in the past three Years

Training	Frequency	Percent	Cumulative percent
Chemical application	15	8.2	8.2
Fertilizer application	32	17.4	25.6
Credit and saving	54	29.3	54.9
Associations and cooperatives	26	14.1	69
Family planning	31	16.8	85.8
Irrigation	26	14.1	100
Total	184	100.0	

Source: Own survey, 2007

As it can be noted from table 4.10, farmers have got training on chemical application, fertilizer application credit and saving associations and cooperatives, family planning and irrigation with the corresponding number of respondents shown in table 4.10. These trainings will improve the production and market consciousness of the farmers and should be strengthened in a planned and organized manner.

4.4. Pricing Related Decisions

Once products are produced and a decision is made to sell, pricing will be a point of market decision. Pricing is affected by many factors such as transportation costs, production costs, the price of competitors etc. Among the different marketing functions, it is the price charged that would result in revenue for the farmers. Therefore price plays a make or break role in the motivation of farmers for more production and commercialization. That is if farmers get attractive price for their products they will be motivated to

increase production and hence use agricultural technologies. Moreover, their agricultural decisions will be market driven. Attractive price means many things for the farmers. Among others it increases their motivation to produce more for markets, it increase their command on agricultural inputs such as fertilizers improved seeds, labor etc and it creates change in the over all living standard of the farmers through increased income.

4.4.1. Basis of pricing

There are different basis that farmers price their products as shown in table 4.11. Farmers may price their products either based on the existing market price or based on the price of similar crops in past periods. Of course, farmers will add or subtract some margin from the price of their products based on the perceived quality of their products as compared with competitors. In the absence of standard quality measures farmers use the area of production/origin of the crop as a means of quality specification.

Table 4.11. Basis of pricing that farmers price their products

Basis of price	**Frequency**	**percent**	**Cumulative percent**
Based on previous /last year prices	39	21.2	21.2
competitive price /based on the competition /spot price	145	78.8	100.0
Total	184	100.00	

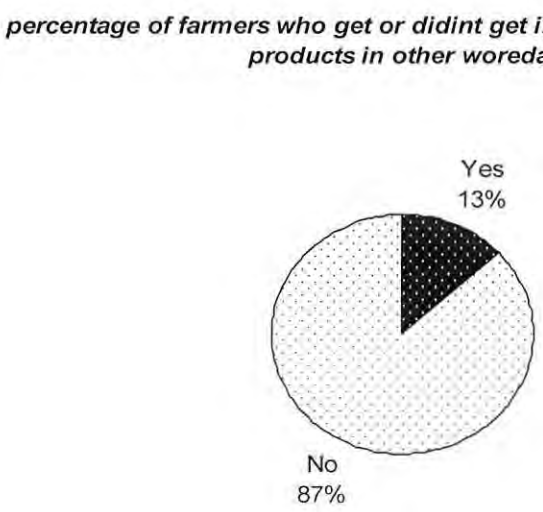
Source: Owen survey, 2007

As shown in table 4.11, the majority of the respondents that account to 78.8 bases the price based on the existing competition that is they follow on spot pricing. The importance of timely and accurate information is a great deal in this regard. Prices will be different from place to place for different reasons and hence information is required to bridge this gap.

4.4.2. Access to Information and its Role in Marketing Particularly in Pricing

Farmers should solicit information about the price of their products in other wordas via different systems and take a rational decision based on the information obtained. However, information may not be easily accessed in rural areas. Marketing decisions such as what to produce, what amount of price to charge, when to sell own products are all dependent on availability of accurate information at the right time. Rural population is at a disadvantage compared to urban population in many regards among others in the case of communication technologies rural people are the last to be served. Graph 4.4 shows the number of respondents in the woreda who have access on information about the price of agricultural products in other woredas or not.

Graph 4.4. Numbers of respondents who get information about the price of products in other woredas or not



Source Owen survey, 2007

As shown in graph 4.4 the majority of the respondents that account to 87.0 percent did not get information about the price of similar products in other woredas. Only 13.0 percent of farmers get information about prices of similar products in other woredas. This data shows that information is in a scarce supply in the market system. It is surprising that such a few numbers of people get information on the price of similar products in other woredas in BahirDar zuria woreda, a woreda that is near to the regional capital, BahirDar. One can imagine how information may be scarce in other woredas that are hundreds of kilometer away from the regional capital.
Among those who get access to information about prices of similar products in other woredas the different technologies that producers get information through are shown in table 4.12.

Table 4.12. Technology through which producers get information about the price of similar products in other woredas

Technology	**Frequency**	**Percent**	**Cumulative percent**
Telephone	8	33.3	33.3
Message /word of mouth Via truck drivers	10	41.7	75
Postal system	-	-	75
E-mail /internet	-	-	75
Mass media	7	29.2	100.0
Total	**24**	**100**	

Source: Own survey, 2007

As it can be noted from table 4.12 among those respondents who get information about the price of similar agricultural products in other woredas 41.7 percent of them get the information in the form of massage/ word of mouth via truck drivers, 33.3 percent of them get the information through telephone calls. The remaining 29.2 percent of them get the information from mass media mainly from radio. Of course, availability of

information alone is not important; the information should be as to the requirements of the farmers and should be applicable to their situation. Moreover, increase in productivity should precede information availability. Information has a value only if the farmers have a stock of products to be transported and transacted.

Information is important for market decision making particularly for price and distribution decisions. Equally important with the information is the aspiration of farmers /producers to go to places where prices are higher to sell their agricultural products. Simple availability of information about price of agricultural products if the producers are not willing to go to the woredas/places where prices are higher to sell their products is no more than useless. Asked about their aspiration to go to other woredas/places to sell their agricultural products in other woredas given that they get market information and price of similar products are found higher in other woredas the majority of the producers responded that they will not go to other woredas to sell their agricultural products for different reasons.

Table 4.13. Aspiration of farmers to sell their products in other woredas given that they have information on price of similar products in other woredas

Aspiration to go to other woredas given Information availability			Reasons for not going to other Woredas		
			Reason	Frequency	percent
			Lack of transportation	48	31.0
	Frequency	Percent			
Yes	27	14.7	Legal barriers to go to other woredas	-	-
No	157	85.3	High transaction but due to small less of the product to be marketed	109	69.4
Total	184	100.0	Total	157	100.0

Source: Own survey, 2007

As it can be inferred from table 4.13 given that information is available about price of similar products in other woredas and prices are found to be higher there the majority of the respondents who get the information that account to 85.3 percent did not show aspiration to go to other woredas to sell their products. This may be illogical from rational point of view; however, respondents justified the reason for the low level of aspiration to go to other woredas where prices are high to sell their agricultural products by different reasons. Most of the respondents that account 64.4 percent justified that the transaction cost of going to another woredas is high due to the small amount of produce transacted while 31.0 percent responded that there is lack of transportation service to go to other woredas where prices are high. One important point that we can infer from the data in table 4.13 is that there are no legal barriers to move agricultural products unlike the previous socialist regime. Little number of respondents that amount to 14.7 percent has shown the aspiration to go to other woredas particularly to the regional capital. These include mainly commuters to the regional capital and are accustomed with the city environment when they commute for non-farm activities such as daily wage labor particular in their off-season.

Even if the importance of information is undeniable, priority should be given for measures that increase production to avoid the transaction cost related with small amount of produce so that farmers will be willing to go to other woredas to sell their products in case prices are higher for similar products. Of course, it will not be logical to go to a distant market place to sell a small amount of agricultural product for a small amount of price margin if we don't adhere to the traditional saying 'deha gulbetun aykotrim' which means poor doesn't consider his/her effort. Had the amount to be transacted be a larger amount the farmers might have been induced by what economists call economies of scale to go to other woredas/places to sell their agricultural products.

Information is basic resource for competition in to day's competitive information age. The majority of the respondents that account to 85.3 percent responded that given they get information about a price difference on similar products in any area they are not willing to share this information to the majority of producers and traders around. This may be attributed to competition reasons. Only 14.7 of the respondents show their willingness to share their information with other people around. Therefore, information communication strategies by which every body will have access to information have to bee expanded. Table 4.14 shows the willingness of individual to share market information particularly in price related information with others.

Table 4.14. Willingness to share information with other individuals around

Do you share the information with others	**Frequency**	**Percent**	**Cumulative percent**
Yes	27	14.7	14.7
No	157	85.3	100.0
Total	184	100.0	

Source: Own survey, 2007

4.5. Distribution and Transportation Decisions

Once products are harvested, they will be stored and when a need arises to sell products will be transported to market places through different transportation mechanisms. Transportation and distribution is one important point in market decisions. Once products are produced they have to be transported to market places. It is clear that in rural areas of Ethiopia animals such as donkeys are major transportation mechanism. Table 4.15 shows the different means of transportation that farmers use in the study area.

Table 4.15. Means of Transportation

Means of transportation	Frequency	Percent	Cumulative percent
Carrying one self/ human backs	43	23.4	23.4
Animal backs like donkey, mules, horses...)	133	72.3	95.7
Modern transport like cars and Vic hales	-		100.0
carriages/ 'garry'	8	4.3	
Total	184	100.0	

Source: Own survey, 2007

As shown in table 4.15 the majority of the respondents use animal back such as donkeys, mules and horses for transportation purpose that accounts to 72.3 percent of the respondents followed by those who carry themselves (on human back) most of the time women are responsible for this purpose . Only few respondents that amount to 4.3 percent of the respondents use carriage as a means of transportation. No respondent reported use of modern transportation system like cars. This shows that transportation infrastructure is not yet well developed in the region particularly at woreda level and hence lack of modern transport is one of the major obstacles in the agricultural product marketing system of the woreda. Rural roads that connect different kebles with market places have to be considered by authorities.

4.6. Problems after Production

After agricultural products are produced farmers face different post harvest problems few among others include lack of modern storage facilities, lack of transportation to market place, lack of information and lack of attractive price for their produces. Table 4.16 shows the different problems that farmers face after production and their relative frequency as reported by respondents in the study area.

Table 4.16 . Problems the farmers face after production

Problems	Frequency	Percent	Cumulative percent
Lack of storage facility	27	14.7	14.7
Lack of transportation to market	45	24.5	39.0
Lack of information	26	14.1	53.3
Lack of attractive price demand	86	46.7	100.0
Total	**184**	**100.0**	

Source: Own survey poor, 2007

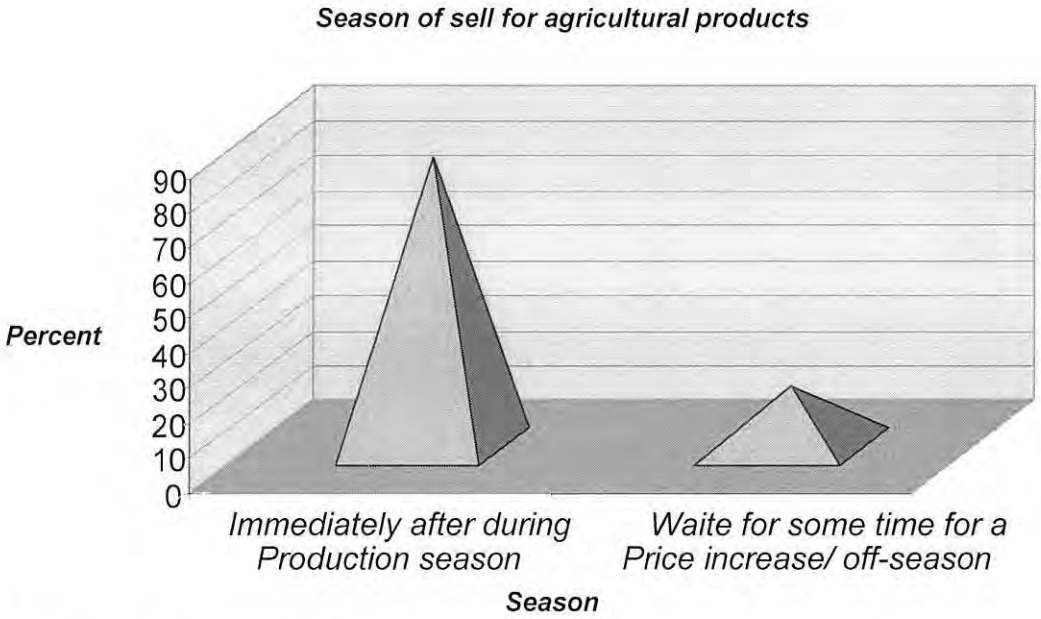
As it can be noted from table 4.16 a reasonable number of the respondents that amount to 46.7 percent reported lack of attractive price as a major problem after production followed by lack of transport to market places which accounts to 24.5 percent of the respondents. Other problems of farmers after production as mentioned by the respondents include lack of appropriate storage facilities and lack of information as reported by 14.7 and 14.1 percent of the respondents respectively.

With regard to storage since most farmers produce for consumption purpose, they store the crops in traditional stores that negatively affect the quality of the products via attack by different insects. When it comes to price there is an escalating price increase of agricultural products particularly cereals these days but majority of the farmers reported lack of appropriate price as major post harvest problem. This may be paradoxical as compared to the existing situation in the nation at large. Of course different hypothesis are being made about this situation by different group of people and institutions. Despite these, all these hypothesis farmers rationalize that the price of agricultural inputs such as fertilizer, labor and modern high yielding seed has increased dramatically that they even does not break even. Farmers add that the price of industrial consumables is also disproportionately increasing that makes their situation worse.

4.7. Place and Season of Sell

One of the important strategic decisions in marketing is when and where to sell the products. Of course when and where to sell an agricultural product depend on characteristics of the product such as its seasonality, bulkiness of the product ,its perish ability etc. In addition, availability of storage facility and financial requirement of the household also affects the decision when to sell the products. The decision when to sell a particular produce have implication on other marketing decisions such as price of the product. Graph 4.5 shows the season when the farmers in the study area mostly sell majority of their agricultural products.

Graph 4.5. Season of sell



Source: Own survey, 2007

Graph 4.5 shows the season /time/ when farmers mostly sell their products. The majority of the respondents, which accounts to 82.6 percent sell their products immediately after production or during production season while the rest 17.4 percent of the respondents wait for some time for a price increase so that they will get appropriate prices for their products.

Those who sell their products immediately after production justified that they did not have money at hand to pay different obligations such as taxes and loans and to buy daily consumables.

However, those who are relatively well to do can wait until prices are favorable since they may have some capital at hand to pay for different obligations such as taxes and to buy daily consumables for the family. In addition, respondents complained about the payment schedule of microfinance and co-operative loans that obliged them to sell their products immediately after /during production called 'meher' season where prices are lower.

In addition to the decision when to sell products where to sell the products is also one of the important strategic decisions in marketing. The decision where to sell an agricultural product is affected buy presence or absence of purchasers, the price of purchasers in different areas, transportation service availability, amount of produce to be marketed and other related factors. There are different areas where farmers in the study woreda sell their products as shown in table 4.17

Table 4.17. Areas where farmers sell their product

Area of sell	**Frequency**	**Percent**	**Cumulative percent**
In residential kebele market	48	26.1	26.1
In other kebeles but part of the woreda	121	65.8	84.8
In other woredas	15	8.2	
In any part of the nation where prices are high	-		100.00
Total	184	100.00	

Source Owen survey, 2007

Table 4.17 shows the different areas where farmers mostly sell their products. As it is clearly seen in table 4.17, the majority of the respondents that account 65.8 percent sell their products out of their kebeles but in their own woreda, this is because each kebele did not have and of course did not afford to have a market place. 26.1 percent of the respondents sell their products in their residential kebele markets while 8.2 percent of the respondents sell their products in other woredas particularly in BahirDar city administration.

In addition to the place of sell, the time when to sell the agricultural products is an important strategic decision in marketing since prices vary not only from place to place but also from season to season. In this regard farmers will be more benefited if they sell their products during off season since prices will be more attractive at this time, however due to different reasons farmers will be obliged to sell their products during /immediately after the production season which is called 'meher' season. Table 4.18 shows the different reasons that oblige farmers to sell their products during the production season.

Table 4.18. Reason for Selling during production season

Reason	**Frequency**	**Percent**	**Cumulative percent**
To get finance to buy daily consumable industrial products	21	13.7	13.7
To pay for children education	28	18.3	32
To pay different obligations and debts/ taxes	63	41.2	73.2
Lack of appropriate storage facility	19	12.4	85.6
Product may be damaged if not sold immediately after production	22	14.4	100.0
Total	**153**	**100**	

Source: Own survey, 2007

As it can be noted from table 4.18 there are several reasons why farmers sell their products during or immediately after production while prices are cheaper. The majority of the respondents that account to 41.2 percent mentioned payment of different obligations and taxes as reason so as not to wait until prices are right. Other reasons mentioned by the respondents include getting finance for buying daily consumable industrial products, to pay for children education, lack of appropriate storage facilities and hence products may be damaged if not sold immediately after production as reported by 13.7, 15.3, 12.4 and 14.4 percent of the respondents.

4.8. Non- Farm Income Generating Activity Engagement

Now a days farmer involve in diversified non-farm activities to supplement their farm incomes. Depending on one activity, farming in this case, is not advisable and hence farmers involve in different non-farm activities. The fact that farmers do involve in non-farm activities may have both positive and negative implication in their agricultural production and hence on agricultural marketing. A reasonable number of respondents that accounts to 45.1 percent were found to involve in different non-farm activities as shown in table 4.19.

Table 4.19. Involvements in non-farm activities

Involvement in non farm activity	**Frequency**	**Percent**		**Non farm activity**	**Frequency**	**Percent**
Yes	83	45.1		Weaving	8	9.6
No	101	54.9		Pottery	7	8.4
				leather and tannery	2	2.4
				Building work	11	13.3
				Petty trading	7	8.4
				Wage labor	13	15.7
				Local beverage	21	25.3
				Sell of fire wood such as charcoal	14	16.9
Total	**184**			**Total**	**83**	**100.0**

Sources: own survey, 2007

It can be clearly seen from table 4.19, a reasonable number of farmers involve one-way or other in non-farm income generating activities. 25.3 percent of the respondents among those who involve in non-farm income generating activities involve in preparation of local beverages such as "areqi"[c]. Other non-farm activities that farmers in the study woreda engage in include Weaving, pottery, petty trading, leather and tannery with a respective percentage of 9.6, 8.4, 8.4 and 2.4 respectively.

The fact that the agricultural product producers involve in non-farm income generating activities have both positive and negative implication for their agricultural production and marketable surplus. Some of the respondents expressed that engagement in non farm income generating activities have positive impact on agricultural productivity via increasing farmers' ability to purchase different kinds of agricultural technologies and increase the ability to pay for hired labor and other agricultural inputs. Other respondents in return responded that engagement in non farm income generating rural activities have negative implication on agricultural production and marketable surplus since it shares the time and effort of the person which could have been invested in agriculture so that the individual will be more concerned to non farm activities than his/ her agricultural activities. Therefore, the importance of involving in non-farm income generating activities to increase marketable surplus is conditional on the fact that the farmer is able to manage both his non-farm and farm activities effectively and efficiently. This in return depends on the number of economically active family members (labor units), size of land to be cultivated, work culture of the individual etc.

[c] A traditional local alcoholic drink in Ethiopia

4.9. Co-operative Marketing

Now a days there is a great emphasis on voluntary cooperative formation. Cooperatives provide different services to their members. Credit facilities, market information provision, appropriate price for producers, provision of agricultural inputs are few among others. Table 4.20 shows the different services that people/ farmers who are member of a co-operative get from the cooperatives. Of course, a reasonable number of producers are member of co-operative that account to 39.7 percent of the respondents.

Table 4.20. Number of people who are member of a cooperative and the services they get from the cooperative.

Member ship	**Frequency**	**Percent**	**Service obtained**	**frequency**	**percent**
yes	73	39.7	Credit facilities	19	26.0
No	111	60.3	Market information	14	19..0
			Appropriate price	17	23.0
			Agricultural input	23	31.5
total	**184**	**100.0**	**total**	**73**	**100.0**

Source: own survey, 2007

As it can be inferred from, table 4.20 those who are member of cooperative gain different kinds of service. 26.0 percent of the respondents reported that they get credit facility, while 23.3 percent of them reported that they gain appropriate price for their products. In addition, 31.5 percent and 19.2 percent of the respondents gain services such as agricultural input delivery and market information respectively. Farmers who are nonmember of a cooperative may enjoy the above benefits if they become member of a cooperative; however, according to interview made with some farmers who are not a member of a cooperative they have strong cooperative phobia that they have developed in the past socialist regime. In this regard, the cooperative expansion agency should play a great deal of role to educate and

brainwash the public about the advantage of voluntary cooperative formation which has democratic leadership and that have a room for rewarding individual performance.

4.10. Post Harvest Processing Activities

Once agricultural products are produced and a decision is made to sell the products the next consideration will be either to sell directly or process the products to add some kind of economic value. In countries where agriculture is said to be the backbone of the economy agro processing industries and rural enterprises play a paramount importance. However, in the study woreda almost none of the farmers made post harvest processing activities.

Post harvest activities such as grading and processing will add some kind of economic value for the producers. Through processing agricultural products, both kinds of forward and backward linkages are possible. The problem is that almost all of the respondents did not involve in any kind of post harvest processing. As it can be clearly depicted from table 4.21, only 1.6 percent of the respondents involve in some kind of post harvest processing. These are farmers who have flourmill and process cereals in to flour and sell it if it has to be considered as post harvest possessing. Presently different policy documents emphasis the importance of backward and forward linkages in agricultural development, however agriculture in Ethiopia shows less amount of forward and back ward linkages at woreda level. Therefore, farmers will simply remain subsidiary and providers of input to higher-level urban industry owners.

Table 4.21 . Performance of post harvest processing

Perform post harvest processing	Frequency	Percent	Cumulative percent
Yes	3	1.6	1.6
No	181	98.4	100.0
Total	**184**	**100.0**	

Source: Own survey, 2007

4.11. Amount of Surplus Sold in the Market

In a commercial agriculture, substantial amount of the production is meant for sell and exchange in the market and the purpose of production is primarily for market. However, in subsistence farming only an amount surplus from consumption is meant for market. Factors such as family size, land operated, seed reserve needed, post harvest losses and use of farm inputs affect the amount of surplus that farmers in the study woreda provide to the market place as shown in the table 4.22.

Table 4. 22. Factors that affect marketable surplus

Factors that determine surplus	Frequency	Percent	Cumulative percent
Family size	40	21.7	21.7
Land operated	53	28.8	50.5
Seed reserve needed	18	9.8	60.3
Post harvest losses	13	7.1	07.4
Use of farm inputs	60	32.6	100.0
Total	184	100.0	

Source: Own survey 2007

As it can be noted from table 4.22 above 32.6 percent of the respondents reported use of farm inputs as a major factor that determine amount of surplus provided to the market. This may be attributed to the fact that more application of inputs leads to more production and hence more surplus to

the market and vice versa. 28.8 percent of the respondents reported land operated as a major determinant of market surplus. The more land operated the more the production and hence the more the marketable surplus. Larger land size also leads to more application of agricultural technologies due to economies of scale and other factors that will in return increase the amount of marketable surplus. Family size is another determinant factor for market surplus that is provided to the market as reported by 21.7 percent of the respondents. In this regard, those who have more family size will have more consumption, hence the amount of surplus supplied to the market will be a meager amount, and their production will be entirely for consumption purpose. Other factors that determine the amount of surplus to the market place include seed reserve needed as reported by 9.8 percent of the respondents and post harvest losses as reported by 7.1 percent of the respondents. In subsistence agriculture like ours the amount that farmers produce and the amount which they use for self-consumption play an important role in the determination of the marketable surplus since they bring to the market the amount which is beyond their consumption at normal conditions.

Given that different factors affect the amount of marketable surplus that the farmers provide to the market the majority of the respondents reported that the amount of surplus they provided to the market has increased in the past three years as in table 4.23.

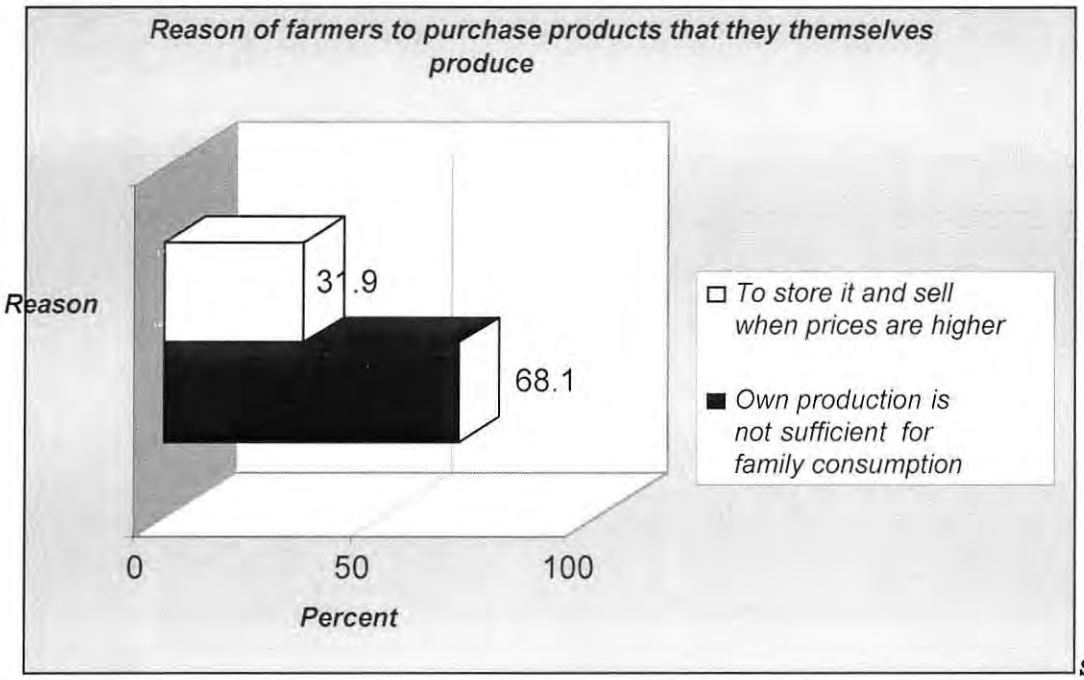
Table 4.23. Amount of marketable surplus in the past three years

Amount of surplus	Frequency	Percent	Cumulative percent
Increased	72	39.1	39.1
Decreased	34	18.5	57.6
remain constant	39	21.2	78.8
Do not know	39	21.2	100.0
Total	184	100.0	

Source: Own survey, 2007

As noted in table 4.23, 39.1 percent of the respondents reported that the amount of marketable surplus they provided to the market has increased while 15.5 percent of the respondents reported that the amount of marketable surplus has decreased. In addition, 21.2 percent of the respondents reported that the amount of marketable surplus has decreased in the past three years while other 21.2 percent of the respondents reported that they do not know as to what happened to the amount of marketable surplus that they provide to the market place. Some of the respondents were found to purchase agricultural products that they themselves produce. 25.5 percent of the respondents reported that they purchase products that they themselves produce while 74.5 percent of the respondent reported that they did not purchase products that they themselves produce. Those who purchase products, which they themselves produce, have given different reasons for their actions as indicated in graph 4.6.

Graph 4.6.Reason of farmers to purchase products, which they them selves produce



Source: ***Own survey, 2007***

As it can be noted in graph, 4.6 producers have different reasons to purchase products that they themselves produce. 68.1 percent of the respondents among those who purchase products that they themselves produce purchase the products since their own production is not sufficient to feed the family members. This group of people particularly involves purchasing agricultural products that they themselves produce in summer season. This is because either what they have produced was not sufficient to cover consumption for a year or they might have sold much than they have to during 'meher' season. In addition, 31.9 percent of them purchase products that they themselves produce with the purpose of saling the products when prices increase, which is for commercialization purpose. This shows that given availability of funds farmers have aspiration to do business by purchasing products at 'meher' season when prices are lower and selling them at off season when prices are higher.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1. Conclusions

Based on the analysis made the following major conclusions are made.

Farmers who produce the agricultural products, consumers, /both urban and rural/ who purchase agricultural produces for consumption, retailers, and assembles who purchase the agricultural products for profit motive are the major actors in the agricultural product market system at Woreda level.

Farmers in the study woreda are subsistence oriented in their production decisions. They will give priority for their consumption requirement, and hence their aspiration for business motive is too low. Their choice of produces highly depends on crop rotation needs, and land suitability for the crop under consideration. However, their market expectation as criterion to select the kind of crops to grow is low. A substantially low number of farmers produce primarily for market purpose.

Small land size, lack of implements aggravated by lack of finance to buy agricultural inputs are major problems of farmers in their attempt to increase their production. A reasonable number of the farmers in the study have serious financial and land scarcity problems. With regard to finance microfinance institutions, mainly ACSI and different cooperatives are working in the Woreda to curb the problem. However those institution also pose problem to the farmers such as in appropriate payment schedule, short gestation period of the loan which they provide, inappropriate loan provision polices that do not entertain applications that did not fit to the group model particularly in the case of microfinance's.

Farmers mostly are required, to pay different obligation such as taxes, cooperative and microfinance loans at 'meher' season. During this time the price of their agricultural product are cheaper as compared to price of similar products at off-season. In addition to payment of different obligations, farmers sell their agricultural product to buy consumable industrial products.

Land scarcity is one of the serious problems of farmers to increase their production. In line with this problem farmers with different amount of land holding size will follow different strategies. The majority of the farmers in the area use to cultivate their own land only. Some farmers rent out their land due to lack of the basic agricultural resource such as oxen, inability to buy required inputs such as fertilizer or they opt to involve in non farm income generating activities, It is not because that they have more land that they rent out their land. In the opposite, those who rent in the land of others aspire to increase production and sell the surplus, or my have too small land to feed family members while others may not have land at all.

Most of the farmers price their products based on the spot pricing strategy in the on going market price. Only few farmers get information about price of similar products in other woredas via telephone, word of mouth and truck drivers or on mass media while the majority of farmers do not have access to such information. However given that farmers get information about the price of similar product in other woreda they do not have aspiration to go to the woreda where prices are high to sell their products due to high transaction costs related to small amount of products involved in the transaction, and lack of appropriate infrastructures. Of course, there are no as such strict legal barriers unlike the socialist regime, which control the flow of agricultural products through what were called 'kellas'/cheek points.

A reasonable number of farmers involve in non-farmer income generating activities such as pottery, leather and tannery, building work, petty trading,

wage labor, local bear, sell of firewood such as charcoal etc. Engagement in non-form activity have both negative and positive implication to agricultural productivity and thereby on marketable surplus. It may increase the command of farmers on agricultural inputs and hence increase production or it may minimize the time and effort allotted for agricultural activities and hence lowers production. However, these effects are conditional on how the farmer manages both his farm and none farm activities.

Cooperative marketing plays important role in agricultural product marketing. Cooperatives provide different services to their members such as provision of credit facilities, market information, appropriate price, and agricultural inputs. However, the majority of respondents are not member of a cooperative due to their phobia of cooperatives, which they have developed during the socialist period.

As the educational background of farmers is low, their application of technology and aspiration for market-oriented production is low. Therefore, farmers need different formal and informal trainings. Farmers had received different kinds of training in the past three years such as on chemical application, fertilizer application, importance of credit and saving, family planning etc... However, the training given to them is not continuous and well planned.

Unfortunate by the time this research was being done urban dwellers are crying about the escalating price increase of agricultural products. Even if different suggestions are being made about the cause and the policy instruments to be taken by different group of people and institutions such as IMF, government and scholars regarding this issue farmers still express that they are not satisfied with the prices of their agricultural products. Farmers rather complain about the prices increase in fertilizer, improved seed varieties and industrial consumables two to three fold in the past three years so that they do not even break even.

5.2. Recommendations

Based on the conclusions of the study the following recommendations are made.

Land scarcity and financial problem are the main challenges of farmers. In regard with land, scarcity the present land holding system has no room for efficient farmers to acquire land from inefficient farmers, and hence land transaction has to be considered as a policy option to increase aggregate production and marketable surplus. In addition, given that there is land scarcity intensification of crop through the application of different agricultural technologies has to be practiced by farmers. In addition to intensification depopulation of rural land by creating different non-farm income generating activities both at rural and urban areas has to be considered as a way out for the land scarcity.

Reasons such as to pay different loans and obligations are mentioned as primary reason that oblige farmers to sell their agricultural products during 'meher' season where price are not attractive. Therefore arrangements should be made in the payment schedule of the loan providers such as microfinance and agricultural cooperatives so that farmers can decide anytime which they think is rational for selling their products.

Infrastructures such as roads and communication facilities should be improved. Farmers need to have information on what kind of products are demanded in the market. The government's effort in rural connectivity project and woreda net project that is expected to make woredas users of different communication technologies has to be facilitated so that every body will have access to information and will decide rationally.

Since Ethiopia is a highly populated country where land per head is decreasing every time intensification of agriculture via use of different

technologies should be given priority than expending land under cultivation to increase agricultural productivity and hence marketable surplus.

Cooperative marketing that has democratic management and a room to entertain individual performance should be encouraged since it improves farmers' access to credit, information and other marketing services.

Improvement in market infrastructure especially roads and communication is important, however it cannot be treated in isolation from the general development strategy of the nation. To alleviate the present transportation problems investment in road and telecommunication should focus in linking food production areas with that of consumption areas particularly rural roads that connect rural kebles to small market areas may play a significant role in this regard. Roads constructed in this direction should assist to improve food security and increase food production by rising grain prices and lowering farm input prices.

Smallholder farming is dominant in Ethiopia. Therefore, efforts on making markets accessible to smallholder farmers through improvement of marketing extension services, road conditions and transportation facilities would have tremendous impact on farmers' incentives to produce more for markets.

In subsistence agriculture where farmers mostly produce for consumption purpose and supply to the market an incidental surplus after meeting their consumption needs increase in productivity and market success of the framers has to bee given a prior attention in policymaking.

Different nations have a system called commodity featuring by which a farmer can sell his/her agricultural products before they are harvested. This will add flexibility in the market system. For example, a farmer with good seedlings will not be obliged to wait until harvest. If he/she has a high demand for money, he/she can sell his/her agricultural seedlings rather than waiting until harvest.

REFERENCES

Alemayehu Lirenso (1998). ***Grain Marketing Reform in Ethiopia: A Study of the Impact of Deregulation in the Structure and Performance of Grain Market***. Addis Ababa, Ethiopia.

Alemayehu Lirenso(1987). **Grain *Marketing and Pricing in Ethiopia***. IDR research report no. 18.Adiss Ababa, Ethiopia.

ANRS (2005). ***Development Indicators of Amhara Region***. Bahir Dar.

Bekele Tilahun (1995). Rural credit in Ethiopia: in: Degene Aredo and Mulat Demeke (eds.). ***Ethiopian Agriculture Problem of Transformation***, proceedings of the 4th annual conference on Ethiopian economy, Addis Ababa.

Berhanu Nega (2003).Introduction: development options for Ethiopia. rural, urban or balanced. in: Berhanu Nega and Befkadu Degfe (eds.).***The Role of Urbanization in The Socio Economic Development Process***. The Ethiopian economic association, Addis Ababa.

Chamber, R (1983) ***Rural Development: Putting the Last First***. john and sons inc, New York.

Dejene Aredo and Teferi Regasa (1995). Land tenure: theory and policy issues in Ethiopia. in: Dejne Aredo and Mulat Demeke (eds.). ***Ethiopian Agriculture: Problems of Transformation***, Proceedings of the fourth annual conference of the Ethiopian economy, Addis Ababa.

Dejene Aredo (1995). Transforming agriculture a conceptual framework: in: Dejne Aredo and Mulat Demeke (eds.). ***Ethiopian Agriculture: Problems of Transformation***, Proceedings of the fourth annual conference of the Ethiopian economy, Addis Ababa.

Desalegn Ramahato (1994). Land policy in Ethiopia at across road. In. Desalegn Rahamato (ed.). ***"Land Tenures And Land Policy in Ethiopia After The Derg"*** , proceeding of the second workshop of the land tenure project, IDR, AAU.

Desalengn Ramahato (1984). ***Agrarian Reform in Ethiopia***. Institute of African studies, Motala Grefiskan ab, Motola ,Sweden.

Eleni Gebremedhin and Wolday Amaha (2003).Getting markets right in Ethiopia: institutional changes to grain marketing. Paper presented at a workshop on "***Harnessing Markets for Agricultural Growth in Ethiopia: Bridging the Opportunities and Challenges"***, ILRI, Addis Ababa.

Eleni Gebremedhin (2007). **Ethiopia to Start Commodity Markets at the End of 2007**. Fortune p18.Adiss Ababa.

Fasil G/kirstos (1993). ***The Subsistence Crises in Africa***: ***The Case Of Ethiopia.*** Organization for social science research in eastern Africa ,Nairobi, Kenya. Icipe Since press

FDRE (2003). ***Poverty Reduction Strategy.*** Addis Ababa, Ethiopia.

FDRE (2002). **Food *Security Strategy***. Addis Ababa, Ethiopia.

Gebrehiwot Ageba (1989). ***Rural Credit: The Review of Some Controversial Issues and Their Policy Implication.*** Proceedings of the workshop in problems and prospects of rural development in Ethiopia IDR, AAU, AA.

Gezahegn Kebede (1995). Agricultural marketing polices and food security. in: Mulat Demeke et.al (eds.). ***Food Security, Nutrition and Poverty Alleviation in Ethiopia: Problems and Prospects***, proceedings of the inaugural and first annual conference of agricultural economics society of Ethiopia, 8-9 June.

Giorghis Tekele (1999). ***The Role of Transport and Marketing in Rural Development.*** Study of farmers in Ada woreda, proceeding of the workshop in problems and prospects of rural development in Ethiopia, IDR, AAU, AA.

Girmia Bekele (2003). The state of agricultural marketing and food security in Ethiopia .In Gezahangn Ayele et al.(eds) .***Food Security and Agricultural Marketing in Ethiopia.*** proceedings of policy forum jointly sponsored by Ethiopian development research institute and the east African food policy net work of the international food policy research institute, Gihon hotel Addis Ababa may15-16, Ethiopia.

Kotller,Pillip(2001).***Marketing Management,*** north western university,pretile-hall inc,schusten Neyork

Kuma Trfie and Mekonen Abraham (1995). Grain marketing in Ethiopia in the context of recent policy reforms. in: Dejnee Aredo and Mulat Demoke (eds.). ***Ethiopian Agriculture: Problems of Transformation***, proceedings of the fourth annual conference of the Ethiopian economy, Addis Ababa.

Muhamed Jabbar (2003). ***Agricultural Market in Ethiopia: Problem and Issues.*** Addis Ababa, Ethiopia.

Patric.D and Daniel (1995). Managing uncertainty in grain marketing. in: Mulat Demeke. et al (eds.). ***Food Security, Nutrition and Poverty Alleviation in Ethiopia Problems and Prospects***, proceedings of the inaugural and first annual conference of agricultural economics society of Ethiopia, 8-9 June. Addis Ababa.

Tegegne Gebreegziabher (2005). Rural urban linkages in Ethiopia: the need to bridge the divide. in: Tegene Gebreegziabhere and Meine Peter Van Dijk (eds.).***Issues And Challenges in Local And Regional Development***, Addis Ababa.

Tegenge Gebreegziabhere 1995***).*** An assessment of Ethiopia's agricultural Land resource. in: Dejne Aredo and Mulat Demeke (eds.). ***Ethiopian agriculture: problems of transformation***, proceedings of the fourth annual conference of the Ethiopian economy: Addis Ababa.

Wolday Amaha and Eleni Gebremedhin (2003).Getting markets right in Ethiopia: institutional changes to grain marketing. ***Paper Presented At A Workshop on "Harnessing Markets for Agricultural Growth in Ethiopia: Bridging the Opportunities and Challenges***", ILRI, Addis Ababa.

Wolday Amaha (1995). Ethiopia's market liberalization in agriculture: consequences and responses. in: Mulat Demeke. et al (eds.). ***Food Security, Nutrition and Poverty Alleviation in Ethiopia Problems and Prospects***, proceedings of the inaugural and first annual conference of agricultural economics society of Ethiopia, 8-9 june, Addis Ababa.

Wolday Amha, Eleni GebreMedhin and Gezahagn Ayele (2003). Markets and agricultural Chinas in Ethiopia's agricultural transformation: Conceptual foundations. In Gezahangn Ayele et al.(eds) .***Food Security and Agricultural Marketing in Ethiopia.*** proceedings of policy forum jointly sponsored by Ethiopian development research institute and the east African food policy net work of the international food policy research institute. Gihon hotel Addis Ababa may15-16, Ethiopia.

Workneh Nigatu and Roth, Michel (2002). Intensification and crop commercialization in north eastern Ethiopia, in: Getnet Alem et al (eds.). ***Ethiopian Journal of Economics,*** Addis Ababa, Ethiopia.

Workneh Nigatu (2004). ***Reasons for Food Insecurity of Farmhouse Hold in South Wello, Ethiopia: Explanation at Grass Roots***.IDR, AAU.

Workneh Nigatu (2005). ***Rural Development***. Unpublished teaching material department of Regional and Local Development Studies, Addis Abba University

Yigremew Adal (2002). ***Preliminary Assessment of the Impact of Post Derg Land Policy on Agricultural Production***: a case study of land redistribution in two communities: in North West Ethiopia, Addis Ababa.

APPENDICES

Annex I

Dear Respondent:

The purpose of this questioner is to collect information on agricultural product marketing and challenges towards a commercial approach. The information you provide will be strictly confidential and solely used for academic purpose. I would like to thank in advance for the information you will provide

Enumerator's guide

Put the mark (✓) inside the rectangle provided at the back side of each question. Respondents may have more than one response in some cases. However only one response that express the situation of the respondent most should be marked.

1. Personal Information of Respondents

1.1. Age _____

1.2. Gender (sex)

☐ 01 Male

☐ 02 Female

1.3. Education

☐ 01. Illiterate

☐ 02 .Read and write/

☐ 03. Elementary school Completed

☐ 04. High school completed

☐ 05. Other (Specify) _____

1.4. Marital status

☐ 01. Single ☐ 03. Divorced

☐ 02. Married ☐ 04. Widowed

2.1. One what basis does you choice the kind of products / real crops that you Produce

☐ 01. Food culture of the family and society around

☐ 02. Productivity of the crop per acre

☐ 03. Land suitability for the cope

☐ 04. Price expectations

☐ 05. Land availability / size

☐ 06. Crop rotation needs

☐ 07. input requirement (labor, fertilizer …)

☐ 08. Any other (specify) ----------

2.2. What is your primary objective of producing a particular product / Crop?

- ☐ 01. Consumption as a food for household members
- ☐ 02. for sale in the market / Business purpose
- ☐ 03. Primary for consumption but sells the surplus
- ☐ 04. If any other ----------

2.3. If your primary purpose of production is for sale, to whom do you sell the Produces

- ☐ 01. Directly to the rural consumers
- ☐ 02. Directly to urban consumers
- ☐ 03. To retailers and assemblers
- ☐ 04. To whole sellers
- ☐ 05. Any other (specify) _____

2.4. What is your reason for four response in Question 2.3.

- ☐ 01. They offer good temperature price that others
- ☐ 02. They are found in near by location
- ☐ 03. Absence of other buyers
- ☐ 04. Any other (specify) _____

2.5. Which of the following most impedes your effort to increase production?

- ☐ 01. Small land size plot
- ☐ 02. Lack of implements like pesticides etc…
- ☐ 03. Lack of labor
- ☐ 04. Land ownership / security problem
- ☐ 05. Lack of appropriate extension support service
- ☐ 06. Any other (specify) _____

2.6. Do you have financial problem to by agricultural inputs and Technologies

- ☐ 01. Yes
- ☐ 02. No

2.7. If you have financial problem, why don't you borrow from microfinance Institutions.

- ☐ 01. The service is not available in the kebele
- ☐ 02. Higher / exorbitant interest rate
- ☐ 03. In appropriate payment time, particularly when crop prices are cheaper
- ☐ 04. Short gestation period of the loan / duration / life span
- ☐ 05. Lack of friends to be a member of group
- ☐ 06 Fear of bankruptcy there by confiscation of other assets
- ☐ 07. Any other (specify) _____

2.8. When do you sell your products?

- ☐ 01. immediately after / during production season
- ☐ 02. Waiter for some time for a price increase /off season
- ☐ 03. Any other (specify) _____

2.9. If you sell your products during production period, why don't you wait for Off season so that prices will increase

- ☐ 01. To get finance to buy daily consumable industrial products
- ☐ 02. To pay children education
- ☐ 03. to pay different obligations and debts /taxes and microfinance debts)
- ☐ 04. Lack of appropriate storage facilities
- ☐ 05. Products may be damaged if not sold immediacy after production
- ☐ 06. Any other (Specify) _____

2.10. For what purpose do you sell products?

- ☐ 01. To buy consumable industrial items
- ☐ 02. To buy items for children education
- ☐ 03. Accumulation of capital
- ☐ 04. To pay any government / microfinance debt
- ☐ 05. If any other (specify) _____

2.11. Which one is appropriate your critical problem after production?

- ☐ 01. Lack of storage facility
- ☐ 02. Transportation to market places
- ☐ 03. Lack of information
- ☐ 04. Lack of attractive price /demand
- 05. Any other (specify) _____

2.12. On what basis do you set prices for your products?

- ☐ 01. Based on pervious / least year prices
- ☐ 02. Competitive price / based on the competition /on spot pricing
- 03. Any other (specify) _____

2.13. Where do you sell your products?

- ☐ 01. In my residential kebele market
- ☐ 02. In other kebeles / part of the woreda
- ☐ 03. In other woredas
- ☐ 04. In any part of the nation
- 05. Any other (specify) _____

2.14. What transportation systems do you use to transport your products to the Market place.

- ☐ 0.1. Caring one self /human backs
- ☐ 02. On animals back (like donkeys, mules, horses…)
- ☐ 03. Modern transport like cars and vichles
- ☐ 04. Caret ('garry')
- ☐ 05. Any other (specify) _____

2.15. Do you get information above the price of similar products in other Woredas.

- ☐ 01. Yes
- ☐ 02. No

2.16. If your answer for question '16' is yes through what mechanisms

- ☐ 01. Telephone
- ☐ 02. Messages / Words of mouth) via truck drivers
- ☐ 03. Postal system / envelope
- ☐ 04. E-mail internet
- ☐ 05. Mass media

06. If any other (specify) _____

2.17. Do you perform any non farm income activity?

- ☐ O1. Yes
- ☐ 02. No

2.18. If you perform any non farm activity which of the following

- ☐ 01. Weaving
- ☐ 02. Pottery
- ☐ 03. Leather and tannery
- ☐ 04. Wood work and tool making
- ☐ 05. Building work / traditional/
- ☐ 06. Petty trading
- ☐ 07. Wage labor
- ☐ 08. Metal work and tool making
- ☐ 09. Local beverages like 'tela', 'Arechi'
- ☐ 10. Sale of fire wood such as charcoal
- ☐ 11. Sale of crop residual (Straw)
- 12. Any other. _____

2.19. If you perform any non form income activity, what kind of impact / both Negative and positive/ does it have on your agricultural production

Positive _____

_____

Negative _____

_____

2.20. Land is a basic resource in agriculture; in regard with this do you?

☐ 01. Cultivate only your own land

☐ 02. Rent out my land to others

☐ 03. Rent in the land of others

2.21. If you rent out your land, what is the reason?

☐ 01. I have no oxen

☐ 02. I have more than enough land

☐ 03. I can't buy inputs like fertilizers and pesticides

☐ 04. I have other non farm activities to do/ perform

05. Any other (Specify) _____

2.22. If you rent in land of others, why

☐ 01. I don't have my own land

☐ 02. I have too small land to feed my family

☐ 03. I need to increase my surplus production and sell it in the market

04. Any other (specify) _____

2.23. Do you perform any kind of post harvest processing before you sell your Products

☐ 01. Yes ☐ 02. No

2.24. If your answer is yes for Question 23 yes what kind of processing activities.

_____

_____

2.25. Which of the following is your critical problem in your agricultural activity?

☐ 01. Lack of implements at the right time

☐ 02. Lack of finance /credit

☐ 03. Lack of information

☐ 04. Lack of access to credit

☐ 05 lack of transport infrastructure

☐ 06. Fluctuating prices

☐ 07. Lack of market demand.

08. Any other (Specify) _____

2.26. For what purpose do you give priority in production of particular grain?

☐ 01. Market

☐ 02. Consumption

03. Any other (specify) _____

2.27. What factors determine / impede your agricultural activity from being market driven.

_____

_____

_____

2.27. What factors affect your usage of technology such as fertilizers?

☐ 01. Land size

☐ 02. Availability of oxen

☐ 03. Operated form size

☐ 04. Education of the head / heads literacy

☐ 05. Heads age

☐ 06. Labor units / number of families

☐ 07. Existence of non oxen livestock

☐ 08. Non farms income engagement

2.28.For the selection in question 2.27 explain how the effect goes?

-

_____

_____

_____

2.28. If here is price difference at your woreda and any other woreda do you go to the woreda where prices are high to sell your products

☐ 01. Yes ☐ 02. No

2.29 If your answer is No for question number 2.28 (you don't go to the Woreda while prices are high) what is the reason

☐ 01. Lack of transportation

☐ 02. Legal barriers go to other woredas

☐ 03. Higher transaction cost due to small ness of surplus to be marketed

04. Any other (specify) _____

2.30. What challenges do you face in attempting to make your agricultural activity market oriented? _____

_____

_____

2.31. What do you expect the government to do four you? _____

_____

_____

2.31. If you get information about price of products in other places (woredas) do you freely share this information with others

☐ 01. Yes

☐ 02. No

2.32. If your answer is no for question NO 2.31 No why? _____-

_____

_____

2.33. Do you have any permanent customer to who you sell your products?

☐ 01. Yes

☐ 02. No

2.34. Are you member of any agricultural product marketing co-operative?

☐ 01. Yes ☐ 02. No

2.35. If you are member of any co-operative what services do you get being member of the cooperative

- ☐ 01. Credit facilities
- ☐ 02. Market information
- ☐ 03. Appropriate price for products
- ☐ 04. Agricultural inputs
- 05. Any other (specify) _____

2.36. Which offers most you market surplus that you sell in the market?

- ☐ 01. Family size
- ☐ 02. Land operated
- ☐ 03. Seed Reserve needed
- ☐ 04. Post harvest losses
- ☐ 05. Use of farm inputs
- 06. Any other (specify) _____

2.37. Do you purchase agricultural products that you your self produce?

- ☐ 01. Yes
- ☐ 02. No

2.38. If your answer is yes for question number 2.37 is yes, why

- ☐ 01. Own production is not sufficient for family consumption
- ☐ 02. To store it and sell when prices increase
- 03. Any other (Specify) _____

2.39. Amount supplied to the market in the past three years

- ☐ 01. Increased
- ☐ 02. Decreased
- ☐ 03. Keep constant
- ☐ 04. Don't know

2.40. Which kind of training that you get over the past three years

- ☐ 01. Fertilizer application
- ☐ 02. Chemical application
- ☐ 03. Credit and saving
- ☐ 04. Associations / cooperatives
- ☐ 05. Nutrition
- ☐ 06. Family planning
- ☐ 07. Storage
- ☐ 08. Harvesting
- ☐ 09. Transportation of crops
- ☐ 10. Weeding
- ☐ 11. Planting
- ☐ 12. Irrigation
- 13. Any other (specify) _____

2.41. Which of the following finance sources you use

- ☐ 01. Agricultural office
- ☐ 02. Co-operatives
- ☐ 03. Formal Banks
- ☐ 04. NGO's
- ☐ 05. ACSI or any microfinance institution
- ☐ 06. Private many lenders
- ☐ 07. Private money lenders
- ☐ 08. Friends/ relatives
- ☐ 09 Traditional organizations/like ekub, edir…)

2.42. For what purpose do you use the loan?

- ☐ 01. To buy agricultural inputs
- ☐ 02. To buy farm implements
- ☐ 03. To buy live stock
- ☐ 04. To pay for hired labor
- ☐ 05. To pay rent /taxes

☐ 06. To start an off farm business

☐ 07. To spend for consumption

08. Other (specify) _____

2.43. Any kind of comment that you want to give.

_____

_____

_____

_____

Thank you!

Annex ii

Interview Guides

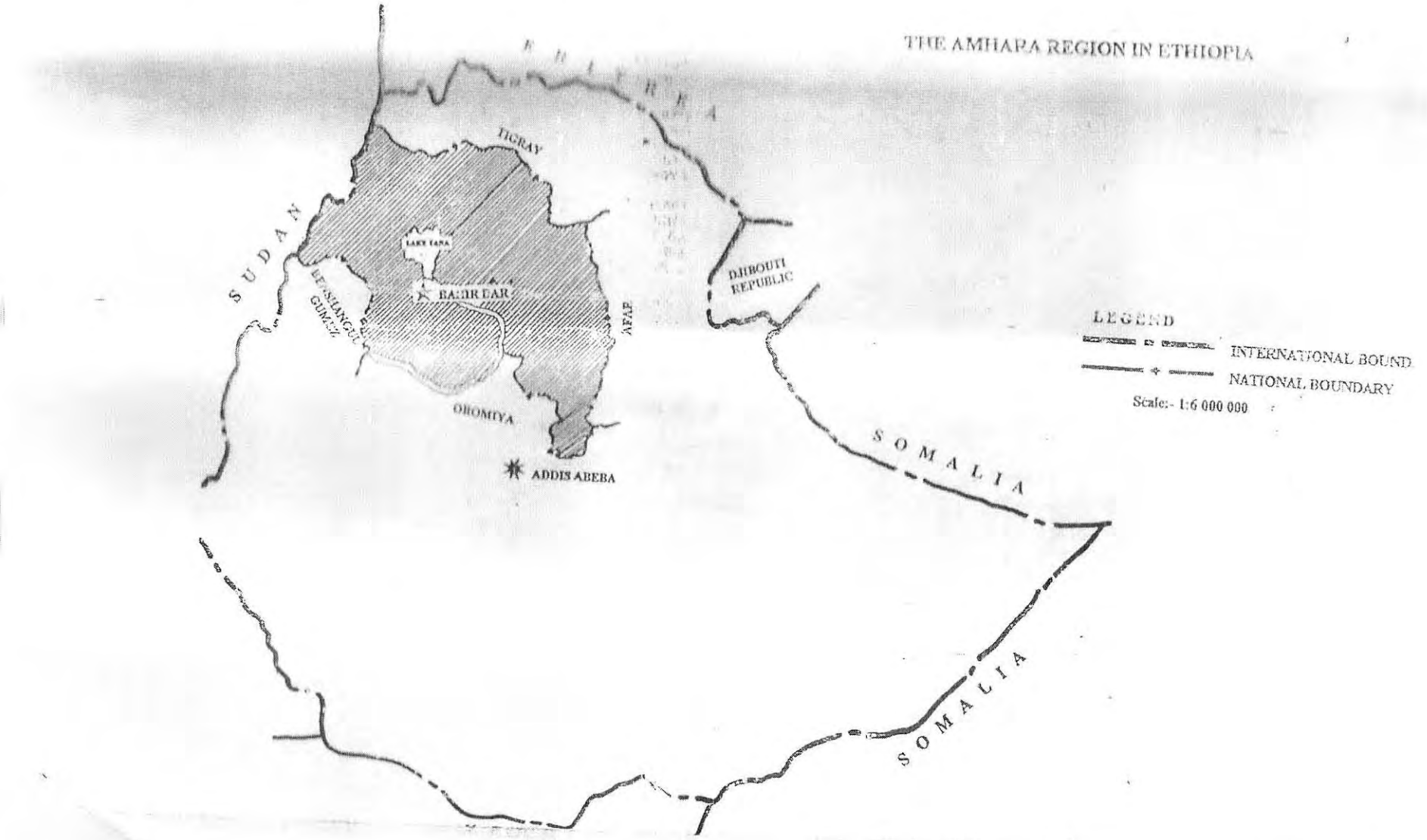
Key informant in depth interview with Amahra Region Bureau of Agriculture and Rural Development and BaharDar Zuria Rural Development Desk

- ✓ General information about the region/woreda in terms of population size, economic activities, geographical size and boundaries, economic development in the past five years?
- ✓ What supports does your office render for farmers?
- ✓ What has been done in the sector to increase production for market besides insuring food security?
- ✓ What incentive mechanisms that your office uses to increase farmers motive of production for markets?
- ✓ What are the challenges that your office think to increase agricultural production and hence the marketable surpluses in the region/woreda?

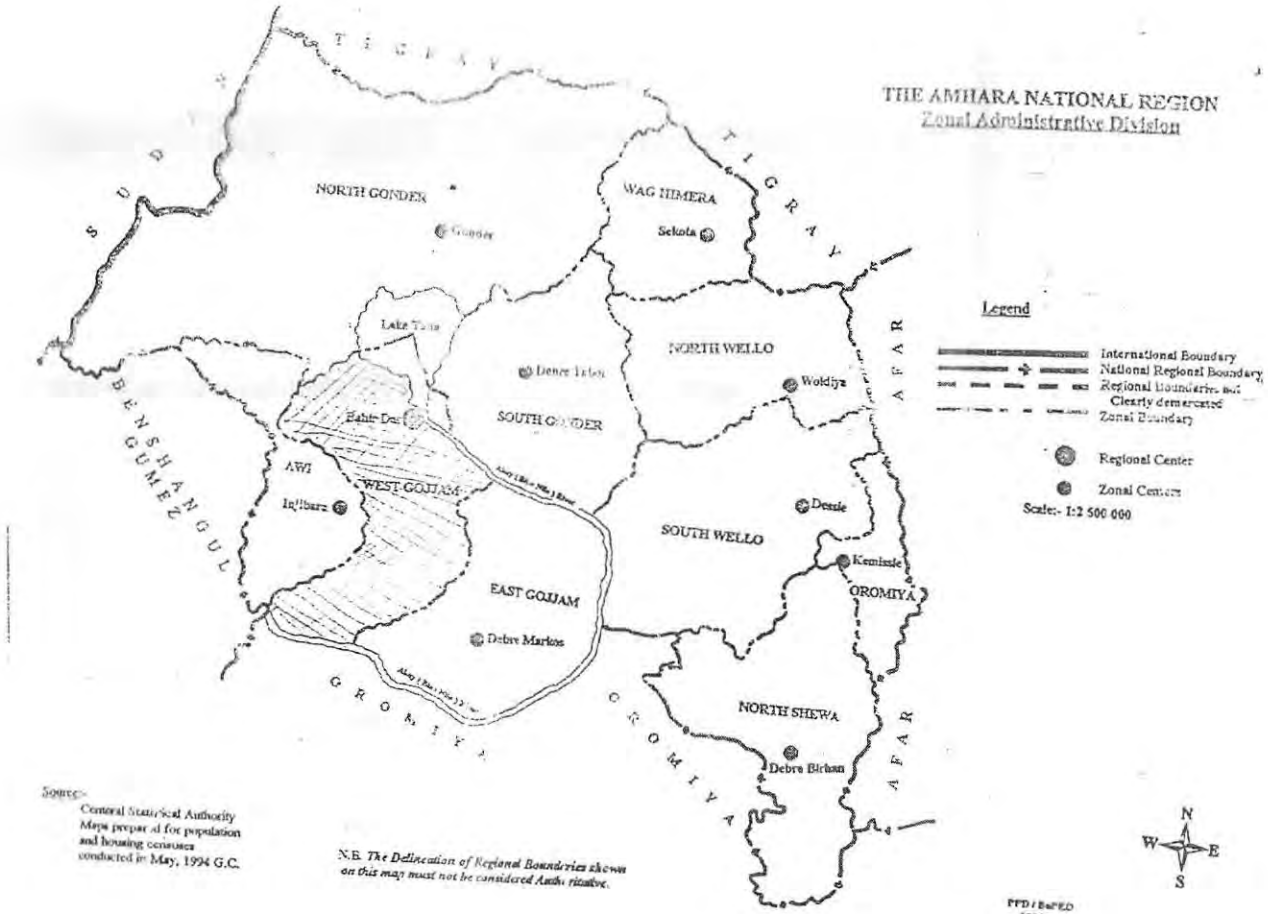
Informal unstructured interviews with farmers

- ✓ For what purpose do you primarily produce agricultural product? If you are producing primarily for consumption why don't you produce for market?
- ✓ When is the right time for you sell your products and When do you sell the majority of your products ?
- ✓ What transportation methods do you mostly use to transport agricultural products
- ✓ What ha s happened to your agricultural productivity in particular and your standard of living in particular?
- ✓ What support activities do you need from the government?
- ✓ What are the general problems that you face in production, pricing, and distribution of your agricultural products?

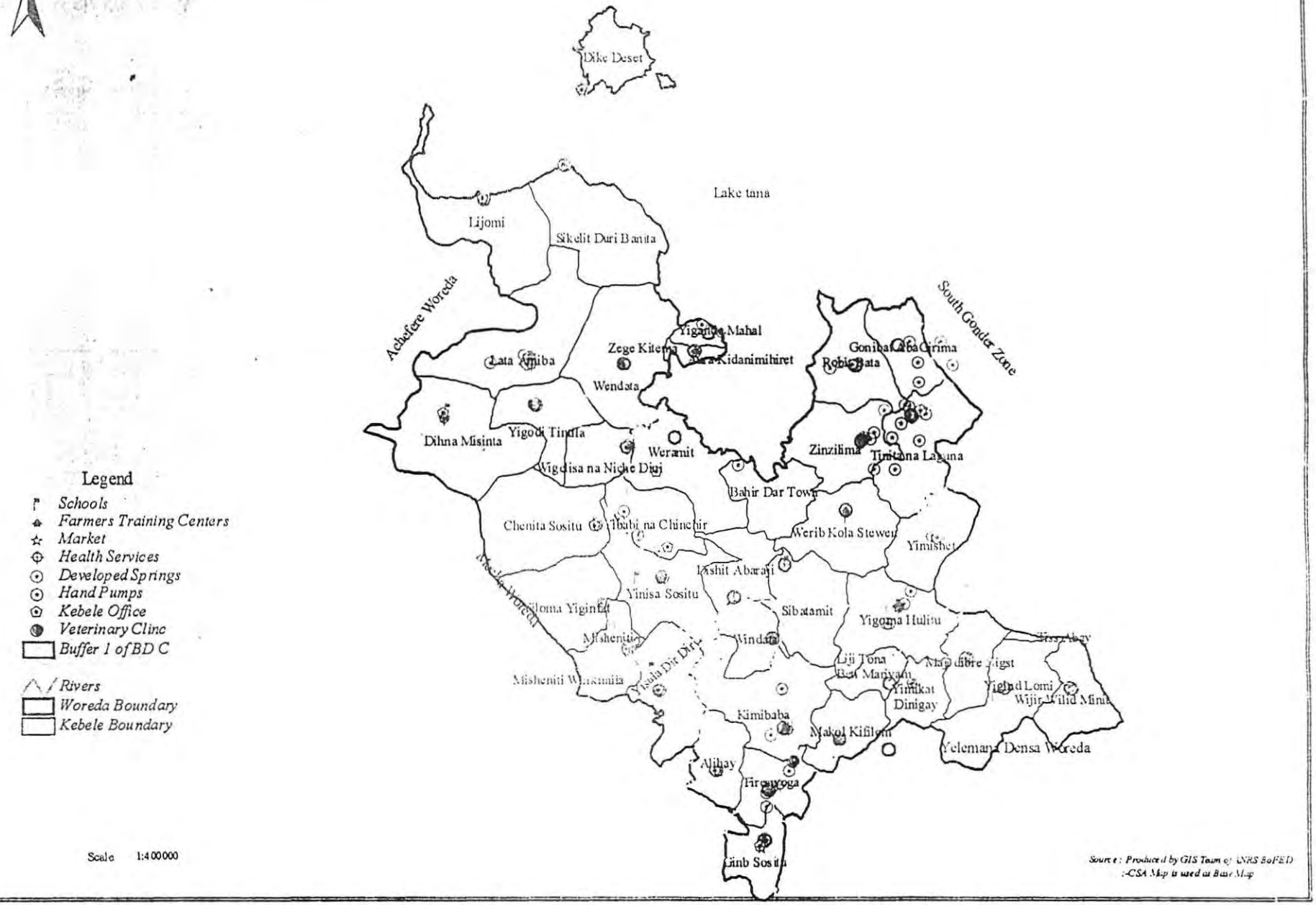
Relative location of Amhara Region in Ethiopia



Administrative map of Amhara Region.



Map of Rural Kebele Centers and Socio-Economic Services in Bahir Dar Zuriya Woreda



DECLARATION

I the undersigned, declare that this is my own orginal work has never been presented in any other university. All sources of materials used for this have been dully acknowledged

Date and Place of Submission July, 2007, Addis Ababa

Declared by:

Name:Abebe Kebie

Signature_____

Date

_____

Confirmed by Advisor:

Name: Issac paul (PhD)

Signature_____

Date_____