

CHARACTERISTICS AND DETERMINANTS OF RURAL MICRO
ENTERPRISE: THE CASE OF KONSO SPECIAL WOREDA IN
SOUTHERN REGION OF ETHIOPIA



BY

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ABBREVIATIONS AND ACRONYMS

ADLI	Agricultural Development Led Industrialization
BFED	Bureau of Finance and Economic Development
BOP	Bureau of Planning
CSA	Central Statistics Authority
DA	Development Agent
DPPC	Disaster Prevention and Preparedness Commission
ECA	Economic Commission for Africa
FAO	Food and Agricultural Organization
GDP	Growth Domestic Product
GER	Gross Enrollment Ratio
HIV/AIDS	Human Immune Virus /Acquired Immune Deficiency Syndrome.
KAD	Konso Development Association
KSW	Konso Special Woreda
ME	Micro enterprise
MOLSA	Ministry of Labour and Social Affairs
NGO	Non Government Organization
PA	Peasant Association
PAs	Peasant Associations
SNNPRS	Southern Nations, Nationalities and Peoples' Regional State
SSA	Sub Saharan Africa
UNDP	United Nations Development Program
RBP	Regional Bureau of Planning
RLDS	Regional and Local Development Studies
TB	Tuberculoses
WB	World Bank

ABSTRACT

This study aims at examining the general characteristics of rural micro enterprises and factors that determine the engagement of households in such activities in an area characterized by low agricultural output, Konso special woreda of South Ethiopia. The study was motivated by the belief that rural micro enterprise employment is survival strategy of the rural households where there is limited local wage employment and agriculture fails to support the growing population.

The study mainly used the household survey data collected through structured questionnaire to explore characteristics of farm economy and to describe the major characteristics of rural micro enterprise activities. Then, the analysis was undertaken by various means of analysis and economic regression for the examination of the influencing/explanatory variables on household's income from micro enterprise activities.

The study finds that the crop production sub sector in the study sites is characterized by very low productivity. This is due to various reasons such as small and fragmented land holding, unsuitable soil fertility and land topography, little use of high yielding inputs and lack of draft animal. Above all, shortage of rainfall is the serious problem of farm economy in the study sites. Livestock sector is also constrained by shortage of grazing land and water as well as prevalence of disease. Thus, the agricultural sector in the study sites is inadequate to support growing population.

Consequently, people in the study sites are involved in very small income generating activities such as local drinks and food preparation as well as trade which mainly used family labour or relatives' and friends' labour. Their inputs are generated from the locality and mainly serve local people in their products. They are operated at homestead and at part time base in combination with farm activities. They are perceived as somewhat profitable, labour saving, and reduce burden on environment and vulnerability of household to seasonal risks. As the result, they are attracted by most farmers despite they are constrained by a number of impediments mainly the lack of financial capital and inputs.

From the determining factors, family size, and educational status of the household's head and location of household's residence to rural weather road and periodic market shown positive significance. This implies for agricultural and rural development strategies and policies to be flexible in such a way that they incorporate micro enterprise sector. Among the promoting instruments, availing necessary resources like credit, expansion of education, and strengthening of rural transport sector and rural periodic markets are reasonably important.

Key words: Rural poor, Rural micro enterprise, Risk averting mechanisms, Seasonal crop failure

CHAPTER ONE

1. INTRODUCTION

1.1. Background

The justification for micro enterprise employment is the failure of large-scale urban biased industries to absorb largely growing population and the prevailing extreme poverty and unemployment in most developing countries especially in countryside. Since 1970's, the past large scale industries and large firm policies have been criticized as they lack flexible specialization in the context of Third World countries (Zewede, 1999; Ozcan, 1995; Pedrson, 1994). As of Pedrson (1994) Third World countries cannot sustain such large and tight firms with out flexible specification because they are characterized by low income, unstable market, poor infrastructure and arbitrary political systems. Furthermore, their economy is influenced by strong seasonal, climatic and cyclic conditions.

On the other hand, Third World countries' like African subsistence agriculture faces problem to feed agrarian society even though it is expected to supply commodities for export, food for domestic market and raw materials for the industrial sector as well as to create and expand market for domestic manufacturing industries. According to Food and Agricultural Organization (FAO) recent statistics, out of 86 low-income countries, which are revealed as food insecure, 43 are found in Africa (Ashimongo and Hella, 2003 citing FAO).

Chronically nourished persons have been increased in Sub-Saharan Africa (SSA). As the result, food import of most SSA countries is 10-20 percent of total food supply to feed the peoples of the region (Bryceson and Loan, 1994). Ethiopia is not exceptional to the above facts. The country has still about 50-60 percent of its population living under absolute poverty (Ministry of Labour and Social Affairs, MOLSA, 1997). Again, as the recent data show, about 22 percent of its population was in need of food aid in 2003 (Workneh, 2004). Furthermore, its socio-economic situation was characterized by low level of economic growth, high population increase, drought, famine, rural-urban migration, civil unrest, etc., in the past two decades (mid 1970s and 1980s). Most of these situations have continued until today with little changes.

The reasons for the failure of agriculture to absorb the rural agrarian society is thought by many scholars as a problem of misguided policy and demographic pressure over the natural resources,

which resulted in distortion of the whole ecosystem. Among others, the 1960s urban biased policy that neglected subsistence agriculture is cited as a misguided policy (Fassil, 1993; Dejene, 1996). Some people also accused the 1970s' and mid 1980s' state dominance over the whole affairs of the economy (Helmising, 2001). Others still argue that little consideration of agricultural and rural development policies and strategies for sectoral relationship especially agriculture to other sectors (non-farm) contribute to the failure of agriculture to feed the growing population (Tegegn, 2000). Furthermore, few state external shocks exacerbate the hardship (Ashimongo and Hella, 2003)

As far as demographic pressure over natural resource concerned, the declining ratio of land per man has become widespread problem of most Third World countries with its chronic implication on the household income and nation's economy. This is because, it has accompanied with fragile use of land and over utilization of land for crop production and grazing. As the result, recurrent drought and famine become prevailing phenomena of Ethiopia and other African countries.

Before, 1960s Ethiopia was one of the food exporters, but since then it has become the food importer to feed its local people (Delil, 2001 citing Sofian). The relative population increase was 3 percent while agricultural sector increases by 2 percent until 1992/93 though it is a main stay for more than 87 percent of the population (Workneh, 2004).

Nevertheless, the effort has been given in order to improve the productivity of land through various yield-increasing technologies due to the fragmented land and recurrent drought; few farmers utilize the effort. This alone cannot improve the agricultural productivity in the short run, though its prospect is encourageable. In general, these problems have undermined the agricultural growth and reduced its labor absorption in Ethiopia and other African countries.

On one hand, in other African countries and Ethiopia, the growth of urban biased industrial sector is stagnant and incapable to absorb the labor force in the urban areas let alone it is expected to absorb rural surplus labour. This is very tricky when it is compared to the rest of the world. For instance, it was only 3 percent of total manufacturing value added of developing countries and only 1.5 percent of the world's total manufacturing exports come from Africa

(Bryceson and Loan, 1994 citing World Bank, WB).

As the result, rural people have no option to stay in fragmented and degraded land with a deteriorating agricultural income. Yet many continue to struggle and while the rest give up to take migration as the last alternative to neighboring areas. Others migrate to other regions especially where it is accessible to male due to cultural problem. This has also its own implication both to the region as well as individual household. It creates demographic and regional imbalance as well as putting women; the vulnerable group of agrarian society to handle the whole family in such hard environment. Moreover, migration to urban areas has led to other interwoven social and economic crises in the urban centers.

Thus, the problem has increased the pressure on a household to seek alternative in non-farm self-employment on part time or seasonal basis otherwise neglect the farm sector. As the result, those have ability have engaged in very small business (micro enterprise) activities as their major or secondary activity to agriculture so as to generate income to supplement and stabilize their income during crop failure. Recently, it is estimated that 21 percent of the rural households in Ethiopia depend on such and other non-farm activities and earned about 17.9 percent of cash income (MOLSA, 1997). This provides the rural poor with purchasing power and lay foundation to improve rural living standard thereby reduce rural urban migration.

Besides this, these activities have an advantage of diversification of the economy and reduce the burden on the land. Its expansion also has a foundation for the rural industrialization through providing capital (Human and physical) and increasing the agricultural production and real income of the household.

In other words, it stimulates the agriculture sector. Consequently, it induces the development of backward regions, the rural areas. Thus, giving emphasis to the rural micro enterprise development is consistent with the strategy that has been adopted by the government, Agricultural Development Led Industrialization (ADLI) in SSA including this country.

Hence, the fact indicates that livelihood of the rural poor has been worsening from time to time, especially, those live in drought prone areas. Therefore, it is important to give attention and consideration to promote micro enterprise development in the rural areas along with agriculture sector. This can be through provision of resources and availing infrastructures to the poor, which is among the various alternatives through which rural poor can be assisted.

1.2. Definition of Concepts

Micro enterprise sector in general and rural micro enterprises in particular has different definitions in different countries and at different time as well as for different purposes. Due to the various uses of the term, any study on micro enterprise starts by outlining the conceptual definition and its specific meaning. This emanates from very heterogeneous characteristics of Micro Enterprise (ME) sector that do not defy a single definition. For example, Andualem (1997) identified about 50 definitions from the survey conducted in 75 countries. From these definitions, some interchangeably use small-scale enterprises and informal sector with the micro enterprise sector. At the same time, others use rural micro enterprises, as they are synonymous to non-farm employment. From this by extrapolation some replace off-farm by rural micro enterprise sector because they synonymously use non-farm and off-farm income. Despite the objective of this study is not to find exact and consistent global definition of these terms, it is important to note some points concerning these concepts.

To begin with, micro enterprises have some characteristics that relate them with small-scale enterprises despite their definitions being different from country to country. In general, micro enterprises are smaller than small-scale enterprises but they have the following common characteristics.

- Knowledge and skills are acquired through apprenticeship;
- Working capital is individual or household owned and the activity involves a small range of workers;
- Activities or workshops are home-based or insecure non-permanent locations;
- A large number of operators do not comply with established business regulations; and

- Operators have low formal education background, pay minimum wages to workers and provide apprenticeship in a non- remunerative basis (Zewede, 1999 citing Economic Commission for Africa, ECA).

Similarly, ME sector has common characteristics with informal sector and by definition these terms are identical (Levitsky, 1989). Webster and Fidler (1996) define informal sector as:

“Informal sector refers to smallest enterprises, typically those with fewer employees, the vast majority of which are one person business with few wage workers. The term also implies a traditional mode of production and therefore, excludes small high technology business” (Webster and Fidler, 1996:5).

At the same time, Levitsky (1989) defines micro enterprise sector as the following:

“The term micro enterprise sector referred to very small income generating units, owned and managed by entrepreneurs who worked in it themselves, from which they derived most of their livelihood, which employ very few people, if any, mainly relying on family members and using very little capital. In most countries, this was largely synonymous with the informal sector but in some cases could include traditional family, cottage industries or artisan units and the self employed” (Levitsky, 1989: xviii).

Consistently, Begachewa (1994) characterize informal sector as if it takes its diversification as its trademark. As of him “informal sector is survivalists (very poor people who work part time in various non-farm income generating activities), self employment who produce goods for sale, purchase goods for resale, or offer services, and very small business (micro enterprise) that is usually operated from a fixed location” (Begachwa, 1994:10).

Throughout this paper informal sector is synonymous to micro enterprise sector. Especially, rural micro enterprise sector is characterized as:

- a. year round or seasonal enterprises funded to the agricultural cycle;
- b. full or part-time enterprises (in rural areas, we can not really find tradesmen or shop keepers who are not farmers);
- c. individuals or family enterprises or enterprises employing full time or casual out side labuorers;
- d. fixed or itinerant enterprises, particularly petty trading;

- e. enterprise with a sole line of business or with multiple lines substituting for one another, according to market needs, or clustered in order to share risks and avoid standing out from the social milieu (Nowak, 1989:247).

Hence, rural micro enterprises are heterogeneous and diversified income sources serve as a common household's or individual's survival objectives. Because of this, Shepherd (1998) states the heterogeneity of rural micro enterprises as if it defies a simple categorization and definition. Hence, micro enterprises have to be considered as an operation run by the poor for whom assistance represented an act of 'poverty alleviation'.

Therefore, rural micro enterprise in this study stands for very small enterprises¹ operated from homestead or sometimes long distance from home and therefore dispersed all over the rural areas. They are often operated on part time or seasonal basis and secondary to farm or sometimes other activities. If other people than owners are employed, it is mostly unpaid family labourers and has small share of market that typically serves only very local market and neighbors. Many of them are engaged in activities that are based on traditional rural raw materials and knowledge and require limited capital.

Farm, non-farm, Off-farm and Rural Micro enterprise Income

It is very important to distinguish among these concepts because some times they are misleading. Economists distinguish these sources of income as follows (Saith 1992 quoted in Ellis 1998).

Farm Income

Farm Income is income generated from own account farm either on own occupied land or on land accessed via cash or share tenancy that includes livestock and crop income and comprises both for consumption in kind of own farm output and cash obtained from output sold.

¹ The term enterprise in real economic sense is defined as a business that involves risk especially as to funds ventured and initiated with the hope of making profit. However, here it is used in a more crude sense representing these household types of business and self employment activities consisting of seasonal and part time economic diversification and is typically operated by low income households as risk averting mechanisms.

Off-farm income

Most of the time, off-farm income is synonymous to non-farm income for most scholars. For others, off-farm income is typically, referred to wage or exchange of labour on other farms (i.e., with in agriculture). It may include income obtained from local environmental resources such as firewood, charcoal, house building materials, wild plants and so on (Ellis, 1998; Shepherd, 1998).

Non-farm Income

Non-farm income refers to non-agricultural income sources. In spite of several sub-categories, the following are the lists of non-farm income sources. These are:

- non farm, rural wage or salary employment;
- non-farm, rural self employment;
- rental income obtained from leasing land or property;
- urban to rural remittances arising from within national boundaries;
- other urban transfers, example pension payments to retired; and
- international remittances arising from cross border and over seas migration (Ellis, 1998).

Rural Micro enterprise income

Rural micro enterprise income has several sources of income categories though the following are listed. These are:

- income from trade and commerce;
- income from family tradition and cottage industries;
- income from local produce (agro based food products, art, handicrafts, pottery, wicker, etc.).

Not withstanding the difference of the last three concepts, they have some common characteristics. All of them are sources of income for the rural people other than farm income. Again, non-farm self-employment includes both micro enterprise and off-farm income. This is because by definition off-farm is rural non-farm self-employment which is based on common pool resources (Shepherd, 1998) while rural micro emprise is rural non-farm self-employment

which produce goods for sale and purchase goods for resale or offer services (Levitsky, 1989; Begachwa, 1994). Thus, this study draws its framework based on these similarities and differences of concepts.

1.3. Theoretical Framework

Modernization theories of the 1950s, and 1960s whose focus was on commercialization and urban biased industrialization could not explain what is happening in the countryside today. The then economic development theories and policies were dominated by the work of Arthur Lewis (1954) mainly with his article on "Economic Development with Unlimited Supplies of Labour." Rural economy was seen as if it had surplus labour and this labour has to be absorbed to the urban industrial sector, which is the only "engine of economic growth and development." Local initiatives especially non-agricultural activities such as handicrafts were undermined and large and imported manufacturing industries were promoted (Staatz and Etchen, 1990).

However, the 1970s equity with economic growth and the 1980s economic reformist approach help to the flourishing support for the micro enterprise in general and rural micro enterprise in particular. Despite this fact, its practical support is vary from country to country. For instance, in Ethiopia economic reform and private enterprise promotion were put in practice in the first half of 1990s (Degene, 1996). Until then the Ethiopian development was led with rural cooperative where no support was given to rural private economic development.

Similarly, the peasant model, which defines rural economy as only dependent on the land could not fully understand the intersectoral as well as interspatial relationship of the rural economy (Tegegne, 2000). Due to this, decisions of rural development policies, at most focused on tenure, institution, infrastructure, technical and aspects of agricultural development. In contrast, non-farm activities, including micro enterprise activities in rural areas receive little attention.

Hence rural micro enterprise /non-farm/ employment is viewed as follow (Bryceson and Laa, 1994; Mulat and Teferi 1996; Pedersen, 1994; Evan, 1991).

1. A process towards rural industrialization

2. Rural households' labour or occupational adjustment during unfavorable environmental condition.
3. Rural economic diversification (Survival strategy)
4. A potential source for rural urban linkage

A prospective that perceives rural non-farm as a process towards rural industrialization adopts its idea from the European cottage industries and the recent Chinese rural industrialization policy. Especially, the Chinese rural industrialization policy bases the argument of transforming the rural economy to the rural industrial sector. For this reason, the policy aims at transforming the rural economy from self sufficiency and semi self sufficiency production to large commodity production through promotion of small scale rural industries. In this prospective, the process of development is seen as a transition of peasant agriculture to modern industrialization (Malat and Teferi, 1996; Levitsky, 1989).

Meaning, rural households generate income from rural non-farm (micro enterprise) activities and transform the other economic sectors such as agriculture and the rural industrial economy. They accumulate capital and invest it on agriculture and industrial sector. Thus, rural micro enterprise employment is a means of transforming agriculture and rural economy to the industrial sector. Especially, micro enterprise sector helps to increase the productivity of agriculture through building capacity for the farmers to afford agricultural inputs which in turn helps to the expansion of rural industrialization.

Rural households' labour or occupational adjustment view bases the argument of rural households' labour extension from the family farm to family firm and the Newly Industrialized Countries small and micro enterprises strategies. In the case of extending family farm to family firm, households allocate their labour to the firms that demands labour and capital from that was restricted only to farm (Mulat and Teferi 1996). Whereas, the case of Newly Industrialized Countries micro enterprises strategies, micro enterprises make cluster or merge together otherwise close some of their sub branches during unfavourable economic condition. Using this they can survive for ever (Pederson, 1994).

Rural economic diversification (Survival strategy) perspective views rural non-farm or micro enterprise employment as a means of rural households' survival strategy to secure their household needs at the time of food shortage. This is particularly, a common practice of most tropical communities where their farm income is characterized by seasonal fluctuation.

A view that perceives rural non-farm (micro enterprise) activities as a source for rural urban linkage bases the argument of Evan's (1991) virtuous circle model. In this model rural non-farm activities serve as a bridge to link rural and urban economy. In this perspective rural areas and urban centers are seen as if they have symbiotic relationship. For example, households near to urban centers can have opportunities to engage in various non-farm activities which can be gained from the proximity of the household.

1.4. Statement of the Problem

Micro enterprise sector has become an important source of employment and income since 1970s (Ozcan, 1995; Zewede, 1999). However, in Ethiopia given the widespread poverty, unemployment, underemployment and disguised unemployment, the realization of their nature and characteristics as well as their potential by the government and by the development practitioners have been given due attention very recently.

Despite this fact, the consideration of rural micro enterprise is very minimal while it is compared to urban micro enterprises. Studies are confined to urban centers except a few, which are on non-agricultural sector where micro enterprise is one component. Similarly, the assistance of Non-Governmental Organizations (NGOs) and government is limited to the short-term solutions like food for relief where none is given to micro enterprise development in the rural areas where agriculture fail to support the growing population. On the other side, as it is stated in the background section conditions become worse from time to time that necessitate the micro based studies and decisions. It also needs the appreciation of local initiatives like micro enterprise employment of the people to avert such problems.

In Konso Special Woreda (KSW)² where this study is conducted, the seriousness of the poverty has become chronic compared to other areas. As the study conducted by the Regional Bureau of Planning (RBP), people living under poverty line reached 86 percent in KSW (FARM Africa³ 2004 citing RBP). This is very high while it is compared to the national proportion that is 50-60 percent (MOLSA, 1997).

Furthermore, agriculture, which is the economic backbone and the main source of employment as well as income for more than 95 percent of the woreda population is now in a very disastrous state and seems to go out of function after some years in some areas of the woreda due to the bad condition of the environment and man made problems. Despite this, government's and other organizations like NGOs' support for development of rural micro enterprise is very low. There is no such organized and planned credit provision or other means of providing the poor for their self-sufficiency. Rather the government's and NGOs' support is mainly limited to the provision of food for relief every year due to the frequent drought that induces frequent famine. For instance, Filmon (2001) computed Konso food aid as it was increasing at 25 percent per annum from 1995 to 1998.

Though little attention is given to the micro enterprise sector in the study area, the extent of involvement by the people in such activities is increasing despite non-availability of clear-recorded information. As the result, they are utilized by different people, poor and rich farmers as well as by remote agrarian communities at different time and under different conditions. Households' participation of different kind of micro enterprise activities might be influenced by the decisions and their resource endowment as well as other determining factors like access to rural periodic market.

In general, the involvement of micro enterprise by individual household is influenced by different factors. Thus, determining factors and characteristics of rural micro enterprise is assessed in this study.

² Woreda is conventionally a distinct with its boundaries. Whereas special woreda is a district differs from its surrounding by culture morphology, etc in the context of SNNPRS.

³ FARM Africa is an international organization that has been working on capacity building in the study area.

1.5. Objective of the Study

The main objective of this study is to assess the major characteristics of rural micro enterprise employment and its determinants. It also suggests some kind of development interventions likely to promote the prospect of the participants.

Specific Objective

- To describe the scope of farm economy in the study area.
- To explore the characteristics of micro enterprise sector of the study area.
- To examine the determinants of rural micro enterprise sector of the study area.
- To suggest some kind of policy intervention.

1.6. Research Questions

1. What does the farm sector seem in the study area?
2. What are the main characteristics of rural micro enterprise sector?
3. What factor/s do/does determine the involvement of the household in micro enterprise sector?

1.7. Research Methodology

a. Data Type and Sources

In this study quantitative data were mainly used. As a supplementary, qualitative data were also used. To generate data a combination of the following methods and sources of data were employed.

Primary Data Sources

Primary data that were the main source of information for the study were mainly generated through household survey. Household survey covered a total of 136 sampled households from two PA. Information about the households' livelihood, farm, the characteristics of micro enterprise, and the present status of households' condition were collected using structured and semi pre-coded questionnaires.

To supplement the survey, the study also used qualitative data collection techniques. Among others, elder people, kebele⁴ administrative and different institutions were contacted. In addition, focus group discussions in both sampled Kebels were conducted based on the gender, age and household livelihoods. Each focus group discussion was designed to have 8 members of participants from different group of society. In addition to this, information were gathered from key informants which contains 12 individuals from different institutions and occupational engagement. Furthermore, observations were also made. Through out the qualitative techniques, information about farm economy of today and the past, the engagement of the micro enterprise, the land degradation and capacity of local institutions of the area were collected.

Secondary Data Sources

In addition to the primary data sources, the study obtained and used information from related institutions' records and studies on the study area. Related literature and books in this country and in other countries were also referred.

b. Sampling Procedure

The data collected for this research were mainly used to assess the people's engagement in micro enterprise in the study area. For this purpose two step selection methods were used. In the first step kebele were selected from 44 PAs mainly based on the high concentration of micro enterprise engagement. As the secondary consideration, distance from the urban area and agricultural climatic zones were used. Based on these, two kebeles, i.e., Dogato which is near to the main town and in 'Kola' climatic zone and Gawada, which is one of the remotest areas of the district and found in 'Weinadega' climatic zone were selected for the survey.

In the second step, enumeration was conducted based on the kebele rosters that were up to dated for the survey of safety net program by the UNDP in the month before the survey was undertaken. Accordingly, the house-to-house enumeration revealed that an average of 28 percent of households engaged in micro enterprise activities, which is dominated by Dagato where 37 percent of the households are engaged in such self-employment activities (see table 1). Based on the house-to-house enumeration, households were selected as the sampling unit. For the sake of

⁴ Kebele is the lowest unit of government administration. It is synonymous to peasant association

interview, a total of 136 households were selected from both households which are micro enterprise engaged and non-micro enterprise engaged using systematic random sampling technique (see table 2). However, the research is mainly on the micro enterprise employment, to facilitate the analyses those non-micro enterprise engaged households were also selected. Finally, the interview was held with household heads about the family firm and farm as well as other information about the household.

Table 1: Total Household and Occupational Engagement in the Study Sites

Peasant Association	Total Number of Households	Non-Micro enterprise Engaged Households	Micro enterprise Engaged Households	Percentage of Micro-enterprise Engaged Households
Gawada	580	464	116	20
Dogato	779	491	288	36.92
Total	1359	955	404	28.46

Source: Own Survey 2005 -

Table 2: Distribution of Samples in the Study Sites

Peasant Association	Total Sample	Samples as a Percentage of Total Household	Non-micro-enterprise Engaged households	Micro-enterprise engaged households
Gawada	58	10	23	35
Dogto	78	10.01	18	60
Total	136	10	41	95

Source: Own computation 2005

c. Method of Analysis

By using data collected from the fieldwork and books as well as records, the results were analyzed using different techniques such as percentages, averages etc. In addition to this economic model was also used.

1.8. Limitation and Scope of the Study

To analyze the nature and characteristics of rural micro enterprise requires a consecutive longitudinal survey, records and measurement of different variables against different periods.

Due to data problem in this area, the study only depended on one time survey data and on the respondents' memory. In addition, data collected from the field for the research were collected at the time when it is known by the farmers as a preparation of land for cultivation (February to March). This may lead to underestimation of the potential of micro-enterprises in the area.

1.9. Significance of the Study

The current government of Ethiopia has designed rural development oriented strategy that is known as Agricultural Development Led Industrialization (ADLI). The adoption of this strategy is aimed at creating an agrarian middle class and domestic mass market through a unimodal agricultural policy such as land tenure reform, the promotion of rural small-scale industries and infrastructure improvement. In addition to this, it necessitates the examination of nature and characteristics of micro enterprise sector in general and rural micro enterprises in particular to facilitate the development strategy of the country.

Despite the fact, there is little research on the nature and characteristics of rural micro enterprise sector. Most of the micro enterprise studies (Central Statistics Authority, CSA, 1997; Selamawit, 1994; Andualem, 1997; Solomon, 1996) have so far focused on urban areas and deal with their characteristics and determinants of their income. This has left the rural micro enterprise potentials except a few studies on non-farm activities in rural area (Mulat and Teferi, 1996; Mulat, 1997; Tegene, 2000). These studies identified the determinants and problems of general rural non-farm activities in which micro enterprise is a component except the study conducted by Etsegenet (2000) on the determinants of rural micro enterprise growth, survival and closure. Yet, the nature and characteristics as well as the determinants of rural micro enterprise have not been studied. Thus, this study will be expected to fill this gap.

It is also hoped that this research provides information for those concerned about rural micro enterprises especially development practitioners and policy makers. At large, it helps those working in rural credit provision, particularly in shaping their intervention.

1.10. Organization of the Thesis

The thesis is organized in seven chapters. The first chapter presents information about introductory part while the second chapter reviews the necessary information that can help to

interpret the field results.

The third chapter reviews the study area information. The fourth chapter deals with the demographic character and farm economy of the sample households and fifth chapter discusses the characteristics of rural micro enterprises. The sixth and the seventh chapters describe influencing factors of micro enterprises and conclusion respectively.

CHAPTER TWO

2. REVIEW OF EMPIRICAL LITERATURE

2.1. Micro Enterprise Employment in Ethiopia

Literature on ME sector in general and rural ME sector in particular Ethiopia are very scarce. This shows that the nature and characteristics as well as the potential of non-farm activities especially rural ME sector has not been realized. Among other reasons, the former government (from mid 1970s to 1980s) which was favoring cooperative arrangement and neglected private investment, frustrated the development of the sector (Mulat and Teferi, 1996; Tegegne, 2000).

Despite this fact, the survey of CSA in the year 1996, shows, urban ME sector contributes 0.2 percent to GDP and 48 percent to the value added by the industrial sector (CSA, 1997). Study by MOLSA (1997) also indicates that about 21 percent of households in five regions (Tigray, Amhara, Afar, Oromia and Southern Nations, Nationalities and Peoples' Regional State, SNNPRS) are engaged in rural non-farm activities in which rural micro enterprise is one component. Similarly, studies conducted by Tegegne (2000) reveals that, about 51.31 percent of households are engaged in various non-farm activities like trade and handicrafts in densely populated areas. At the same time, Etsegenet (2000) indicates that about 37 percent of households engaged in rural micro enterprise in drought prone areas.

In this regard, the involvement of this sector especially in rural areas is related with the over population of the people over the limited and scarce natural resources. In addition, this sector is mainly related with the recurrent drought that results in the failure of the subsistence farm products and leads the people to be drought prone. Thus, farmers in these areas turn to this sector to avert risk associated to their environment.

Like other low-income countries ME sector in Ethiopia is small in size that is dominated by those operated by the proprietor himself and family members. The CSA survey of 1996 on ME sector in urban areas estimates that about 82 percent are proprietor operators. By the survey, children and spouse of the operators alone account for 60 percent of the employments of urban ME sector in 1996 (CSA, 1997).

Regarding the characteristics of employment by gender and age, MOLSA (1997) study indicates women and youth are participants of ME employment. Like other developing countries women are dominated by household related activities like local drinks and food preparation as well as handicrafts such as spinning compared to trading (MOLSA, 1997).

Source of capital for ME is very small. For both ME own saving is the major source of initial investment followed by borrowing and assistance from friends and relatives (CSA, 1997; MOLSA, 1997). In a limited availability, microfinance institutions and moneylenders provide initial capital in rural areas (MOLSA, 1997). Study conducted by Etsegenet (2000) shows that 61 percent of the start up capital is from own saving which is followed by friends' and relatives' borrowing (21.8 percent) and saving and credit associations' contribution (17.2 percent).

As far as the sector concentration, ME sector in Ethiopia is dominated by production which accounts for 47.2 percent and trade and commerce is 41.9. In rural areas from the production sector like handicrafts, local drinks and food production constitute major shares (MOLSA, 1997). A specific study conducted by Etsegenet (2000) shows that 57 percent of the households are engaged in local drinks and food catering and followed by 17 percent of trade and commerce.

2.2. Typology of Rural Micro enterprises

Rural micro enterprises defy easy categorization due to their heterogeneity. However, most studies of rural micro enterprises neglect their heterogeneity and categorize them by applying the formal urban micro enterprise analysis and looking them within this definition. Shepherd (1998) states this situation due to three reasons.

“First, they miss the importance of diversity and flexibility for household income and security strategies, because they are typically concerned with the fortunes of firms not households. Secondly, they tend to lump together very diverse rural enterprises in to large categories, either basic or arbitrary quantitative characteristic (e.g., owner/managers also work on the shop floor’ or degree of entrepreneurship growth orientation, and strategic business awareness). Thirdly, they tend to have a strong bias to manufacturing industry, when it is often service and trade which is much more significant in terms of employment” (Shepherd, 1998:100).

However, some studies also try to categorize rural micro enterprise activities. For instance, Tellegen (1994) identified different non-farm activities and categorized them in general four categories depending on their capital requirement. Accordingly, these are productive activities requiring low capital, productive activities requiring moderate low capital investment, service activities requiring moderate low capital investment and activities requiring high investment capital.

This categorization lacks the exhaustive classification of all activities these are undertaking in rural areas. For instance, it neglects the commerce and trade, which is common in the rural areas of most developing countries.

Nowak (1989) also classifies rural micro enterprise activities under the general category of production, service and trade and commerce (see the following table).

Table 3: Rural Micro Enterprise Activities

Production	Service	Trade and Commerce
Wood and by products Housing, construction materials Products of skins, horns and by products Textiles, garments Agro-based food product Pottery, wicker products Art, handicrafts	Health Hairdressing Mechanical repairs Transport	Grain, storage Other farm products Livestock Farm inputs, staples, etc.

Source: Nowak, 1989 Table 1

Thus, rural micro enterprise activities are categorized as production, service, and trade and commerce that are operated by the rural poor mainly for the survival and security strategy.

2.3. Characteristics of Rural Micro enterprise Employment

Rural micro enterprises are characterized as very tiny enterprises with over 85 percent owned by a family which concentrated on trade and commerce and production that account for over 80 percent of total employment and establishment. They have low starting capital (\$10) which is mainly from own saving and only use local market that accounts for about 97 percent of total

sales (Begachwa, 1994; Webster and Fidler, 1996). In addition to the own saving, rural micro enterprises usually obtained their starting capital from families, friends, and bank at exceptional case for civil servants (Shechambo, 1994). It also provides local people with necessary agricultural inputs as well as manufacturing outputs. Rural enterprises used local farm products for their production of outputs (Dejene, 1994). For their labour requirement, they use family labour and apprentices (Pederson, 1994).

Furthermore, gender biased labour division; ethnicity or social group of society, education and age also characterize rural non-farm or micro enterprise employments. Some activities specialized by certain family members and a certain class of society or skill required engaging them. Home-based activities are confined to female together with those with low profitable and traditional activities such as pottery making, tannery and basket making while long distance trade is over represented by male and young group of societies. It is also evidenced that pottery making, tannery and weaving are specialized with certain group of a society (Abebe, 1994) while other activities are distributed all over the rural areas (Pederson, 1994).

Finally, rural micro enterprise operation is seasonal which is combined with agriculture depending on the labour availability of the household and demand for products or services. This is because customers of rural enterprise operators are involved in farming and therefore time and money is no longer spent on production and the consumption of non-agricultural goods and services for both producers and consumers. The operators themselves are almost farmers. It is shown in Tellegen (1994) that farming is the most important source of income for more than 40 percent of rural enterprise operators. Despite this fact, rural micro enterprises should be supported depending on their importance and for the reason that individual household is engaged in such activities.

2.4. Importance of Rural Micro enterprise

The development of rural micro enterprise or diversifying the income sources for the rural poor is not only desirable but also enduring and pervasive to many low income countries especially, SSA for many reasons (Alamgir and Arora, 1991; Ellis, 1998). Rapid growth of rural micro enterprises is a viable for broad based agricultural development. As of Tegegne (2000) non-farm

engagement determines the farmers' decision on agricultural inputs, land under cultivation and production (surplus agricultural output). Similarly, rural micro enterprises provide goods and services for irrigation, cultivation, fertilizer application, crop-care, harvesting, storage, processing, transporting and marketing (Alamgir and Arora, 1991).

By the same token, rural micro enterprise engagement helps the rural poor to have assets for the productive use (Ellis, 1998). In other words, it reduces poverty which most of the time is correlated with the inability of possessing productive assets. Assets in this case are related to human capital (the educated and skilled household members), physical capital, the social networks and associations to which people belong and the natural resource base. Thus, cash generated from micro enterprise employment helps the household to improve these assets i.e., sending children to school, or purchasing house amenities that can enhance the income generating capacity of rural poor.

By large, rural micro enterprise is important means of overcoming food insecurity (Alamgir and Arora, 1991; Shepherd, 1998). As of Alamgir and Arora (1991), rural micro enterprise provide the poor with purchasing power that is one of the chronic problems of food insecurity.

Ellis (1998) points out that rural micro enterprise sector or rural income diversification can help to reduce the adverse effects of seasonal income failure. Farmers in case of shortage of farm products on their own farm need alternative income to smooth unsynchronized consumption and production.

Similarly, micro enterprise employment is needed to farmers in order to reduce risk related to the failure of farm income to fulfill their subsistence need especially for those live in drought prone areas and vulnerable to annual income fluctuations. Particularly, this way of survival mechanism is common in tropical societies where rain fed farming system places them at a high risk due to farm income fluctuation (Ellis, 1998).

Furthermore, rural micro enterprise employment is strongly argued as it services as a vehicle for introducing a more equitable income distribution (Liedholm and Mead, 1999 quoted WB). This

is because in rural areas, rural micro enterprise activities are more intensified by landless farmers. This eventually, results in equalizing their income with land endowed farmers.

Rural micro enterprises have also an effect on the environment protection, rural-urban migration and strengthening urban rural linkage. ME employment and demand are generated through the adoption of labour intensive technologies which in turn reduce pressure on land and environment. In the other way, rural micro enterprise employment is characterized by its environmental ecosystem maintenance. In Machakos district of Kenya where high population pressure over the land intensifies the coverage of bar land with vegetables by investing the income generated from non farm activities. Similarly, rural micro enterprise employment reduces burden on land and helps farmers for the effective utilization of relatively abundant labour (Abebe, 1994).

Again, low manufacturing activities lay foundation for the improvement of rural living standards thereby stemming rural urban migration (Alagmgir and Arora, 1991). On the one side, rural micro enterprise stimulates the urban-rural symbiotic relation like other non-farm activities through developing purchasing power of the rural poor to afford urban industrial products (Evan, 1991).

Micro enterprise employment in general and rural micro enterprise employment in particular provides skills and technical knowledge; acquire economic independence and new consumption modes and needs. It facilitates acquisition of management and entrepreneurial ability especially, where strong entrepreneurial tradition lacks. It also enables general population particularly youth and women to acquire greater economic independence. Finally, it introduces farmers to invest on other non-food items and consumption of industrial products.

2.5. The Reason for Households Employment on Rural Micro enterprise

In the literature, the reason behind the engagement of rural micro enterprise employment is different form country to country as well as form community-to-community and inter-household. For instance, to the Zimbabwe and South African communities, the rural non-farm engagement is the response to urbanization and commercialization or modernization (Pedersen 1994; Bank,

1994; Ozcan, 1995). In Ethiopia, in the highlands of North Ethiopia and East Harargie as well as in Darfur of Sudan the involvement of non-farm activities is the result of land shortage and unpredictability of the surrounding environment (Mulat and Teferi, 1996; Abebe, 1994; Ibrahim, 1994; Kirshnan, 1994; Tegegne, 2000). Especially, the latter argument bases the prevailing and widespread shortage of land for family need and recurrent drought that induces famine. Thus, farmers in these areas used non-farm activities to supplement or complement the farm through combining them with agriculture. There is also another argument that states rural micro enterprise employment is a hobby activity in which individuals can prefer at some time for their pleasure (Okafor, 1983).

Thus, rural micro enterprise employment at household level is intensified mainly for the survival strategy. It helps farmers to complement their farm income. On the other side, it becomes a major occupation for the small landholders and landless farmers. This can depend on the households' determining factors.

2.6. Determinants of Rural Micro enterprise employment

Micro enterprise employment varies according to the opportunities available, the location and perhaps the skills and expectation of the members of the household. To state it briefly, these factors influencing the engagement might either negatively or positively affect the income generated from the different activities of micro enterprise (non-farm). Accordingly, the following are reviewed from the literature.

2.6.1. Household Demographic Character

Income generated from various activities varies from household to household according to their family size and household composition. In other words, the size of the family, marital status and age and sex of household head among others affect the engagement of various activities of non-farm or rural micro enterprise employment of individual household.

Family size difference, encourages or deteriorates the income from micro enterprise. Large family size means a household gets cheap labour and capital for its enterprise. On the other hand, large family size deteriorates further growth of a enterprise through expenditure required for

education, health and other family needs (Buckly, 1983). For example, the result that is identified by some scholars shows that households of family size 2 to 5 earn an average of ETB 1798, which is lower than that of large family size from six to eleven that earns an average of ETB 2490 from non-farm engagement (Dejene, 1994).

Young people with a middle age are more attracted by the trade, which is perceived as profitable activity instead of family tradition. Seppälä (1996) evidenced that traditional handicraft fails to attract young people of both sexes. On the other hand, it is argued that in the past people fear of evil eye to engage in traditional handicrafts, but today it is more intensified than before (Abebe, 1994). Some people also argue that the intensification and non-intensification of rural micro enterprise is the result of individual decisions and other socio-economic factors as well as the scope of shortage of farm produce (Okfar, 1983; Seppälä, 1996). For instance, village political identities and socio-cultural resources such as education, age and spirit possession result in the neglect of traditional handicrafts (Okafor, 1983).

Individual household firm is also associated with the marital status of the individual. According to Levitsky (1989), an individual to be engaged in micro enterprise, he or she should be married except in some areas, married women are not allowed to sell goods and services out side home.

As far as age and sex of household head concerned, young family heads (between 34 and 50 years) earn non-farm income of ETB 2108, which is less than that of families with a head of age 51 and above (ETB 2501) (Dejene, 1994). Whereas female headed households are relatively concentrated in narrow band of sectors or activities which are traditional manufacturing activities like beer brewing, Knitting, dressing, crocheting and grass and cane making whose income is very low compared to male headed who are over represented in trade activities (Hiedholm and Mead, 1999). Thus, characteristics of household differentiate the income generated from micro enterprise employment.

2.6.2. Household Resource Endowment

The wealth of household can affect the engagement of different non-farm activities. Especially, farm size and livestock ownership is positively correlated with the wealth of the farmers (Manag'

ongo', 1994). Accumulation of capital or income as the result of owning these resources lead farmers to the further claim to the engagement of higher return activities. This emanates from vigorous character of start up capital source for micro enterprise employment particularly own saving. On the one hand, this endowment is a constraint for poor farmers.

Evidences indicate that in highly eroded Konadoa Irangi hill of Tanzania, wealthy farmers move to a mixture of agriculture and urban business. On the one spectrum, poor farmers move from the better off land holdings to more marginal once plus a daily labourer for those well to do or to migrate to other areas (Manago' ongo', 1994). Dejene (1994) ascertain the foregoing issue by saying that households with 3 or 4 draft animals earn higher annual average income of non-farm (Birr 3492) than those owning 1 or 2 draft animals (Birr 1873).

Regarding land, some evidences signify that small land holding leads to intensify or pushes many farmers to very small enterprises to generate cash for their family needs (Lewis, 1996). This is also evidenced by continent date. In a particular area of Asia where land is very scarce relative to Africa, households generate higher percent of annual income from rural non-farm activities (Levitsky, 1989).

2.6.3. Location

The location of individual households can determine the engagement of various activities of micro enterprise, which can affect the income generated from these various activities. It also affects the intensification of non-farm activities. The locations may be seen as access to infrastructure or urban centers.

According to Levitsky (1989) infrastructure service appears to exercise significant influence on finding rural non-farm employment. Persons in remote and inaccessible areas are less likely to find such employment. Moreover, there is a strong positive association between households' connection to electricity or rural road and their likelihood that family members engage in more than one non-farm activities (Levitsky, 1989). Especially, rural road is important to transport produced products from the production places.

Location also results in combination of agriculture and non-farm activities for those proxies to urban centers. Rural communities within urban hinterlands show both diversification and specialization that may be exhibited in both secular and seasonal changes (Iliya, 1994).

Location again affects the engagement and the income of households from the non-farm activities due to the households' proximity to periodic market. This is because periodic markets are outlet for agricultural surplus, rural produced handicrafts, and source of supply for consumer goods and manufactured products which are needed by majority of rural low-income groups. According to Shchambo (1994), periodic market accounts two third of the trading activities of Africa, Asia and Latin America. Therefore, access to infrastructure and periodic market results in engaged in micro enterprises.

2.7. Problems of Rural Micro Enterprises

Micro enterprise in general and rural one in particular faces different difficulties and constraints, which can differ from place to place according to the context of the economy and sub sector. According to Bagachwa (1994), Lack of financial capital for start up and expansion affects all firms between 30 percent and 50 percent in rural areas.

Solomon (1996) argues that low technological means of production affects most micro enterprises. As of him most micro enterprises carry their activities through traditional means of production that are time consuming, cumbersome, and in some instance hazardous to the health. Competition is also fierce for most micro enterprises due to their easy characteristics to entry, lack of specialization, which resulted form lack of skill and smallness of market served by those kinds of enterprises (Webster and Fidler, 1996). Similarly, lack of training and education affects the rural enterprise operators engaged in different activities (Biggs and Shah, 2003).

Mulatu and Teferia (1996) identified that high price of raw materials, low demand because of weak purchasing power of rural people, lack of training and lack of equipment and tools are serious problems for handicrafts whereas lack or shortage of transport, shortage of capital to start the enterprises, lack of permit or license and check point charges imposes problem on trade activities in Ethiopia. Therefore, problems of micro enterprise range from the general sector to the specific sub sector.

CHAPTER THREE

3. THE STUDY AREA

3.1. Physical Features

A. Location, Area and Population

Konso Special Woreda (K.S.W) is one of the special woredas in the Southern Nations, Nationalities and Peoples' Regional State (SNNPRS). It is located at about 600 km and 300 km south west of Addis Ababa and Awassa (capital of SNNPRS), respectively. The woreda is bordered by Burji special woreda and Arero Zone⁵ of Oromia Regional State to the east; South Omo Zone to the west, Arero Zone and South Omo Zone to the south and Derashe special woreda to the north (see Appendix 4). Its area coverage is 2000km².

According to the projection of the Bureau of Finance and Economic Development (BFED) of the region in the year of 2003, the wereda reached a population of 200,607 out of which 102,309 (51 percent) are female and the remaining are male. The annual growth rate of population is 3 percent. Out of the total population, 96.5 percent are dwelling in 44 peasant associations and the rest is in two towns, Karat, the capital of the woreda and Segen town. This implies that the wereda has low level of urbanization. Population density of the woreda is 100 persons per km² that varies with the range of 10 persons per km² in the low lands and 300 persons per km² in the mid altitude.

Regarding age structure and dependency ratio, 49.3 percent of the total population is under 15 years of age category while 1.8 percent is above 64. The rest 48.9 percent are considered economically active. These show, every 95 economically independent people provide 100 dependent persons with a means of living. This information also reveals that, there is a potential for fast population growth (CSA, 1994).

As far as ethnicity and religion is concerned, about 66 percent of the woreda residents follow traditional faith, 24 percent Protestant, 5.5 percent Ethiopian Orthodox and the remaining are

⁵ Zone is a middle government unit, which comprises woreda administrations. In SNNPRS context it is also an administrative area differs with its culture, morphology, etc. from others.

Muslim. Concerning Ethnicity, 87 percent are Konso tribe, 9.2 percent are Gowada tribe and the rest from other ethnic groups (Amhara, Oromo and others) (CSA, 1994).

B. Topography, Agro Climatic Zone and Rainfall

The wereda elevation varies between 500m and 2100m above sea level. Its topography is hilly and mountainous intersected by valleys, gullies, rages and plains. More than 70 percent of the woreda is highly undulating and mountainous (60 percent highly undulating and 10 percent mountainous) the remaining 30 percent is plain and flat. Agro climatically, it is classified as 70 percent 'Kola' (low altitude below 1500 m) and 30 percent 'Woinadega' (mid altitude 1500m to 2100m). Average rainfall is 762 mm with strong inter annual variability. It is also highly erratic and weakly bimodal with peak on April and October. Above 75 percent of rain falls from March to May which referred as 'Belg' and a main rain season and 17 percent in October-November ('Mehere'), minor rain season. The maximum and minimum temperature is 35⁰c and 14⁰c, respectively (FARM Africa, 2004).

C. Soil, Vegetation and Wild Life

Soil in mid altitude is very shallow and low fertile as well as less than 5 cm deep due to over cultivation for hundreds of years. While in low altitude plains, it is alluvial with high fertility and good potential for crop cultivation (FARM Africa, 2004).

Konso was naturally endowed with best forestland, which is now diminished to total areas of less than 2000 hectare. The forest is composed of dense natural forest separately populated trees and man made plantations including juniper and eucalyptus. According to Woreda Office of Agriculture, in the low land areas there are also bush lands that cover wide areas.

Disastrous effect of forest loss for cultivation and construction and non-existing effort to replace the forest has resulted in disappearance of wild life in the woreda. Very important wild animals such as elephant, buffalo, which existed in considerable number in the past, totally disappeared today. Although the condition is getting worse year to year, there are still some kind of wild animals such as hyena, monkey and others those have less economic importance (FARM Africa, 2004).

D. Water Resource

Water for irrigation as well as human use is generally scarce in Konso except few perennial rivers which presently have changed to semi-perennial rivers typically Segen river. Water volume and duration of seasonal rivers and streams declined to disastrous level. Despite this fact, in some areas these rivers have a potential to irrigation especially in low lands of the woreda (FARM Africa, 2004). On the other side, a study by FARM Africa (2000) estimates a family walks of an average 45 minutes to reach the sources they usually use and requires an average of 70 minutes to collect it. This brings an average of 115 minutes to fetch water in the study area.

3.2. Socio-Economic Aspects

A. Education and Health

Education and health are among the key indicators for a country socio economic development. They occupy a significant place in the progress of social life. Despite this, their contribution in Konso is very minimal due to different reasons associated with the area's backwardness and economic problems.

Education

In Konso, education is characterized by low enrollment, high gender disparity, and high drop and repetition, which at some time especially during the sever drought year is more exacerbated. It is also characterized by low educational facilities and very poor service (FARM Africa, 2004). The following table shows the recent four years educational enrollment of primary school.

Table 4: Primary School (1-8) Gross Enrollment Ratio (GER) Over the Last 4 Years (2000-2003).

Academic Year	School Age Population (7-14 years)			Enrollment of Students				Gross Enrollment		
	Male	Female	Total	Male	Female	Total	Percent	Male	Female	Total
2000	22,503	23,421	45,924	9,745	2,502	12,247	20.4	43.3	10.7	26.7
2001	23,159	24,105	47,264	11,222	2,916	14,139	20.6	48.5	12.1	29.9
2002	23,837	24,810	48,647	12,391	3,135	15,526	20.2	50.0	12.6	31.9
2003	24,532	25,535	50,061	12,155	3504	15,659	22.4	49.5	13.1	31.3

Source: FARM Africa 2004

The gross enrollment ratio of the Woreda is low in general for both sexes and it is very high in gender disparity in particular while it is compared to the national and regional enrollment ratio (see table 5).

Table 5: GER of 2002 of the Woreda Compared to the National and SNNPRS

Sex	National	SNNPRS	Konso
Male	71.7	83	50
Female	51.2	48	12.6
Total	61.6	65	31.9

Source: *FARM Africa 2004*

In Konso, it seems that child labour is badly needed to the family that makes school enrollment rate very low. *FARM Africa (2001)* states that children from age seven are considered economically active in Konso tradition. They go to farm, herding, fetching water, running family enterprise or their own enterprise, which finally resulted in very low school enrollment. Especially, female in addition to cultural bias to male, their labour is very important to family in Konso tradition.

Health

To attain the development strategy the betterment of an individual is very important for he/she should work. These efforts can only be successful if the health of individual as well as the society is maintained. But in Konso, this is a serious problem mostly related to the shortage of food and over crowding of the people. This means, health problems are predominantly are communicable and food related diseases such as malaria, diarrhea, tuberculosis, malnutrition, gastric, HIV/AIDS, etc. (*FARM Africa, 2001*). From this information, one can simply say that children and women are almost victims of diseases associated with malnutrition as a result of poor diets.

B. Economic Activities and Employment

Agriculture

Like other people in the country, agriculture is the main stay for Konso people. Despite the natural and man-made problems become serious problem, Konso people are well known with their mixed farming. Watson and Lakew (2001) state:

“The Konso take intense pride in their agriculture, and have a strong work ethic. Visitors to the region have remarked that the Konso go to work in the fields with such vigour and passion that it looks as though they were going in to battle. Their agriculture is inseparable from their identity, and they value digging with Konso two-pronged hoe, known as ‘bayra’ (Watson and Lakew 2001:244).

Despite the farmers' effort, the production and productivity in Konso are very low because of farmland shortage and monotonous crop production practice coupled with the severe environmental problem.

Farm Land

Among the other factors that determin agricultural production, land endowment is a major important input and it creates disparity among farmers in their wealth possession. In Konso land holding for crop production is very small and below the national average per capita land holding. In Konso average par capita land holding is 0.90 hectare while national per capita land holding is 1.02 hectare. In Ethiopia about 28 percent who possess land less than one hectare whereas in Konso about 72 percent possess land size less than one hectare, let alone 10 percent of landless population (CSA, 1997; CSA, 2003).

Crop Production

In Konso tradition, intensive intercropping is a practice not only to save the land but also to avert risk related to the recurrent crop failure emanating from unfavorable climatic condition. Approximately, two or three and more crops are planted at one time on the same plot of land. In the contrary, traditional agricultural practice like fallowing and crop rotation are unthinkable. Similarly, the modern high yielding inputs are difficult to apply consequently the farmers' harvest is very low (FARM Africa, 2000).

Another fact in Konso is very small varieties of cereal and places, which are cultivated. Among others, sorghum, maize, millet and haricot bean are dominant crops. Except in very small areas of Fasha PA where coffee is cultivated in very small amount, there is no perennial crop in the woreda.

If conditions permit, farmers harvest their crop during the 'Belg' and 'Meher' season where more than 75 percent of harvest can be undertaken in 'Belg' season. Especially, sorghum is harvested twice. Whereas the main harvest comes in the 'Belg' season, the second harvest 'Hagay' meaning 'Meher' harvest obtained from the practice of ratoonings (allowing new growth from the roots left in the ground). Others are also harvested during both seasons depending on the availability of rain though they are not in ratooning practice as of sorghum.

Livestock Production

Livestock production is the second important economic activity in the study area. In Konso there are various kinds and numbers of livestock are found. According to the office of woreda agriculture, there are 106,120 cattle, 1859 pack animals, 80,351 goats and 65,832 sheep in the woreda. Despite the number and species of livestock, prevailing disease, traditional breeding practice and animal fodder problems together with environmental problem undermine the production of livestock.

In the study area, in addition to the problem of recurrent drought, the prevalence of disease becomes prominent reason for the death of thousands of livestock. The following table shows type of disease and its effect in the year 2000.

Table 6: Number of Livestock Death and the Type of Disease

Type of Disease	No of Cattle Dead	Percent
Abasenga / Anthrax/	852	49
Abagorba /Blackleg/	817	47
Desta /Rinderspest/ and TB	70	4
Total	1739	100

Source: FARM Africa 2000

Abasenga is the most killer of livestock, which kills 49 percent of livestock and followed by Abagorba that takes 47 percent of the killing effect. Desta and TB also kill at a very minimal case.

The breeding practice of the woreda is highly traditional which together with others results in low productivity of livestock. Again, livestock fodder is a serious problem to the woreda that facilitates the death of most livestock as well as reduces the productivity of livestock in the woreda. Despite this fact, farmers in the woreda use various means to cope up with the problems. The following table shows coping mechanisms used by different farmers.

Table 7: Coping Mechanisms to Animal Fodder Shortage and Farmers Practiced

Coping Mechanism	Frequency	Percentage
Buying fodder	3889	28.5
Migrate with cattle	5486	40.2
Destock by selling	368	2.7
Give for share	3903	28.6

Source: FARM Africa 2000

28.5 percent of the farmers preferred to feed their animal via purchase animal fodder from where it could be available whereas 40.2 percent migrate with cattle to the areas where they can find enough animal feed especially to the boarder of the woreda. These two mechanisms are not free of problems. The former one is very difficult for most farmers to afford and it is believed to be more difficult than feeding people during drought conditions. The later mechanism also results in conflict with neighboring regions every year in the all directions. Similarly, 28.6 percent look for other means of management in which selling is not included. Selling of livestock is also highly influenced by seasonal factors. Under a drought condition as most households become sellers of cattle, price could go down significantly and adversely affecting both households and local economy.

Thus, the problem of animal food is a serious problem in woreda that results in interwoven problems. Particularly, agro-residue that was the main source for the fertility and that conserves soil and water, now a day, it is wholly taken to feed animals, which result in a great environmental degradation in addition to crop production reduction.

C. Environmental Degradation

One of the prevailing problems observed in the woreda is the extreme environmental deterioration that at this time in some localities has reached on irreversible stage. The massive deforestation with no attempt to replace the forest resources, overgrazing, population pressure, total consumption of organic material for animal fodder and the exclusive dependency of the woreda people on the fire wood to generate their energy requirement are underlined as the major causes of the environmental degradation.

At this time, the overall natural ecosystem in the special woreda is out of balance. There is no longer equilibrium between the carrying capacity of land and the need of the people as well as the environment. The land that is to be cultivated has already been used (see the following table).

Table 8: Land Use of the Woreda 2005

Land use	Hectares	Percent
Cultivated land	76,000	38
Grazing land	52,000	26
Forest	2,000	1
Unsuitable land	24,000	12
Others (Construction)	46,000	23
Total	200,000	100

Source: Konso Office of Rural Development Co-ordination

Table 8 shows land use in the woreda is dominated by cultivated land and followed by grazing land and others like settlement. The rest is land that is unsuitable both to cultivation and grazing. This indicates almost all the woreda's land is already occupied and it is risky for the next generation unless other means of survival strategies will be designed.

According to the information gathered from experts and elders, the seriousness of land shortage has started since 20 years ago. The size of land previously available for farming and grazing has been significantly declining since then.

D. Soil and Water Conservation Practice

As far as the issue of soil and water conservation is concerned, Konso is well known in the world by its stonework (Watson and Lakew, 2001). In Konso, there is dry stone bench terrace used to minimize soil erosion and maximize water infiltration.

The history of soil and water conservation of the woreda is related to the shortage of rainfall and soil degradation in the past. It was started by the hill settlers due to severe water shortage some 500 'Kilata'⁶ ago (Filimon, 2001). Since then, the construction of terracing has been intensified in the farmland to harvest water as well as protect soil from erosion. It becomes a trend that is done by farmers all over the Konso PAs. Even if shortage of labour faced a family, it used local mutual support like 'Kanta' and 'Parka'. Thus, local support institutions pool labour, capital and material (usually basalt stone) (Filimon, 2001).

Thus, Terracing supplemented by multi cropping helps the Konso people to maximize their food availability and minimize their vulnerability.

E. Vulnerability and Availability of Employment

Konso is known by its vulnerability to drought that induces famine and food shortage in the woreda. The causes of its vulnerability are first and foremost associated to factors related to facts, which determine the farmers' income from farm. Among others, weather condition and its patterns are not always conducive to farm practices. Land holding which mainly used for crop production is very small and not sufficient. As the result, crop production is not at a reliable condition. A survey which is undertaken by FARM Africa (2001) computed income from crop production to be 35 percent of the total household income. Similarly, FARM Africa by its study undertaken in the year 2000 states that only 41 percent of the farmers can feed themselves up to 10 months and above with what they produced in their farmland (FARM Africa, 2000).

Livestock breeding, although widely practiced, it is not a reliable alternative. At the same time, shortage of grazing land undermines the contribution of livestock. Thus, livestock income that is

⁶ Kilata is a Konso traditional generation counting which represents 8 years.

earned by the farmers is estimated at 10 percent of the total household income (FARM Africa, 2001).

On the other hand, the absorptive capacity of the local wage labour market is very low. Most of the employments are directly farm related while the rest are included under natural resource conservation. The single largest farm wage employment is during weeding where about 29 percent of the households that are seeking employment are involved. While the land preparation, crop planting, harvesting, livestock herding and natural resource conservation are others that are most important (FARM Africa, 2001).

The other contributing element for local wage labour is food for work, which is not always reliable source of employment except the fact that it serves at a time of severe drought conditions and years. In some years, it contributes about 33 percent of the total household income (FARM Africa, 2004).

Thus, these and others rank Konso at the highest poverty level while compared to the rest of the regions of the country (Estrly, 2002). It is also categorized as one of the 60 drought prone districts in the county by the National Disaster Privation and Preparedness commission (NDPPC) (FARM Africa, 2004).

Hence, Konso farmers at various time used different survival strategies to cope up with vulnerability inherent in their farm in addition to local wage labour employment participation. Among others, labour migration and micro enterprise employment are the most.

Labour Migration

Migration is becoming a means of balancing in terms of income and employment in Konso. However, this phenomenon was not much known by the people before a few decades. But now days it becomes a common means of survival strategy among the special woreda's people. Though it is difficult to estimate the actual number of people that migrate out of Konso, a rough estimation of FARM Africa (2004) indicates about 17 percent of the total population have practiced out migration as an alternative means of survival strategy. Out of this, about 15.5

percent migrate to Teltele woreda of Oromiya region; Arba Minch and Jinka towns with in the region at a permanent base and the rest temporarily migrate to Moyale, Yavelo, Omorate, Shakiso and etc (FARM Africa, 2004). Though many reasons are identified, for temporary migrants, seasonal and daily wage labour engagement is a major reason. In case of permanent migrants, it is to search potential farmland and source of income (FARM Africa, 2001).

Micro Enterprise Employment

Due to fragmentation of land holding and frequent crop failure, micro enterprise employment has become a growing concern as livelihood support to Konso people since the last two decades. Even though specific research has never been conducted on it, there are a large number of people employed on part time or full time basis.

Among the micro enterprise activities carried out by the farmers trade especially, grain trade, hide and skin trade, cattle trade, vegetable trade, etc are major one. Other micro enterprise activities are local beer brewing, especially 'Cheqa' which is much loved by Konso people (Watson and Lakew 2001) and in small extent 'Tej', honey beer are also carried out by the people. Local food preparation like 'Injera', staple food of most Ethiopian is one from the others.

One that is the most type of micro enterprise activity is weaving. Weaving in the past were hat by the society, especially those are engaged in farm, 'Etanta' and treated as the only work of minority group which belongs to 'Hawida' meaning people who never take farm as their livelihood. Now a day due to the environmental problems both 'Etanta' and 'Hawuda' are engaged in weaving (Watson and Lakew, 2001). Other micro enterprise activities, which are undertaken at a scant intensification are local shoe making, tailoring, carpenter work, blacksmithing, butcher, etc. Though these economic activities are undertaken by the farmers, their opportunity is very limited to small number of farmers due to various problems. Among others, limited credit and saving institutions in the woreda stands as one problem.

Saving and Credit Institutions

It is evidenced that saving and credit institutions, especially rural micro finance institutions are very important weapons to fight against poverty and unemployment. They provide credit and saving services for the poor farmers in their legal bases and reduce the burden of poverty. Banks are also serve the locality in their saving service despite their limited accessibility to the poor.

Despite this fact, there is no bank service is found in the woreda even the government institutions themselves are served by the banks out side the woreda in Gamo Gofa Zone Arbaminch town which is located at 100 km away from the woreda. On the one side, there is one share company, which is known as Omo Micro Finance Share Company. It started its operation as a Konso sub branch from 1999. Its out rich is limited to the PAs that are near the town and places where there is available transport facilities. It has great problem of manpower including skilled, and transport facilities. Due to this, it is not in a good position to serve the society in general. According to the records of the institution, it has around 693 depositor and 2700 creditor clients.

Similarly, Konso Development Association (KDA) and Woreda Cooperative Office provide credit at the limited supply based on the fund availability despite their main function is not provision of credit and saving. All these institutions provide credit at small amount for micro business and farm input purchase. In addition to formal saving and credit institutions, local informal institutions like 'Iqub', group rotating saving and credit is common among the Konso people.

F. Access to Road

Road is one of the basic infrastructure that initiates and promotes development of an area. Especially, non-existence of reasonable access to road is believed that it contributed to the present backwardness and poverty in the woreda (FARM Africa, 2000). This is because it is observed that there is a great difference between areas where road and transport facilities are accessible and inaccessible. Inaccessible farmers are exposed to unorganized and fragmented market for their products, which probably force them to sell at extremely low price. In addition, they lack opportunity to engage in non-farm activities such as trade.

According to the study conducted by FARM Africa (2000) the average distance of household from the main road coming from Addis Ababa via Arbach and Konso -Jinka is around 11.9 km. However, there are households located more than 50km away from the main road.

On the other side, almost all peasant associations are accessible to recently paved feeder roads. Accordingly, the average distance of household's residence to those roads is around 2.6 km. This is relatively better opportunity compared to other areas of the country.

G. Periodic Market

Like other developing countries, periodic market has both social and economic values for the Konso people. Market, in Konso is an important place where people get together to share information (i.e., what is going on in other places, see each other or meeting places for relatives and friends) and also serves as a recreation centre. At the same time, it is outlay for agricultural surplus and processed products, rural handicrafts and source of supply for consumer goods and manufacturing products badly needed by poor farmers. Almost all trading activities are undertaken in the market place or places around the market.

In Konso, there are village level markets except their set up (frequency) differ them from each other. Except Karate (Bakawile), a market at the main town, they are not well developed to provide the people with all what is expected from such infrastructure. Consequently, there is no more than presenting there distance from the home and frequency of set up /frequency of visit/. This is because all markets existed in the PAs are very traditional by nature where no much industrial products are sold. In addition, all the markets except in few cases no surplus agricultural products are marketed due to the nature of agriculture in the study area. Most grain is supplied from these surplus producers out side the woreda, from Derashe and South Omo neighboring woredas.

CHAPTER FOUR

4. CHARACTERISTICS OF SAMPLE HOUSEHOLDS AND THEIR AGRICULTURAL CONDITION

4.1. Characteristics of Sample Households

4.1.1. Sex, Ethnicity, Religion and Marital Status of Sample Households

Majority of the respondents are male-headed households which accounts for about 73 percent of the respondents and the rest are female headed (27.21 percent). This is high in Dagato kebele where about 77 percent of the respondents were male-headed households.

Concerning ethnicity, majority of the respondents are members of the Konso tribe that accounts for about 59 percent and followed by the Gawada tribe. There are also minor ethnic groups that belong to the Gamo and Oromo that accounting for 2.94 percent each. Dagato kebele is dominated by the Konso tribe (99 percent) while Gewada Kebele is dominated by Gawada tribe (83 percent).

Table 9: Percentage Distribution of Sex, Ethnicity, Religion, and Marital Status of the Household Head

	Dogato	Gawada	Total
Sex:			
Male	76.92(60)	67.24(39)	72.79(99)
Female	23.08(18)	32.76(19)	27.21(37)
Total	100.00(78)	100.00(58)	100.00(136)
Ethnicity:			
Konso	98.72(77)	5.17(3)	58.83(80)
Oromo	1.28(1)	5.17(3)	2.94(4)
Gawada	0.00(0)	82.76(48)	35.29(48)
Gamo	0.00(0)	6.81(4)	2.94(4)
Total	100(78)	100(58)	100(136)
Religion:			
Ethiopian Orthodox	48.72(38)	43.10(25)	46.33(63)
Protestant	39.74(31)	44.83(26)	41.91(57)
Traditional	11.54(9)	12.07(7)	11.76(16)
Total	100(78)	100(58)	100(136)
Marital Status:			
Married	94.84(74)	82.76(48)	89.71(122)
Widowed	0.00(0)	17.24(10)	7.35(10)
Single	5.13(4)	0.00(0)	2.94(4)
Total	100(78)	100(58)	100(136)

Source: Own Servey 2005

Numbers in parentheses indicate reporting respondents

In terms of religion, Ethiopian Orthodox Christianity is the major one which is followed by Protestant that accounting for 46.33 percent and 41.91 percent, respectively. About 12 percent of the sample households also follow traditional beliefs. Inter-kebele comparison indicates that 48.72 percent of the Dogato respondents are members of the Ethiopian Orthodox Church which is high as compared to 43.10 percent of Gawada respondents. Whereas the Protestant followers in Dagato account for 39.74 percent which is less than that of Gawada (44.82 percent).

Except a few of the respondents who are unmarried and divorced/ widowed, most respondents are married. They account for about 90 percent. This is related to the idea that states marriage is seen as a social identification in rural Ethiopia.

4.1.2. Age

Table 10: Percentage Distribution of Age of Respondents

Year	Dogato	Gawada	Total
Mean age	35	36	35.43
Below 20	6.41(5)	3.45 (2)	5.17 (7)
20-30	38.46(30)	31.03 (18)	35.29 (48)
30-40	26.92(21)	34.48 (20)	30.15 (41)
40-50	16.67 (13)	17.24 (10)	16.56 (23)
50-60	10.26 (8)	8.62 (5)	9.56 (13)
Above	1.28 (1)	5.45 (3)	2.94 (4)

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

The mean age of the respondents is 35.43 years. Most of the respondents are grouped in the middle age which is between 20 and 40 years. In other words, 70.61 percent of the respondents are 40 and below. The corresponding percentage slightly differs between two PAs. In Dugato, there are about 72 percent of the respondents aged 40 and below while in Gawada it is 69 percent.

4.1.3. Family Size

Table 11: Percentage Distribution of Size of Households

No of Members	Dogato	Gawada	Total
Mean family size	5.03	4.53	4.82
1-4	43.59 (34)	43.10 (25)	43.38 (59)
4-8	44.87 (32)	55.17 (32)	49.78 (67)
Above 8	11.54 (11)	1.72 (1)	7.35 (10)

Source: Own survey 2005

Numbers in parentheses indicate reporting respondents

Mean family size of the sample households is 4.82. The corresponding mean varies between the two kebeles. Dogato has an average family size of 5.03 whereas Gawada has 4.53. This is less than that of national, regional and wereda average family size which is 5.8, 5.1 and 5.9, respectively reported in 1993 and 2003 (CSA, 1993; CSA, 2003).

4.1.4. Educational Status

Table 12: Percentage Distribution of Educational Status of Respondents

Peasant Association	Read only	Read and write	Illiterate	Grade 1-4	Grade 5-8	Grade 9-12	Total	Mean
Dogato	1.28 (1)	1.28 (1)	64.53 (48)	23.08(20)	8.97(7)	3.85 (3)	78(100)	1.68
Gawada	3.44 (2)	0.000	48.27 (28)	41.8 (22)	8.62 (5)	1.72 (1)	58(100)	1.76
Total	2.2 (3)	0.74 (1)	55.88 (78)	30.88 (42)	8.82 (12)	2.94 (4)	136(100)	1.71

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

Average highest grade completed is 1.71. The highest, 1.76 was recorded in Gawada kebele. However, this is very small compared to other rural areas of Ethiopia computed by Tegegne (2000) that is 2.78. As it is revealed from the table, more than half of the respondents are illiterate and about 31 percent completed elementary school. The illiteracy problem varies between these kebeles. The most illiterate people were recorded in Dogato than Gawada PA, which is 61.53 percent and 48.27 percent, respectively. Individuals who completed Primary

school are also higher in Gawada than Dagato. In general, the illiteracy problem is one of the most problems in Konso special woreda (see FARM Africa, 2004).

4.1.5. Location

From the main town of the woreda to reach Gawada on foot, it requires 6.48 hrs. while it is only 0.53 hrs. for Dogato. It is estimated that Gawada is 7 km away from the main town while Dogato is 3 km. Similarly, the time required to reach Gawada from main road, Addis Ababa, Arbamich, via Konso is 1.50 hrs. whereas to reach Dogat it needs only 0.20 hrs. This indicates that Gawada is relatively far from the main town and main road compared to Dogato (see the following table).

Table 13: Mean Time Required to Reach Main Town, Road and Nearby Periodic Market (per walk hour)

Mean Distance	Dogato	Gawada
Mean time required to reach main town	0.53 hrs.	6.48 hrs.
Mean time required to reach main road	0.20 hrs.	1.50 hrs.
Mean time required to reach nearby period market	0.20 hrs	0.82 hrs.

Source: Own Survey 2005

On the other hand, mean time required to reach the nearby periodic market for Gawada respondents is 0.82 hrs. which is more than Dogato's 0.20 hrs. This also shows Gawada households come from far distance from the periodic market compared to the Dogato's farmers.

4.2. Agricultural Condition

Like other communities of most rural Ethiopia, the mainstay of Konso people is mixed farming. It is characterized by multidimensional problems that push most of the communities to search other means of survival. Now, it is better to discuss the main futures of agriculture in sampled sites.

4.2.1. Land

Average land holding in the study sites is 0.94 hectare, which is greater than average land size (0.90 hectare) of the woreda but less than the national average land holding (1.02 hectare) (CSA, 1997; CSA, 2003). Land shortage is a serious problem of Dogato Kebele than Gawada that accounts for about an average of 0.79 hectares compared to Gawada (1.41 hectares).

Table 14: Percentage of Land Size Distribution in the Sample Sites

Landholding in Hectares	Dogato	Gawada	Total
Mean land holding	0.79	1.41	0.94
Landless	23.08(18)	17.24(10)	20.54(28)
0.10-0.50	30.77(24)	10.34(6)	22.06(30)
0.15-1.00	21.79(17)	39.66(23)	29.41(40)
1.51-1.50	11.54(9)	12.07(7)	11.76(16)
1.51-2.00	5.13(4)	8.62(5)	6.62(9)
Above 2.00	7.69(6)	12.07(7)	9.56(13)

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

Land distribution indicates that 76 percent of the respondents are landless and possess not more than 1 hectare. This may be relatively consistent with the study conducted by FARM Africa (2001) that shows, about 82 percent of households are landless and those possess land less than one hectare. This in general shows land shortage is a serious problem in the woreda.

Table 15: Percentage Distribution of Sample Households' Land Tenure Arrangement

Type of Holding Arrangement	Dogato	Gawada	Total
Private	90.00 (54)	97.92 (47)	93.52 (101)
Rent	5.00(3)	2.08 (1)	3.70 (4)
Share cropping	1.67 (1)	0.00 (0)	0.93 (1)
Private and rent	3.33 (2)	0.00 (0)	1.58 (2)
Total	100 (60)	100 (48)	108

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

Consequently, land tenure arrangement of the areas is private tenure or own land cultivation which accounts for about 94 percent of the responded households. Share cropping tenure

arrangement seems not known in the study sites compared to the study conducted in other Ethiopian areas that constitute 37 percent via share cropping arrangement (Mulat and Teferi, 1996). This indicates, the serious problem of land shortage. Thus, it is impossible to find free of land that is uncultivated even the land now in the hands of the farmers seems not enough to their subsistence agriculture.

Table 16: Percentage of Farmers Perceive about the Sufficiency of Their Land

Adequacy	Dogato	Gawada	Total
Enough	15 (9)	16.67 (8)	15.74 (17)
Very Small	85 (51)	83.33 (40)	84.26 (91)
Total	100 (60)	100 (48)	100 (108)

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

About 84 percent of the households reported, the land that they use is very small whereas only 15.14 percent of the respondents reported enough land. The seriousness of land shortage seems very common problem for both PAs with little differences. This indicates, the problem of population pressure over the scarce land resource, which could not be stretched with population growth.

Table 17: Percentage Distribution of Households' Current Status of Land Compared to the Past 20, 15, 10 and 5 Years Ago

The Current Status of Land	20 Years Ago	15 Years of Ago	10 Years of Ago	5 Years of Ago
Greater than	21.62 (8)	22.80(13)	20.83 (15)	11.11 (13)
No Change	24.32 (9)	17.54 (10)	16.67 (12)	46.15 (54)
Less than	54.06 (20)	59.64 (34)	62.50 (45)	37.96 (41)

Source: Own Survey 2005

Numbers in parentheses indicates the reporting respondents

The phenomenon of land shortage has long history in Konso. Nearly 22 percent of the respondents reported that their current status of land is greater than that of the last 20 years while 24 percent and 54 percent of respondents indicated that their land today has not shown any change and it has declined, respectively compared to the last twenty years. Even the land holding in the last 15 years and 10 years ago has declined where about 60 and 63 percent of the

respondents, respectively reported it. Furthermore, it has also not shown any change for 46.15 percent of respondents in the past 5 years while it has declined for 37.96 percent of households during the same time. This indicates, land shortage is one of the serious problems that faced households and lead to redistribute it to their offspring through time.

Table 18: Percentage Distribution of Plot of Land

No of Plots	Dogato	Gawada	Total
1	23.08(15)	36.73(18)	28.954(33)
2	27.69(18)	36.73(18)	31.58(36)
3	18.46(12)	16.33(8)	17.54(20)
4	15.38(10)	6.12(3)	11.40(13)
5	4.62(3)	2.04(1)	5.51(4)
6	1.54(1)	0.00(0)	0.88(1)
7	7.69(5)	0.00(0)	4.39(5)
8	0.00(0)	2.04(1)	0.88(1)
10	1.54(1)	0.00(0)	0.88(1)

Source: Own Survey 2005

Numbers in parentheses indicate the reporting respondents

Thus, land fragmentation is common in Konso special woreda. The sampled households' data revealed that holdings range from 1 to 10 plots of land. It is dominated by two plots of land, which constitutes 32 percent of the respondents then it is followed by 29.20 percent of one plot of land. Land fragmentation is more common in Dogato than Gawada kebele. It is nearly half of the respondents who possess three and above in Dogato while Gawada is only 24 percent or less than one-fourth of the respondents. This result contrasts the study by Tegegne (2000) that states land fragmentation is not a serious problem of the densely populated areas of Kambata and Wolaita Zones' of South Ethiopia. This may reveal, unavailability of land pushes an individual household to redistribute its land to its offspring through time.

4.2.2. Land Topography and Fertility

Konso's agricultural problem is not limited to the shortage of land but also land terrain of the area seems uncomfortable. As of data from the survey, farmers' perception about their land topography shows that about 51 percent of the land is reported steep which is followed by plain land (39 percent). The respective percentage significantly varies between kebeles. Nearly 58

percent of the Gawada respondents reported that their farm land is steep compared to Dagato(45 percent).

Table 19: Percentage Distribution of Farmers that Perceive about Their Land Topography

Topography	Dogato	Gawada	Total
Plain	38.46 (30)	40.30 (27)	39.31 (57)
Gorge	16.67 (13)	1.49 (1)	9.65 (14)
Steep	44.87 (35)	58.21 (39)	51.04 (74)

Source: Own Survey 2005

Numbers in parentheses indicate the reporting respondents

Quality of land is another attribute of Konso agriculture. It is about 52 percent of the respondents who feel that their land is semi-fertile while nearly 33 percent state that the land they are using is not fertile. Only 14.81 percent of the respondents perceive their land is fertile.

Table 20: Percentage Distribution of Farmers that Perceive about Their Land Quality

Quality	Dogato	Gawada	Total
Fertile	15.25(9)	14.29(7)	14.81(16)
Semi-fertile	44.67(26)	61.22(30)	51.85(56)
Non-fertile	40.68(24)	29.49(12)	33.34(36)

Source: Own Survey 2005

Numbers in parentheses indicate the reporting respondents

The corresponding percentage, especially the non-fertile is a major feature of the Dogato farmers, which is about 41 percent compared to Gawada (29 percent) (See table 20). This reflects, the poor or meager potential of agriculture in the study sites that is also characterized by low productivity of crop production.

Land Yielding

Table 21: Mean out Put, Land and Yield of Major Crops

	Belg			Meher		
	Dogato	Gawada	Total	Dogato	Gawada	Total
I. Teff:						
Land	0.06	0.10	0.08	0.008	0.06	0.03
Out Put	0.02	0.23	0.13	0.003	0.05	0.03
Yield	0.33	2.30	1.63	0.38	0.83	1.00
II. Maiz:						
Land	0.28	0.42	0.35	0.06	0.17	0.09
Out put	0.46	1.33	0.90	0.14	0.03	0.18
Yield	1.64	3.16	2.57	2.33	0.18	2.00
III. Sorghum:						
Land	0.38	0.56	0.47	0.21	0.28	0.24
Output	0.77	1.48	1.12	0.19	0.34	0.26
Yield	2.08	2.64	2.38	0.90	1.21	1.08
IV. Millet:						
Land	0.01	0.01	0.01	0.01	0.00	0.00
Out put	0.02	0.01	0.16	0.00	0.00	0.00
Yield	2.00	1.00	1.60	0.00	0.00	0.00
V. Hircot bean:						
Land	0.13	0.00	0.06	0.02	0.003	0.01
Out put	0.06	0.00	0.03	0.02	0.00	0.00
Yield	0.46	0.00	0.50	1.00	0.00	0.00
Total Crop:						
Land	0.85	1.08	0.97	0.31	0.51	0.35
Out put	1.32	3.04	2.18	0.61	0.42	0.50
Yield	1.55	2.81	2.24	1.97	0.82	1.43

Source: Own computation 2005

The average yield of crop in the study sites is 2.24 quintals in 'Belg' and about 1.43 quintals in 'Meher' season (quintal is equivalent to 100 kilograms). While it is compared among the crop as well as between the study sites, maize and sorghum recorded the highest yield that account for 2.5 and 2.38 quintals in 'Belg', respectively. Whereas the highest yield is recorded in Gawada Kebele, which is 2.81 in 'Belg' season, especially the highest harvested crop is maize (3.16 quintals).

Farmers also claimed that their crop production is declining from time to time. About 92 percent of the households reported that their crop production declined in the year 1996 EC (2003/04) while about 8 percent their crop yield has not shown any change compared to the last five years. The respective percentage of crop production reduction ranges between 98 and 87 for Gawada and Dogato, respectively. On the other hand, none of the Gawada farmers reported any variation of their crop production in the same year while in Dogato kebele it is 13 percent (see, table 22)

Table 22: Percentage of Farmers Reported their Status of Crop production in the Year 1996 EC (2003/04) Compared to the Last Five Years

Status of Crop Production	Dogato	Gawada	Total
Increase	0.00(0)	2.13(1)	0.93(1)
Decrease	86.67(52)	97.87(46)	91.59(98)
No Change	13.33(8)	0.00(0)	7.48(8)
Total	100(60)	100(46)	100(107)

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

The major reason reported by farmers for the crop reduction is rainfall that accounts for 90 percent of the respondents report. It is followed by poor fertility and shortage of land, 77 percent and 73 percent respectively. None of the farmers reported excessive rainfall is the reason for their crop production reduction except 35 percent who reported that crop pest is one of their problems for crop production reduction.

Table 23: Percentage of Farmers Reported the Reasons for Crop Production Reduction (Multiple Responses)

Major Problems	Dogato	Gawada	Total
Poor fertility of soil	75.00	75.00	75.00
Shortage of rainfall	93.33	85	90
Shortage of land	78.33	65	73
Pests	31.67	35	33
Excess rainfall	0.00	0.00	0.00

Source: Own Survey 2005

When we compare the problem between the two PAs, shortage of rainfall highly affects those farmers in Dogato kebele, which was reported by 93.33 percent of the respondents. Again, land poverty problem faces Dogato farmers that accounts for 78.33 percent. This all affects the food availability of the area and push most farmers to purchase grain from the market for their household consumption.

4.2.3. Crop Sales and Purchases

In Konso, almost all produced crop is consumed for the household subsistence consumption except little which is taken to the market for some obligations like land and agricultural income tax. Accordingly, the survey data indicates that only 8.82 percent of the households sold their crop produced on their own farm, which are all from Gawada kebele. These households earned an average of ETB 243.80 (see table 24). The result is confirmed the study conducted by FARM Africa (2001) in the study area which states in Konso, only 7 percent of the households provide their crop to the market. Again, one informant in the Woreda Administrative Office supports this by saying “Konso farmer does not take his crop to sell rather he needs additional grain via purchase even in the time of tax obligation he sells one from his livestock or use cash from wage employment.”

Table 24: Crop Sales, Purchase and the Mean Revenue and Expenditure in the Year 1996 EC (2003/04)

Response	Dogato	Gawada	Total
Crop sales (yes) %	0.00(0)	20.69(12)	8.82(12)
Mean Revenue	0.00	243.80	243.80
Crop purchase (yes) %	88.46(69)	84.48(49)	86.76(118)
Mean expenditure on crop purchase	286.25	253	272.44

Source: Own Survey 2005

Numbers in parentheses indicate reporting respondents

Table 24 also shows, nearly 87 percent of the households reported that they purchased crop from the market for their household subsistence consumption and incurred mean expenditure of ETB 275.44 in the year 1996 EC (2003/04). The corresponding percentage varies within the range of 89 percent in Dogato and 84 percent in Gadawa who purchased crop from the market and incurred a mean cost of ETB 286.25 and 253, respectively. Crop purchase becomes a common tradition compared to other areas of the country where similar studies indicate a small proportion of farmers purchase crop from the market (for example see Tegegne, 2000). This reflects that most farmers in the study sites depend on the market for their subsistence consumption in general and Dogato kebele in particular.

4.2.4. Input Usage

Table 25: Traditional Inputs and Percentage of Farmers Used them in the Year 1996 EC (2003/04) (Multiple Responses)

Types of Input	Dogato	Gawada	Total
Manure	56.67(34)	40(20)	49.09(54)
Fallowing	6.67(4)	12(6)	9.09(10)
Burning (Guy)	0.00(0)	0.00(0)	0.00(0)
Irrigation	3.33(2)	2.08(1)	2.73(3)

Source: Own Survey 2005

Number in parentheses indicate reporting respondents

Usage of traditional inputs seems unusual in the study sites. It is only manure that was used by half of the respondents. Others like fallowing, which is known by most Ethiopian farmers, was only consumed by 9.09 percent of the respondents, last year (1996 E.C). Similarly, Irrigation was only consumed by 2.73 percent of the respondents while burning (guy) is not consumed at all.

This is perhaps due to the land to be used has already been occupied by the farmers that takes them to use their land without fallowing. In addition to this, crop residual is all collected to animal fodder.

Similarly, usage of modern high yielding inputs seems non-existing. Only five farmers used DAP and improved seeds in the year 1996 E.C. (2003/04). The fact that farmers did not use these inputs, the study tried to find the reason for it. In this regard, there were mixed reasons forwarded from different key informants.

Table 26: Non Traditional Input and Farmers Used them in the Year 1996 E.C (2003/04) (Multiple Responses)

Type of Input Used	Dogato	Gawada	Total
DAP	2	0	2
Urea	0	0	0
Improved seed	3	0	3
Pesticides	0	0	0
Herbicides	0	0	0

Source: Own Survey 2005

To begin with, the development agent (DA) in one of the sites stated that “Though farmers want to use modern inputs, the supply problem stands a major constraint, especially availing it on time and at appropriate amount.” Another informant from the Woreda Rural Development and Agriculture Co-ordination Main Office accused the farmers’ negative attitude towards usage of these inputs. In the side of farmers, their non-use of these inputs is due to recurrent failure of crop and lack of insurance during crop failure, which frustrated them to become a risk taker.

Here, it is perhaps necessary to build the confidence of farmers through strong contact between DA and farmers, which also needs the higher official’s commitment to avail farmers with necessary inputs.

4.2.5. Use of Draft Animals

It is a common tradition in Ethiopia to use a pair of oxen for cultivation and other activities of farm. Hence, it is a main source of power to farmers. Despite this, about 70 percent of the farmers reported that they had not drought animal while only a few farmers owned one and two oxen that constitute 12.50 percent and 13.23 percent, respectively (see table 27). This is more serious in Dogato than Gawada Kebele. In Dogato there are 96.15 percent of the respondents reported that they did not possess farm oxen whereas only 3 households reported to have two oxen. Similar study conducted by FARM Africa (2001) indicates that lack of draft animal in Konso woreda is one of the major problems coupled with others that exacerbate farmers’ poverty. Because of this, about 59 percent of the respondents claimed that they face shortage of oxen during their various farm activities. This is especially in Gawada about 76 percent of the households reported shortage of oxen compared to Dogato (45 percent). For this problem, farmers in the study sites used a combination of various mechanisms (see table 28 below)

Table 27: Percentage of Farmers Reported about their Possession of Farm Oxen

Number of Oxen Owned	Dogato	Gawada	Total
None	96.15(75)	34.48(20)	69.85(95)
1	0.00(0)	29.31(17)	12.50(17)
2	3.85(3)	25.86(15)	13.23(18)
3	0.00(0)	5.17(3)	2.21(3)
4	0.00(0)	5.11(3)	2.21(3)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Table 28: Percentage of Farmers Faced Shortage of Drought Animal and Mechanisms Used in the Year 1996 E.C (2003/2004)

Mechanisms	Dogato	Gawada	Total
Farmers face drought animal shortage (yes)	45 (27)	76(38)	59.09(65)
Mechanisms used (Multiple responses):			
Pair own oxen with other	3.70(1)	60.53(23)	36.92(24)
Labor exchange to ox	3.70(1)	27.95(11)	18.46(12)
Use friends' or relatives' oxen	3.70(1)	52.63(20)	2.30 (21)
Hire oxen	18.50(5)	7.99(3)	12.31(8)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Table 28 shows that most farmers use pair their ox by others' ox. This is mainly common in Gawada site where about 61 percent of the respondents reported this mechanism. Then, it is followed with the use of friends' or relatives' oxen. Again, this is mainly a dominant practice of Gawada farmers that accounts for 52.63 percent. These mechanisms are also applied by other Ethiopian communities (See Tegegne, 2000; Mulat and Teferi, 1996).

At a scant amount, farmers used hired oxen for their agricultural work. This is especially a tradition used by Dagato farmers than Gawada that is about 19 percent and 8 percent, respectively.

4.2.6. Manpower

Manpower is the only farm power or input for agricultural production and for others. Because of its necessity, farmers face labour shortage, especially in the peak time of farming (see table 29). About 65 percent of the respondents reported that they face labour shortage during weeding period which is followed by labour shortage during protection, cultivation and trashing (61.17, 58.62 and 50 percent, respectively). Almost all labour shortage is a serious problem of Gawada farmers except labour shortage during cultivation for Dogato farmers. This is due to the size of

land that is relatively large and requires more labour in the case of Gawada while lack of farm oxen, which is the most important power for cultivation for most Ethiopian communities in the case of Dogato farmers. For this, farmers use a combination of various mechanisms. (See table 30).

Table 29: Percentage of Farmers Reported Labour Shortage During Major Farm Activities (Yes)

Activities	Dogato	Gawada	Total
Cultivation	87.38(57)	22.91(11)	58.62(68)
Weeding	51.47(35)	83.33(40)	64.65(75)
Trashing	22.05(15)	89.95(43)	50.00(58)
Protection	36.76(25)	95.83(46)	61.17(71)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Among others, relatives' or friends' labor is mainly used which accounts for 64.55 percent. This seems that other means that are used to solve labour shortage require cash or other kind of cost. For instance, 'Parka' and 'Kanta' which are equivalent to 'Debo' and 'Wqnfel', respectively used by most Ethiopian communities require arrangement of food and drinks.

Table 30: Percentage of Farmers Reported Various Means of Solving Labour Shortage (Yes)

	Dogato	Gawada	Total
Hire daily labourers	16.67 (10)	20 (10)	18.18 (20)
Use relatives' /friends' labour	63.33 (35)	66 (33)	64.55 (71)
Use Social labour support (Parka' or 'Kanta')	53.33 (32)	60(30)	56.36 (62)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

4.2.7. Livestock

Farmers in the study area used livestock for various purposes ranging from cultural prestige to economic values. The average number of cattle (Oxen, cows and calves) owned by the farmers in the study sites is 3.17. The corresponding number in Dogato is 1.88 while in Gawada it is 4.44. Similarly, average goat and sheep, and poultry as well as pack animals possession is 5.76, 7.17, and 1.33, respectively. The respective number for Gawada is also higher than Dogato.

Table 31: Mean Value of Livestock, and Revenue Earned from Livestock and Livestock Products

	Dogato	Gawada	Total
Cattle (Ox, Cow, Calf)	1.88 (41)	4.44 (41)	3.17 (81)
Goat and sheep	4.16(62)	7.59 (50)	5.76 (112)
Poultry	3.83 (12)	8.04 (46)	7.17 (58)
Pack animals	0.00 (0)	1.33 (6)	1.33 (6)
Mean income from Livestock	497.65 (49)	1,205 (48)	865.53 (95)
Mean income from livestock products	3.5 (4)	39.11(38)	36.40(42)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

The average revenue from the sales of livestock and livestock products is ETB 865.53 and 36.4, respectively. The average income earned from livestock sales in Dogato is ETB 479.65, which is less than that of Gawada's ETB 1, 205. At the same time, average revenue of Gawada households from the sales of livestock products is ETB 39.11 that is greater than that of Dogato ETB 3.5. This indicates that farmers in the study sites have relatively higher income from livestock sales in general and Gawada in particular compared to other rural areas of the country (see Tegegne, 2000; and Mulat and Teferi, 1996). According to the key informants response, this may due to farmers' practice of fatten cattle for the market.

Major Problems in Raising Livestock

Table 32: Percentage of Farmers Reported Major Problems in Raising Livestock (Yes)

Response	Dogato	Gawada	Total
Shortage of grazing land	96.83(61)	58.33(28)	80.18 (89)
Poor breeding system	0.00 (0)	12.50 (6)	5.41 (6)
Prevalence of disease	92.06 (58)	35.42 (17)	67.76 (65)
Shortage of water	100 (63)	39.58 (19)	73.87 (82)
Wild animal	6.35 (4)	2.08 (1)	4.50 (5)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

The major problem in raising livestock is shortage of grazing land which was reported by 80 percent of the respondents then it is followed by the shortage of water which accounts for 73.87 percent. The next is prevalence of disease (67.76 percent).

The corresponding problems differ between kebeles. Dogato faces greater poverty of grazing land (96.83 percent) than Gawada (58.33 percent). Similarly, the shortage of water and prevalence of disease are serious problems for Dogata (100 percent and 92.06 percent) compared to Gawada, 39.58 percent and 35.42 percent, respectively.

To sum up, farm economy of the study sites, especially crop production is characterized by very low productivity due to various reasons. Small and fragmented land holding, unsuitable soil fertility and land topography, little use of traditional and modern high yielding inputs and lack of drought animals stands as major problems. Above all, shortage of rainfall in the study sites is the most problem-faced farmers to grow crop. Whereas in the livestock sector, shortage of grazing land and water as well as prevalence of disease are main constraints for livestock raising in the study sites.

Hence, agriculture is not in a position to support the fast growing population in the study area, which leads most farmers to engage in various non-agricultural activities to fulfill their household subsistence consumption. Among others, micro enterprise employment is one practice in the study sites. Now, we turn to see the characteristics of micro enterprises in the study sites.

CHAPTER FIVE

5. CHARACTERISTICS OF RURAL MICROENTERPRISE

It has so far documented that rural micro-enterprise is main source of income and employment for those people live in drought prone areas to supplement meager farm economy. Thus, this section describes the major characteristics of micro enterprises engaged by the people in the study area.

5.1. Type of Rural Micro enterprise Activities

In the study sites, farmers engaged in various income generating activities that are mainly categorized under three general classes (see table 33). These are manufacturing,⁷ commerce and trade, and service sectors. Manufacturing accounts 74.41 percent, trade and commerce 20.83 percent and service sector 4.77 percent.

Intersectoral data show, local drinks and food preparation is the dominant sub sector of the manufacturing which is operated by 61.91 percent of respondents. In this sub sector 'Cheqa' the Konso traditional drinks that is consumed by any social classes and societies both for food and drinks is a leading one. This sub sector is followed by 'Areke', which is local drinks and made from barley and Gesho with other grains.

Regarding trade and commerce sector, though various types of trade is undertaken by the farmers at a scant intensification, the major one is grain trade that accounts about 8 percent. It is followed by textile and hides and skin trade (4.76 percent and 3.57 percent, respectively).

The respective data indicate, Gawada kebel is leading with its manufacturing sector, especially the local drinks and food preparation that accounts for about 87 percent. On the contrary, Dogato PA is leading in commerce and trade which is 27.78 percent compared to Gawada's 8.33 percent.

⁷ Manufacturing in this case is a simple idea that refers "the physical or chemical transformation of materials or components in to new products whether the work is performed by power driven mechanism or by hand, whether it is done in a factory or in the workers' homes and whether the products are also sold at whole sale or retail" (CSA, 1997:3).

**Table 33: Types of Micro-enterprise Activities and Percentage of Engaged Households
(Multiple Responses)**

Types of Activities	Dogato	Gawada	Total
I. Manufacturing:	65.74 (73)	86.66 (52)	74.40 (125)
Handicrafts:	18.52 (20)	1.67 (1)	12.50 (21)
Weaving	12.04 (13)	0.00 (0)	7.74 (13)
Spinning	3.70 (4)	0.00 (0)	2.38 (4)
Blacksmithing	0.0 (0)	1.67 (1)	0.60 (1)
Local shoe Making	2.78 (3)	0.00 (0)	1.79 (3)
Local drinks and food preparation:	47.22 (53)	85.00 (51)	61.91 (104)
‘Cheqa’	22.22 (24)	40.00(24)	28.57 (48)
‘Areke’	21.30 (23)	20.00 (12)	20.83 (35)
‘Tej’	0.00 (0)	5.00 (3)	1.79 (3)
‘Tella’	0.00 (0)	1.67 (1)	0.60 (1)
‘Injera’	2.78 (6)	18.83 (11)	10.12 (17)
II. Commerce and Trade:	27.18 (30)	8.33 (5)	20.83 (35)
Grain trade	9.26 (10)	5.00 (3)	7.74 (13)
Textile trade	6.48 (7)	1.67 (1)	4.76 (8)
Hide and skin trade	4.63 (5)	1.67 (1)	3.57 (6)
Honey trade	0.93 (1)	0.00 (0)	0.60 (1)
Livestock trade	4.63 (5)	0.00 (0)	2.98 (5)
Vegetable trade	0.93 (1)	0.00 (0)	0.00 (1)
Livestock product trade	0.93 (1)	0.00 (0)	0.60 (1)
III. Service sector	6.48(5)	3.34(3)	4.77(8)
Carpenters	1.85 (2)	0.00 (0)	1.19 (2)
Mill flour	0.00 (0)	1.67 (1)	0.60 (1)
Butcher	4.63 (3)	1.67 (1)	2.38 (4)
Tailor	0.00 (0)	1.67 (1)	0.60 (1)
Total	100.00 (108)	100 (60)	100 (168)

Source Own survey 2005

Numbers in parentheses indicate reporting respondents

This seems that villages near urban centers have more opportunity to engage in various trade activities than those far from it. This is also indicated by Tegegne(2000) where he states villages near to urban centers sent more number of households to non-farm activities and more engaged in trade than those far away from the urban centers.

Based on the opportunity, individual households engaged in various income generating activities to avert the risk associated with the farm income (see the following table).

Table 34: Number of Micro-enterprise Activities and Percentage of Operating Households

Number of Activities	Dogato	Gawada	Total
1	43.33 (26)	51.43 (18)	46.31 (37)
2	33.33 (20)	31.43 (11)	32.63 (38)
3	20.00 (12)	17.14 (6)	18.95 (18)
4	3.33 (2)	0.00 (0)	2.11 (2)

Source Own Survey 2005

Numbers in parentheses indicate reporting households

Table 34 shows that about 46 percent of the households engaged in one type of micro enterprise activities while 40 percent of the respondents were running two types of micro-enterprise activities. While the rest were undertaking three or more micro enterprise activities. Inter kebele data indicate that more than half of Gawada farmers engaged in one type of micro enterprise activities whereas more than half of Dogato farmers engaged in two or more activities. For this situation, Etsegenet (2000) in her study in drought prone areas of North Shoa Zone of two Pas cites meager agriculture product. Furthermore, Livitsky (1989) ascertained this by stating that households near to urban centers have opportunity to engage in more than one non-farm activities due to their access to transport.

These activities are carried out by the farmers mainly via combine with agriculture either as a primary or secondary activity. As table 35 shows, about 86 percent of the households combine their farm with their business whereas 13.68 percent engaged only in micro enterprise sector.

This is somewhat consistent to the idea of identifying only a tradesman is difficult in rural areas (Nowak, 1989).

Table 35: Percentage of Households and their Occupational Engagement

Type of Engagement	Dogato	Gawada	Total
Only micro enterprise engaged households	10 (6)	20 (7)	13.68 (13)
Combine micro enterprise and agriculture	90 (54)	80 (28)	86.32 (82)
Micro enterprise 1 st rank	64.81 (35)	46.43 (13)	58.54 (48)
Agriculture 1 st rank	35.19 (10)	53.57 (15)	41.46 (34)
Wage labour 1 st rank	0.00 (0)	0.00 (0)	0.00 (0)

Source Own Survey 2005

Numbers in parentheses indicate reporting households

Table 35 also shows, nearly 60 percent of the respondents ranked micro enterprise first for the question would you rank your household major source of livelihood among the micro enterprise, agriculture and wage labour? While 41.46 ranked agriculture first and none ranked wage labour. Inter PA comparison indicates, Dogato is leading by its undertaking micro enterprise activities as a major source of income to agriculture and wage labour. This is probably because Gawada has higher potential of agriculture than Dogato (see the preceding chapter).

Thus, based on the opportunity and households' survival strategy, farmers in the study sites generate an average annual income⁸ of ETB 391.91 (see appendix 1). This annual income was generated from various micro enterprise activities, which were undertaken by households in the year 1996E.C (2003/04).

⁸ Annual income represents the total income earned in the year 1996 E.C (2003/04) net of material (merchandise) cost including transportation.

Table 36: Distribution of Household by their Annual Micro enterprise Income from Major Sectors (Multiple Responses)

Distribution	Handicraft	Local drink	Food preparation	Trade	Mill flour	Total
Below and 100	7	12	2	1	-	22
101-200	5	22	3	-	-	32
201-300	2	5	2	4	-	13
301-400	1	3	-	1	-	5
401-500	1	8	2	4	1	16
501-600	2	4	1	1	-	8
601-700	1	-	-	2	-	3
Above 700	5	15	5	15	-	40

Source: Own Survey 2005

Annual income of most households participated in different micro enterprise activities ranges from 700 ETB and above then followed by group of 101 and 200. Intersectoral comparison indicates that income of most households those were engaged in local drinks fall within the range of 101 to 200 ETB whereas for those participated in handicrafts; their income falls within ETB 100 and below.

Among others, trade is the highest income generating activity relative to others. About 15 households out of 28 of those engaged in trade, their annual income is above 700. This seems that trade is the most profitable and attractive one in the study sites. Some studies in this county incorporate the same result (see Tegegne, 2000; Etsegenet, 2000). On the other side, it is somewhat inconsistent to the study by Mulat and Teferi (1996) where local drinks and food are highest income generating activities.

5.2. Labour for Rural Micro enterprise

For rural micro enterprises, major source of labour is family members that participate in various activities. The following table indicates the household member's participation and their kind of involvement.

Table 37: Household Participation and Activities Carried Out

Response	Dogato	Gawada	Total
Household reported participation of their household members (yes) %	75.00(45)	77.14 (27)	75.99 (72)
Kind of activities:			
Input provisions (yes) %	53.33 (24)	18.51 (5)	40.28 (29)
Carrying out put to the market (yes) %	37.78 (17)	59.26 (16)	45.83 (33)
Selling the products or service (yes) %	35.56 (16)	77.78 (21)	51.39 (37)
Money provision (yes) %	11.11 (5)	11.11 (3)	11.11 (8)

Source: Own survey 2005

Numbers in parentheses indicate reporting households

About 76 percent of the respondents use family members in various kinds of micro enterprise activities. The respective percentage is almost equal in both PAs. This indicates, the importance source of family labour in operating micro enterprises.

As the field data reveals, family members mainly participate in selling products or services that constitutes 51.39 percent. The corresponding figure is large in Gawada PA as compared to Dogato, which accounts for 77.78 percent. This might be due to the fact that most micro enterprises selling place is at home, especially local drinks and food where majority of the sampled households are engaged in this kebele. Similarly, household members participate in carrying the product or services to the market and providing input for the enterprises that constitute 45.83 percent and 40.28 percent, respectively. If incase labour shortage, households use various strategies (see the following table).

Table 38: Labour Requirement and Means of Solving Labour Shortage

Response	Dogato	Gawada	Total
Households reported labour shortage for their enterprise (yes) %	53.33 (32)	74.14 (27)	73.68 (59)
Mechanisms used:			
Hire daily labourers (yes)%	17.65 (6)	18.75 (6)	17.11 (12)
Hire temporary workers* (yes) %	2.94 (1)	18.75 (6)	10.61 (7)
Hire permanent workers* (yes) %	2.94 (1)	6.25 (2)	4.55 (3)
Use relatives and friends(yes) %	76.47 (21)	56.25 (18)	66.67 (44)

Source: Own Survey 2005

Numbers in parentheses indicate reporting households

* Permanent workers in this case stand for those have been working for more than 6 months in the enterprise while temporary is below 6 months and different from daily wageworkers.

The above table shows that 73.68 percent of the respondents reported that they faced labour shortage during their enterprise operation. This, especially faces those households in Gawada kebele. This may be due to the agricultural potential of Gawada, which competes for labour as compared to Dogato kebele.

Though farmers use various mechanisms, the most prominent mechanism is relatives' and friends' labour that account for about 67 percent. This is recorded high in Dogato as compared to Gawada, 70.4 percent and 56.25 percent, respectively.

With a little extent, enterprise operators use temporary and permanent workers. There are 10.61 and 4.55 percent of the households who use temporary and permanent workers, respectively while only 18.18 percent of the respondents hire daily labourers. Rural micro enterprises are survivalist work hence it is difficult to hire salaried workers but rather use families' or friends' labour (Levitsky, 1989; Shepherd, 1998). Similar situation in a drought prone area of North Shoa Zone led Etsegenet (2000) to conclude that, it is impossible to encounter paid employees in rural micro enterprise sector.

5.3. Micro enterprise Employment and Start up Capital

5.3.1. Years of Employment

Most of the households started their enterprise one year ago. That means, about 35 percent of the respondents started their enterprise during this time. Especially, in Gawada kebele more than 60 percent of the respondents started their enterprise in the same time.

Table 39: Percentage Distribution of Households and their Years of Employment

Years of Employment	Dogato	Gawada	Total	Total More than Cumulative Frequency
Not more than one year	7.41	16.13	10.58	10.58
One years ago	20.37	61.30	35	45.87
Five years ago	22.22	6.45	16.45	62.64
Ten years ago	18.52	9.68	15.30	77.64
Fifteen years ago	24.07	-	15.30	92.94
Twenty years ago	5.55	6.45	5.88	98.82
More than twenty years or throughout life	1.85	-	1.18	100

Source: Own Survey 2005

Very few households started their enterprise before fifteen years and above, which represents 22 percent. On the other hand, more than three-fourths of the micro-enterprises were started within the past fifteen years. This may be due to two reasons. First, the starting of these enterprises is related to the shortage of land and crop failure of the study sites where farmers have undertaken them to supplement or to substitute farm income. Second, it is related to the country's liberalization policy that allowed farmers to participate in trade activities. This is confirmed Tegegne's (2000) study conducted in densely populated areas of South Ethiopia which led him to conclude trade liberalization allowed farmers to choose occupation instead of being confined to one type of activity 'farming'.

Why Farmers Engage in Micro enterprise Sector?

The reason to engage in rural micro enterprise is mainly to supplement agricultural income. The data from the survey indicates that about 58 percent of the respondents carry micro enterprises to supplement their farm income. The respective percentage ranges between 62 and 55 in Gawada and Dogato, respectively. This is followed by those undertak micro enterprise activities as their

major occupation, which accounts for 31.58 percent. Then, the rest undertake these activities as a family tradition and their hobby with 5.26 percent each.

Table 40: Percentage of Households Report Reason for Engage in Micro Enterprise

Reasons for Engagement	Dogato	Gawada	Total
To supplement farm	55 (33)	62.86 (22)	57.89 (55)
Hobby	3.33 (2)	8.57 (3)	5.26 (5)
Major occupation	33.33 (20)	28.57 (10)	31.58 (30)
Family Tradition	8.33 (5)	0.00 (0)	5.26 (5)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Hence, rural micro enterprise activities are combined with farm activities in slack time or any time as conditions permit the household to operate the enterprise (see the following table).

Table 41: Percentage of Household by Time of Engagement

Time of engagement	Dogato	Gawada	Total
Slack time	46.67 (28)	54.48 (19)	49.47 (47)
Any time	53.33 (32)	45.72 (16)	50.53 (48)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Farmers, almost equally engaged in micro enterprises at a slack time and at any time to fulfill the consumption of their household needs without it is clashing with their farm work. This is significantly different from the study by Tegegne (2000) where most of the non-farm engagement is during the slack time in densely populated areas of South Ethiopia. However, in Dogato slack time engagement is less than Gawada because of the farm income variation. About 53 percent of the Dogato respondents engaged in micro enterprise at any time, which is high as compared to Gawada (46 percent). Households also operate their business on part time or full time basis (see the following table).

Table 42: Percentage of Households by their Enterprise Distribution Time of Operation

Time of Operation	Dogato	Gawada	Total
Full time	38.33 (23)	14.28 (5)	29.47 (28)
Part time	61.67 (37)	84.72 (30)	70.53 (67)

Source: Own Survey 2005

Numbers in parentheses indicate reporting farmers

Table 42 shows that about 71 percent of the respondents operate their enterprise on part time base while 29 percent run their enterprise on full time. In Gawada, about 85 percent of the respondents operate on part time whereas in Dogato it is only about 62 percent.

5.3.2. Start-up Capital

Starting capital for rural micro enterprise is very small. Table 43 below indicates that the starting, capital ranges within 2 ETB and 16,000 ETB. Particularly, 2 ETB is for spinning and 16,000 ETB is for the acquisition of rural mill flour that were identified from the survey.

Table 43: Minimum, Maximum, Mean and Distribution of Start up Capital

Distribution	Frequency	Percentage
1-200	73	76.84
201-400	7	7.37
401-600	2	2.11
601-800	3	3.16
801 and above	10	10.52
Minimum	2	
Maximum	16,000	
Mean	460.11	

Source: Own Survey 2005

The average starting capital is ETB 460.11. For more than three fourths of the respondents, their starting capital falls within a group of 1 and 200 ETB. This reflects the survival use of rural micro enterprise that is operated by a household to escape from the crop failure problems, which in turn helps to fulfill their consumption.

Source of Start-up Capital

The main source of start-up capital for most respondents is own saving that constitutes about 55 percent. This is followed by the contributions by friends or relatives, which accounts for 21.94 percent of the respondents' initial capital. Moneylenders, especially individuals and 'Iquib'-traditional group rotating credit and saving institution contribute initial capital of nearly 15 percent. Finally, credit and saving institution (micro finance institution) contributes only 7.62 percent and which is confined to Dogato kebele.

Table 44: Source of Start up Capital and Percentage Distribution of Households

Sources	Dagato	Gawada	Total
Own saving	51.51	61.53	55.24
Relatives' and friends' contribution	22.73	20.51	21.94
Credit and saving institution	12.12	0.00	7.62
Money lenders	13.64	17.95	15.24

Source: Own Survey 2005

According to the data from the survey, major source of own saving for most respondents is agricultural income, which is nearly 54 percent (see the following table)

Table 45: Source of Own Saving for Micro enterprise Start-up Capital and Percentage Distribution of Households

Source of Saving	Dagato	Gawada	Total
Farm income	53.85	53.34	53.62
Sale of property	2.56	30.00	14.49
Remittance	10.26	3.33	7.25
Inheritance	17.95	10.00	14.49
Previous wage employment	15.35	3.33	10.15

Source: Own Survey 2005

This is followed by revenue from sale of property and inheritance that constitutes 14.9 percent each. The corresponding percentage for own saving from farm income is not this much different in both kebeles. This shares the finding of Etsegenet (2000) in South Shoa Zone of drought prone

areas. Thus, to promote micro enterprise in rural areas, it also needs promotion of agriculture since these two sectors have both backward and forward linkages (Etsegenet, 2000; Tegegne, 2000; Dejene, 1994).

5.4. Inputs and Outputs of Rural Micro enterprise

Inputs for rural micro enterprises are mainly local resources. For instance, local beers like ‘Cheqa’ (which is equivalent to ‘Borde’ in other Ethiopian regions) producers mainly use maize and millet that are found from the local market. Similarly, ‘Areke’ which is well known and consumed by both rural and urban communities use maize and ‘Gesho’-herbaceous tree for their major inputs, which are mostly found in the local market. At the same time, trade like in other rural Ethiopian areas is almost all retail trade that uses agricultural products (Tegegne, 2000; Esegenet, 2000). For example, those are engaged in trade collect some agricultural products from their nearby periodic market or from other rural markets and provide it for the local people.

Table 46: Percentage of Households Reported Source of Main Inputs for their Micro Enterprise

Sources	Dagato	Gawada	Total
The locality	56.67 (34)	74.28 (26)	63.16 (60)
The woreda but outside the locality	3.33 (2)	2.86 (1)	3.16 (3)
Outside the woreda	13.33 (8)	2.86 (1)	9.47 (9)
1 and 2	15.00 (9)	17.14 (6)	15.79 (15)
1 and 3	1.67 (1)	0.00 (0)	1.05 (1)
All	10.00 (6)	2.86 (1)	7.37 (7)

Source: Own Survey 2005

Numbers in parentheses show reporting households

The above table shows that the main inputs for more than 60 percent of the respondents is generated from their locality whereas a few (16 percent) uses a combination of local market and other markets that are outside their locality but within the woreda. The corresponding percentage in each study sites indicates, 74.28 percent of the Gawada micro enterprises use the local market while 56.67 percent of Dogato use local market. This is probably due to the fact that most Gawada enterprises are local beer brewing and food catering activities which mainly consume agricultural product. Furthermore, Gawada has relatively high potential of farm sector

compared to Dogato. This indicates that the resource base of rural micro enterprise is their surrounding localities, which are mainly the rural agricultural products.

On the other hand, because of cheap and simply consumable characteristics of rural micro enterprise products, it is used by most rural communities. As per focus group in the two kebeles, even byproducts of most enterprises are consumed as animal fodder. At the same time, focus group participants stress the issue that their family members are also served from the products prepared for the market. This is particularly common for those are engaged in local beer brewing and food preparation. Thus, for most enterprises their products are locally consumed (see the following table).

Table 47: Percentage Distribution of Households Reported Place of Marketing their Enterprises

Place	Dagato	Gawada	Total
In the locality	86.67 (52)	82.86 (29)	85.26 (81)
In the woreda	3.33 (2)	2.86 (1)	3.16 (3)
Outside the woreda	1.67 (1)	2.86 (1)	2.11 (2)
1 and 2	5.00 (3)	11.42 (4)	7.76 (7)
1 and 3	3.33 (2)	0.00 (0)	2.11 (2)

Source: Own Survey 2005

Numbers in parentheses show reporting households

More than 85 percent of the households provide their products and services in their locality except a few (7.36 percent) which combine both their local market and some markets outside their locality but within the woreda boundary. The respecting percentage shows, little variation which is nearly 85 percent and 87 percent for Gawada and Dogato, respectively. This is, because micro enterprises in general and rural micro enterprises in particular serve local people within a very small radius (Begachwa, 1994). Hence, for most rural micro enterprises, the place of production and sales is homestead.

Table 48: Percentage of Households Reported Location of Operation for their Enterprises

Location	Dagato	Gawada	Total
Homestead	56.67 (34)	57.14 (20)	56.84 (54)
Outside /long distance from home	43.33 (26)	42.85 (15)	43.16 (41)

Source: Own Survey 2005

Numbers in parentheses show reporting households

From the above table, it is important to state that most enterprises are undertaken in the home, which consists of 56.84 percent. Whereas 43.16 percent of the respondents sell their enterprise outputs and services outside their home. This is also confirmed the study of Pederson (1994) in Zimbabwe where he concludes that rural micro enterprises are very small income generating activities and mostly are homestead activities.

Those supply their products out side their home use various means of transportation (see the table below).

Table 49: Means of Transportation and Number of Households Used

Type of Transportation	Dagato	Gawada	Total
Pack animal	0	1	1
Self/ family carry	10	10	20
Hire vehicle	16	4	20
Hire labour	0	1	1
Total	26	16	42

Source: Own Survey 2005

Most households use self/family labour and vehicles to transport their products or services, which constitute 20 households each. The corresponding numbers vary between PAs especially in using vehicle as a means of transportation. In Dogato, there are 16 households using such means of transportation while in Gawada it is only 4 households. This may be due to the inaccessibility of Gawada to transport facilities. It also seems that in Dogato, there are more traders than Gawada that might use vehicles.

5.5. Status of the Enterprise

Farmers differently perceive about their enterprise compared to agriculture under the present situation of their environment.

Table 50: Farmers Perception about their Enterprise Compared to Agriculture

Response	Dagato	Gawada	Total
The enterprise saves labour than agriculture			
Yes %	71.43	68.57	70.43
No %	28.57	31.43	29.67
The enterprise generates income than agriculture			
Yes %	72.88	71.43	72.34
No %	28.22	28.57	27.66
The enterprise reduces vulnerability than agriculture			
Yes %	70.37	77.14	73.03
No %	29.63	22.86	26.97

Source: Own Survey 2005

The above table reveals that 73.03 percent of the respondents reported that their enterprise reduces vulnerability to external shocks inherent in their environment. Whereas 72 percent and 70 percent of the households perceived that their enterprise is important to generate income and save labour, respectively. From this it is possible to understand that those farmers engaged in micro enterprise prefer it to agriculture due to the bad environmental characteristics of the area.

The farmers' perception about their enterprise is not restricted to this but also they reveal that micro enterprise activities reduce burden on the land and reduce environmental degradation (see the following table)

Table 51: Percentage Distribution of Farmers Perception about their Enterprise Effect on the Environment Compared to Agriculture

Response	Dagato	Gawada	Total
The business reduce burden on environment	60 (36)	51.42 (18)	56.84 (54)
The business facilitate environmental degradation	31.61 (19)	34.29 (12)	32.63 (31)
The same as farming	8.33 (5)	14.29 (5)	10.53 (10)

Source: Own Survey 2005

Numbers in parentheses show reporting households

About 57 percent of the respondents perceived that their enterprise reduces burden on the environment while nearly 32 percent and 11 percent, respectively reported that their enterprise facilitates environmental degradation and does not show any change compared to agriculture. Inter Kebele comparison indicates, 60 percent of Dogato respondents state that their enterprise reduces burden on environment whereas 51.42 percent of Gawada PA respondents reveal the same situation. This indicates, micro enterprise employment is characterized by reducing burden on environment. This may relate to Abebe's (1994) study conducted in Harargie that he concluded non-farm activities reduce burden on land and help farmers to use their labour effectively and efficiently. On the one side, firewood is one of their main inputs for those are engaged in local drinks and food preparation hence their enterprise effect on environment seems one problem.

Profitability of the Enterprise

From the very beginning, it was tried to state that rural micro enterprise activities are consumed by rural poor for the sake of survival strategy. Hence, their profitability is not this much but farmers perceive the following about their enterprise.

Table 52: Percentage Distribution of Farmers Perception about their Enterprise Profitability

Status	Dagato	Gawada	Total
Satisfactory/ profitable	(10) 16.67	(1) 2.86	(11) 11.58
Some what profitable	(48) 80.00	(33)94.29	(81) 85.26
Not profitable	(2) 3.33	(1) 2.85	(3) 3.16

Source: Own Survey 2005

Numbers in parentheses show reporting households

Households reported that their enterprise is somewhat profitable to run. This represents about 85 percent of the respondents. Only 3.16 percent reported that their enterprise is not profitable. On the other hand, for about 12 percent, their enterprise is satisfactory/ profitable except a few reported in Gawada. The result is consistent with the study by Tegegne (2000) on non-farm activities in densely populated rural areas.

As the result, the micro enterprise sector is favoured and absorbed by most people for their survival means.

Table 53: Percentage of Respondents' Future Plan about their Enterprise

Response	Dagato	Gawada	Total
Continue to work	82.20	76.67	80.00
Abandon the work	10.00	16.67	12.50
No decision	8.00	6.66	7.50

Source: Own Survey 2005

The above table shows, 80 percent of the households want to continue with their enterprise while 12.50 and 7.50 said that they would abandon the enterprise and have no decision about their future plan, respectively. Thus, it is important to deal with their day-to-day problems.

5.6. Major Problems of Rural Micro enterprises

Rural Micro enterprises are constrained by various combinations of problems. Each problem has its own implication on various activities of enterprise. Among others, the major problem for about 93 percent of the respondents is lack of financial capital (see table 54 below). This may be emanated from the individual household needs to expand their enterprise to become self-sufficient or to grow to other stage, and non-existence of capable credit providing institutions in the study sites. Etsegenet (2000) in her study in drought prone areas of North Shoa Zone of Ethiopia shares similar thing. According to her, financial capital is the first constraint for the expansion of rural micro enterprise sector. In addition, Begachwa (1994) forwarded that lack of capital is the most impediment to the expansion of rural micro enterprises.

Table 54: Percentage of Households Reported Major Problems of their Enterprises (Multiple Responses)

Types of Problem	Dagato	Gawada	Total
Lack of capital	95 (57)	88.57 (31)	92.63 (88)
Local inputs (raw materials)	45 (27)	45.71 (16)	45.26 (43)
Social perception about the activities	10 (6)	2.86 (1)	7.57 (7)
Lack of Market	31 (19)	85.57 (30)	51.58 (49)
Lack of transport	25 (15)	22.86 (8)	24.21 (23)
Labour shortage	43.33 (26)	82.85 (29)	57.89 (55)
Shortage of water	75.00 (45)	91.43 (32)	81.05 (77)

Source: Own Survey 2005

Numbers in parentheses show reporting households

The next problem is shortage of water. In addition to the raw materials constrained by the enterprise operators, this constitutes 77.05 percent. As of key respondents, this problem is mainly faced by those engaged in local beer brewing and food catering. In Gawada PA, the problem is more severe than Dogato where it varies with in 91.42 percent and 48.33 percent, respectively. Focus group discussion, in both kebeles reached on the consuses that states “We face shortage of water, especially during the dry season even for our household consumption let alone for the enterprise operation.” In Gawada PA, far distance of water sources were also claimed as a major problem. This may indicate, shortage of water in the study sites constrains households’ survival strategies.

Similarly, lack of inputs (raw materials) for those are engaged in weaving and spinning as well as for others like local beer brewing and food preparation is a major problem that accounts for 45.26 percent. One of the key respondents in Gawada strongly claimed that she lacks honey to prepare 'Tej'- honey beer and due to this she some times gets honey after much tiredness.

Again, lack of market nearly for 52 percent of the respondents becomes a major problem, which varies within the range of 31 percent and 85.57 percent for Dogato and Gawada, respectively. This is consistent to focus group discussion results and key informants' information from both PAs. The results mainly state that “Due to recurrent crop failure, many people engaged in the same type of activities like ‘Cheqa’. For this, it is difficult to compete for many households.

Hence, some times for the lack of consuming customers, the produced 'Cheqa' is given to animals or discarded." This may also resemble with the analysis of Webster and Filder (1996) that states micro enterprises face high competition due to smallness of market served by them, easy entry characteristics of them and lack of skill to specialize some kind of products by most enterprises.

From the nature of rural micro enterprises of which they are combined with farm work and their traditional use of technology, farmers face labour shortage to operate their enterprise. This is a major problem for about 58 percent of the respondents. It is serious for Gawada as compared to Dagato.

Lack of transport is also a major problem for those selling their products and services outside their locality, which accounts for about 24.21 percent.

Finally, social perception towards the operators of micro enterprises, especially negative connotation affects the respondents' engagement. This is mainly related to those participated in handicraft activities. Despite its minimal constitution (7.58 percent), it has a discouraging effect for those are engaged in these micro enterprises.

Discussions were held with key informants in both kebeles during the fieldwork. The result of the discussion was a mixed information/responses. One who is engaged in weaving in Dogago kebele says "This occupation that now I am engaged in was assigned in the past for specific group of people who call 'Hawida'-minor group, who did not take a part on farm work but now it is operated by the whole society including 'Ethenta' major group. I myself belong to major group who were in the past engaged in farm and now I am performing 'Hawida's' work. There is no any discouraging thing that is forwarded on my occupation." Another person in Gawada who is engaged in blacksmithing strongly claimed that, "Segregation of 'Ethenta' and 'Hawida' on such type of occupation is continued till today. Hence, it is discouraging most households those are engaged in such activities."

Especially, the latter indicates, how social perceptions discourage the engagement of households. This was also evidenced by Watson and Lakew (2001) and FARM Africa (2001). They stating the problem as, Konso handicraft works are economically important but they are socially degraded occupations. This may necessitate the intervention of local government and other concerning institutions to avert the negative connotations towards the work through different type of actions mainly teaching the community to change their negative attitude.

The foregoing discussion indicates, rural micro enterprises are very small income-generating activities, which mainly performed by the household due to the inability to fulfill the families subsistence consumption needs from the farm income. They are traditional and labour intensive activities that mainly used the family labour or the relatives' and friends' labour. Their inputs are mostly generated from the locality and serve the local people by their products. They are mainly operated in the homestead and on part time basis with the combination of agricultural activities. However, they are constrained by a range of problems, mainly the lack of financial capital.

They are also perceived as somewhat profitable, reduce burden on environment and save labour as well as reduce the households' vulnerability to the seasonal crop failure. They are consumed is by most farmers in the study sites. Thus, we are going to see the influencing factors of rural micro enterprise sector.

CHAPTER SIX

6. DETERMINANTS OF RURAL MICROENTRPRISE

6.1. The Model

One of the objectives of this study is examining the impact of various factors on the involvement of an individual household. In this study the involvement of a household can be measured by its efficiency to use its resources in economic and systematic way to get higher productivity. The productivity in this study can be stated using income from various sources of micro enterprise activities which is the outcome of different resources of a household. This can be the household's demographic character, the capital resource and access to infrastructure.

Most of the time, productivity can be measured in two ways:

1. Productivity in relation to a particular input or partial productivity, and
2. Productivity in relation to all inputs together or total productivity.

Fore instance, labour productivity and capital productivity which may be value added per unit of labour and per unit of capital, respectively is partial productivities. This study used the partial productivity method because it enables us to measure the contribution of each input, which could be hidden in the total productivity case. Thus, contribution of each input (e.g. labour and capital) can be estimated by the Cobb-Douglas production function as follows:

$$MP_L = a.Y/L$$

$$MP_K = b.Y/K$$

Where, MP_L and MP_K are marginal productivities of labour and capital, respectively. Whereas a and b are output elasticity of labour and capital, respectively estimated from the Cobb-Douglas production function and Y/L and Y/K are average productivities of labour and capital, respectively.

Therefore, Cobb-Douglas production function was chosen to examine household's decision to engage in various income generating activities. This production function was chosen for it is simple to run as well as for it helps us to measure the significant importance of each explanatory variable for the dependent variable. It is specified as:

$$Y = b_0 X_1^{b_1} X_2^{b_2} \dots X_n^{b_n} e^u$$

By transforming the model in to log linear form, it becomes:

$$\ln Y = \ln b_0 + b_1 \ln X_1 + b_2 \ln X_2 + \dots + b_n \ln X_n + u$$

Where,

\ln = The natural logarithm

Y = Dependent variable

b_0 = Y intercept (constant term)

b_i = Coefficient of the model

X_i = an explanatory variable

u = undependable normally distributed disturbance term by assumption.

e = The base of natural logarithm

As it is stated above, the model was specified on the basis of micro enterprise income of the households. Thus, several factors are postulated to influence the efficiency of a household to generate income from different kinds of micro enterprise activities that vary their income generated from such activities. They are broadly grouped under three categories. These are (1) demographic characteristics of the household (2) Endowment of the household and (3) Location of the household residence from the rural infrastructures. Therefore, it is the function of the following.

$$Y = f(\text{FSIZE, AGE, SEX, EDU, LSIZE, CREVEN, LREVEN, LPMKT, LROAD})$$

Then, it is formulated as:

$$\ln Y = \ln b_0 + b_1 \ln \text{FSIZE} + b_2 \ln \text{AGE} + b_3 \text{DSEX} + b_4 \ln \text{EDU} + b_5 \ln \text{LSIZE} + b_6 \ln \text{CREVEN} + b_7 \ln \text{LREVEN} + b_8 \ln \text{LPMKT} + b_9 \ln \text{LROAD} + u$$

Where,

Y = it is dependent variable and represents the total annual income of a household generated from various micro enterprise activities which were engaged by the household in the year 1996 E.C.

- FSIZE= refers to the number of persons in the household (family size) in the year 1996 E.C.
- AGE = is the age of the household head.
- DSEX = shows households' head sex. It is dummy for female household heads.
- EDU = refers to educational status of household head which is measured by highest grade completed.
- LSIZE= refers to household's land resource endowment.
- CREVEN= shows revenue from crop sales in the year 1996 E.C.
- LREVEN= shows revenue from livestock and livestock products sales in the year 1996 E.C.
- LPMKT= refers to the distance of household's residence from the nearby periodic market which is measured by walk per hours.
- LRDAD= shows distance of household's residence from the weather road which is measured by walk per hours.

Thus, it is hypothesized in the following way:

1. Household demographic characteristics

It is expected that family size, and age, sex, and educational status of the household head's attributes of a household affect the engagement of the household.

- Family size- labour rich household has an opportunity to have enough labour to send some of their household members to different activities of enterprise. Thus, this is hypothesized that family size is directly related to the rural micro enterprise income.
- It is also expected that young household heads are more participate in rural micro enterprise activities than old aged household heads due to different reasons. Among others, first, land fragmentation and land shortage lead young household heads to divert to non-farm activities to supplement their farm income. Second, young household heads have capacity to run their fulfilling family consumption. Therefore, the variable age has a negative coefficient and significantly influences the micro enterprise income.
- Women generally have less access to non-farm activities than men. Hence, the variable sex refers to the household head (female=1 and male =0) and is expected to have a significant influence and negative coefficient.

- Access to information and opportunity to engage in profitable micro enterprises might go with the level of education. This is measured with highest grade completed by the household head. Thus, it is hypothesized as a significant and positive coefficient.

2. Endowment and related income of households

- The size of land leads farmers to search for non-farm activities to supplement their income from agriculture, especially for those landless and small landholders. On the other hand, large land owned farmers confine to the farm because they get relatively enough income from their land resource. Thus, their engagement in micro enterprise is low compared to others. Hence, the variable land size has a negative coefficient and a significant influence.
- By the same token, farmers who generate income from sale of crop are less attracted by non-farm income generating activities. Therefore, the variable revenue from crop sales has a significant and negative coefficient.
- Similarly, households generate income from the sale of livestock and livestock products are less attracted by micro enterprise activities. Hence, variable livestock revenue is expected to have a negative coefficient as well as significant influence.

3. Location

- Access to periodic market has an opportunity to have greater information to engage in various micro enterprises. This emanates from the nature and characteristics of rural micro enterprises where their outlet is in the market. Hence, the variable market is a distance of household residence that is expected to have a significant and negative coefficient.
- Proximity to rural weather road has an opportunity to transport goods produced by micro enterprises and to get inputs to run the enterprise hence the variable road is expected to have a significant and negative coefficient.

Thus, a regression was run to estimate the influence of explanatory variables on the involvement of a household in micro enterprise activities which in this case applied to the income generated by the household from various sources of it. Based on the data from the survey, computation was undertaken by the help of computer software known as linear regression.

The Model represents the result computed for the sample households those are engaged in micro enterprise activities. This is used to examine household's decision to undertake various income generating activities. Accordingly, the result is presented and discussed as follow. For more information, see appendix 2.

6.2. The Result

Table 55: Regression Results

Explanatory Variables	Model	
	Coefficient	t-value
Family size	342.942	2.483*
Age	-38.487	-1.572
Sex	563.707	0.813
Education	2649.587	4.517*
Land size	-51.796	-0.552
Crop revenue	-1.704	-0.653
Livestock revenue	-0.429	-0.871
Market	-5445.907	-2.472*
Road	-1131.263	-1.615**
Constant	2887.708	2.592
N	95	
R ²	0.313	
R ² (adj)	0.240	
F-ratio	4.306	

Source: Own Computation 2005

Dependent variable is income from micro enterprise activities

* Significant at 5%

** Significant at 10%

Family Size

Family size has a significant and positive coefficient. This implies that households with large family members have a probability to engage in micro enterprise activities as well as generate higher income from the micro enterprise sector. This may be due to various reasons. First, households with higher family size have opportunity to send more of their family members to micro enterprise activities, which can lead them to have an opportunity of participation and generate higher income. Second, their number and utility to money or cash push them to engage

in micro enterprise activities. Third, family members are sources of micro enterprise financial investment capital and cheap labour (see section 5.2).

Age of the Household Head

The coefficient of variable age has a negative sign despite it has an insignificant relationship. This implies that young household heads are likely engaged in micro enterprise sector and can generate higher income compared to those old household heads. Among the various reasons, first, young people may be more attracted by long distance trade, which generates higher income in our case (see table 36). This might be emanated from the ability of those young household heads to organize transport and net work communication than old age (Seppälä, 1996). Second, young people are likely to have a capability to initiate and promoted by new activities outside established natures that favour traditional farm. The case, it is not significant may due to labour shortage that might inherent in young households due to their family size.

Household Head Sex

Here, the variable sex is dummy for female-headed households. It has a positive coefficient in the model except it has a weak relationship with micro enterprise income. Its positive coefficient implies that female-headed households are perhaps equally participating in rural micro enterprise sector. This may be due to the high dominance of rural micro enterprises by local drinks and food preparation that is more likely operated by female in rural areas of the country. Mulat and Teferi (1996) in their regression result of non-farm activities identified the same result. Its weak relationship may be due to the female headed households are over represented in local drinks and food preparation than trade which in this study is the most profitable activity.

Educational Status of the Household Head

Education in the model refers to the highest grade completed by the household head. It has a significant and positive coefficient that implies educated people are highly attracted by micro enterprise activities in the study sites. This is, probably due to their capability to manage and organize transportation to such activities as well as they have more access to information and engage in profitable enterprises. In other words, this may reflect, rural micro enterprise activities are more attractive than other rural employments.

Land Size

The variable land size, in the model has a negative coefficient but it is not significant. The case, it is negative coefficient implies that households possess relatively large land size have opportunity to secure their food availability hence they send more of their household members to farm. On the contrary, farmers with small land size can intensify rural micro enterprise activities to secure their family needs. The result is consistent with the study of Delil (2001) in Oromiya Region of off-farm activities in this country. Its insignificance may be due to the shortage of land which is one of the major problems of the study sites. Hence, it may not make a significant difference among households.

Crop Sales

Though few households provide their crop to the market may be due to different obligations including tax, the variable revenue from crop sale in the model is insignificant and a negative sign. The negative sign implies that households, which generate relatively high income from micro enterprise, may not provide their crop to sell probably due to they generate enough cash income from micro enterprise activities. On the other hand, its insignificance may be due to the shortage of crop production for subsistence consumption which is one of the major problems of most households. Hence, it may not make a significant difference among households.

Revenue from Livestock Sales

The variable livestock revenue in the model shows, insignificant and a negative coefficient. The negative sign indicates that households with higher income from livestock and livestock products sales are less attracted to micro enterprise activities. In other words, these people probably generate sufficient cash income and have less intention to participate in higher income generating rural micro enterprise activities. The case, it is insignificant is probably due to the fact that households which participate in micro enterprise fatten cattle for the market using byproducts of their enterprises. Hence, it may not show a significant difference among households.

Distance of Household Residence from the nearest Market

In the model the variable market has a significant and negative coefficient. This indicates that the more the household residence is far from the nearest market the less the household engaged in micro enterprise activities. As the distance further increases, the household's access to inputs as well as to market its output or to get information become limited (Shchambo, 1994).

Distance of Household Residence to the nearest main Weather Road

The variable road in the model has a significant and negative coefficient. This reflects that as household go farther from the nearest main weather road, its involvement and generation of higher income become less and less. This may due to the fact that rural roads are important to transport produced and traded products (Levisky, 1989).

Therefore, family size, educational status of the household head, and distance of the household residence from the nearby periodic market and rural weather road got support as they were hypothesized. On the contrary, household heads' age, sex and household's land endowment as well as revenue from the crop and livestock did not get support.

CHAPTER SEVEN

7. CONCLUSION

7.1. Summary

The study tried to examine the scope of farm economy and micro enterprise sector of the Konso special woreda. Mainly, it was guided by the belief that rural micro enterprise sector is a survival strategy of rural poor which in turn the stimulators of other rural sectors (agriculture and industry) and a means of households labour adjustment to diversify their source of income mostly through interaction of their surrounding. This is because modernization economic development theories whose essence is absorbing surplus labour to the urban industrial sector and their negligence of rural communities self employment have been criticized in the context of developing countries where level of urbanization and its economic development is not equally growing. At the same time, peasant model, which perceives rural livelihood is exclusively dependent on land, could not adequately define what is happening in most rural communities of Africa.

The study was conducted using different methods of analysis in the basis of data from the field survey and related literatures. Accordingly, natural resources like land, water and forest are not in a position to carry the fast growing population of the wereda. Almost all the land to be used has already been occupied even all hillsides are consumed for crop cultivation and grazing. Consequently, longer equilibrium of the carrying capacity of the environment had failed.

Furthermore, woreda becomes one of the most drought prone and impoverished districts in the country. Its social sector especially education is characterized by low gross enrollment ratio and high gender gap. Besides this, vulnerability of the people to food shortage which resulted from the recurrent drought and limited availability of local wage employment necessitate the people to search for other means of survival strategy to their family livelihood. Since the last two decades, out migration of the people becomes common phenomenon.

The study in sampled sites in the study area also shows that the agricultural sector, especially crop production shown very low productivity. The highest grain yield recorded per hectare was 3.16 quintals. The crop production has been declining through time due to a combination of

problems. Among others, problems related to land resource and the nature of agriculture which is rain fed are reported as major constraints. The land resource becomes sub-divided and fragmented as well as used for several years without means of replacing its fertility (for example, traditional fallowing).

Modern high yielding inputs are not consumed by the farmers mainly due to the rain shortage that results from recurrent drought, which is accompanied with regular crop failure, frustrated farmers to become risk taker. Livestock sector is also constrained with the shortage of grazing land and water, and prevalence of disease. These, all push farmers in the study sites to search other activities other than agriculture either to supplement farm income or as the major occupation.

From the other means, micro enterprise employment is the most important means of survival strategy as well as a means of livelihood of farmers in the study sites. It is a source of employment and income mainly for those small holders and landless farmers. By type, it is traditional handicrafts, local drinks, food preparation, and trade activities. Its source of inputs and capital is the agricultural produce and income. Labour consumption of the sector outside the family labour is very low except friends' or relatives' labour used in case of labour shortage.

Here, it is important to note that households' labour adjustment is very important during slack periods of agriculture mainly to use their labour effectively and efficiently. On the other hand, its consumption of agricultural products implies that rural micro enterprise sector is one important sector that plays a facilitator role in the rural areas. It also supplements farm income through reducing vulnerability of household imposed by surrounding environment.

The other characteristics of rural micro enterprise sector is its marketing place mainly homestead and the areas surrounding periodic market and the market places. This may help for the flourishing of small towns where industrial products may be consumed by the local people. Micro enterprise sector may also contribute to the rural industrialization through direct investment on agro-processing industries like rural mill flour.

Finally, the regression result shows family size, educational status of household head, proximity of household residence to rural road and periodic market are significantly influencing the rural micro enterprise engagement. On the other hand, household heads' sex and age as well as land endowment, and revenue from the sale of livestock and crop are insignificant in the model.

7.2. Policy Implication

Despite the fact that agriculture is the main stay of most rural Ethiopian communities, it seems incapable to fulfill the rural societies' needs due to its inherent problems related to land resources such as lack of fertility, fragmentation, etc. and environmental fragility in some areas of the country like Konso. This creates a gap between the household's need and agricultural production on own farm for most farmers. Others may not produce crop due to the landlessness. Consequently, this necessitates filling the created gap. Humanitarian assistances such as relief may help those people during the strong drought period. Through such contribution alone, it is difficult to solve the rural problems of food insecurity in areas like Konso where drought is a serious problem.

Thus, rural and agricultural development policies should not only be confined to the sectoral problems and land reform instruments but also should incorporate other means of addressing the poor not for those landless and small holders but also for those live in drought prone areas like the study area where opportunity for local wage employment is too low. Therefore, they should be flexible and adjusted to the area specific in the way they incorporate rural micro enterprise sector.

This as the result diversifies the farmers' source of income and reduces vulnerability of farmers for the food shortage due to the regular crop failure that is caused by the recurrent drought. At the same time, farmers can secure their household food problems.

Here, the finding that indicates rural family labour (family size) is significantly important for the engagement in rural micro enterprise sector as well as to generate higher income from it, implies that how rural family labour is adjusted to use it in an economic way. That means, family labour is the main source of input to transform other resources of micro enterprise sector. Therefore, it necessitates making other resources in such a way that they can be combined to family labour for

their effective use. To do so, problems related to micro enterprise activities like lack of financial capital, inputs, etc need to be tackled through availing them to the rural poor. NGOs and local governments should involve in such people's long-term self-sufficiency mechanisms.

The fact that, education is significant to involve in micro enterprise activities needs the local government as well as regional government to expand education to reduce vulnerability to drought at the household level. This, therefore, becomes one means of solving the problem of unemployment and peoples vulnerability to the environmental and seasonal risks.

Rural weather road has also significant importance for the engagement of rural micro enterprise activities. This reflects the importance of transportation and communication for the rural micro enterprise employment. This is because, transportation facility is very important to get inputs and take output from produced areas to the marketing places. Thus, it needs provision or availing transport facilities through the promotion of rural transport sector.

The other fact from the finding is the significant importance of rural periodic market for the engagement of rural micro enterprise which implies that traditional village level markets need to be developed as much as possible in the way they are accessible to the people. This is also a means of struggle against poverty related to income shortage from farm. This can be simply done by the local government.

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Household Annual Income from Micro enterprise Activities

Distribution	Frequency	Percent
Below and 100	18	18.95
101-200	26	27.37
201-300	9	9.47
301-400	4	4.21
401-500	10	10.53
501-600	5	5.26
601-700	4	4.21
Above 700	19	20.00
Mean	391.91	

Appendix 2 information about the Model

Note: S1=Sex of the household which is dummy for female headed households.
 Eductio1=The highest educational status of the household head.
 4 Timad is equivalent to 1 hectare

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.29E+08	9	47648186.01	4.306	.000 ^a
	Residual	9.40E+08	85	11064616.38		
	Total	1.37E+09	94			

- a. Predictors: (Constant), size of total landholding in timad, distance of home to the nearest road, age of the respondent, EDUCTIO1, amount of money earned from the sell of crop, number of persons in the family, S1, distance of home to the nearest market, amount of money earned from the sell of livestock and products
- b. Dependent Variable: micro interprise

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	2887.708	1114.082		2.592	.011	682.973	5092.443						
	EDUCTIO1	2649.587	585.612	.359	4.517	.000	1488.699	3810.475	.355	.373	.337	.880	1.136	
	S1	563.707	693.152	.069	.813	.418	-808.021	1935.434	.021	.072	.061	.778	1.285	
	amount of money earned from the sell of crop	-1.704	2.609	-.052	-.653	.515	-6.867	3.459	-.027	-.058	-.049	.879	1.137	
	amount of money earned from the sell of livestock and products	-.429	.493	-.082	-.871	.385	-1.405	.546	-.196	-.077	-.065	.632	1.582	
	number of persons in the family	342.942	138.101	.207	2.483	.014	69.644	616.241	.143	.216	.185	.802	1.247	
	distance of home to the nearest road	-1131.263	700.367	-.148	-1.615	.109	-2517.269	254.744	-.224	-.142	-.121	.666	1.502	
	distance of home to the nearest market	-5445.907	2203.338	-.212	-2.472	.015	-9806.248	-1085.566	-.332	-.215	-.184	.758	1.320	
	age of the respondent	-38.487	24.489	-.124	-1.572	.119	-86.950	9.975	-.129	-.139	-.117	.900	1.111	
	size of total landholding in timad	-51.796	93.769	-.047	-.552	.582	-237.363	133.770	-.066	-.049	-.041	.762	1.313	

^a Dependent Variable: micro interprise

Continue...

Correlations

		micro interprise	EDUCTIO1	S1	amount of money earned from the sell of crop	amount of money earned from the sell of livestock and products	number of persons in the family	distance of home to the nearest road	distance of home to the nearest market	age of the respondent	size of total landholding in timad
Pearson Correlation	micro interprise	1.000	.386	-.114	.042	-.059	.241	-.268	-.254	-.102	.121
	EDUCTIO1	.386	1.000	-.052	.191	.169	.043	.118	-.121	-.134	.172
	S1	-.114	-.052	1.000	.162	-.178	-.259	.267	-.026	-.022	-.253
	amount of money earned from the sell of crop	.042	.191	.162	1.000	.055	-.011	.232	-.049	.094	-.059
	amount of money earned from the sell of livestock and products	-.059	.169	-.178	.055	1.000	.144	.320	.309	-.097	.295
	number of persons in the family	.241	.043	-.259	-.011	.144	1.000	-.117	.087	.212	.266
	distance of home to the nearest road	-.268	.118	.267	.232	.320	-.117	1.000	.382	.037	.016
	distance of home to the nearest market	-.254	-.121	-.026	-.049	.309	.087	.382	1.000	-.050	.153
	age of the respondent	-.102	-.134	-.022	.094	-.097	.212	.037	-.050	1.000	.028
	size of total landholding in timad	.121	.172	-.253	-.059	.295	.266	.016	.153	.028	1.000
	Sig (1-tailed)	micro interprise	.000	.000	.136	.344	.284	.009	.004	.007	.163
EDUCTIO1		.000	.000	.310	.032	.051	.338	.127	.122	.097	.048
S1		.136	.310	.000	.058	.042	.006	.004	.403	.415	.007
amount of money earned from the sell of crop		.344	.032	.058	.000	.299	.459	.012	.319	.183	.285
amount of money earned from the sell of livestock and products		.284	.051	.042	.299	.000	.082	.001	.001	.176	.002
number of persons in the family		.009	.338	.006	.459	.082	.000	.129	.201	.020	.005
distance of home to the nearest road		.004	.127	.004	.012	.001	.129	.000	.000	.361	.437
distance of home to the nearest market		.007	.122	.403	.319	.001	.201	.000	.000	.317	.069
age of the respondent		.163	.097	.415	.183	.176	.020	.361	.317	.000	.395
size of total landholding in timad		.122	.048	.007	.285	.002	.005	.437	.069	.395	.000
N		micro interprise	95	95	95	95	95	95	95	95	95
	EDUCTIO1	95	95	95	95	95	95	95	95	95	95
	S1	95	95	95	95	95	95	95	95	95	95
	amount of money earned from the sell of crop	95	95	95	95	95	95	95	95	95	95
	amount of money earned from the sell of livestock and products	95	95	95	95	95	95	95	95	95	95
	number of persons in the family	95	95	95	95	95	95	95	95	95	95
	distance of home to the nearest road	95	95	95	95	95	95	95	95	95	95
	distance of home to the nearest market	95	95	95	95	95	95	95	95	95	95
	age of the respondent	95	95	95	95	95	95	95	95	95	95
	size of total landholding in timad	95	95	95	95	95	95	95	95	95	95

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.560 ^a	.313	.240	3326.35181	.313	4.306	9	85	.000	2.165

a. Predictors: (Constant), size of total landholding in timad, distance of home to the nearest road, age of the respondent, EDUCTIO1, amount of money earned from the sell of crop, number of persons in the family, S1, distance of home to the nearest market, amount of money earned from the sell of livestock and products

b. Dependent Variable: micro interprise

Questionnaires for Survey Data

Part I. Information about Household Head

(Note: Except part IV all questioners are filled for all respondents)

- 1.1. Name of the household head _____
 1.2. Address: Kebele (Code) _____ village (code) _____
 1.3. Sex _____ Male -1 Female -2
 1.4. Age _____
 1.5. Ethnicity _____
 Konso -1 Gawada -2 Amhara -3 Oromo- 4 Others /specify
 1.6. Religion _____
 Ethiopian Oredthodox-1 Protestant-2 Muslim-3 Traditional faith -4 Others/specify
 1.7. Marital status _____ Married -1 Single -2 Widowed /divorce-3
 1.8. Education _____ Read-1 Write-2 Others/specify -3

Part II. Household Livelihood Information

- 2.1. What would your family source of livelihood? (More than one response is possible)
 _____ Farm-1 Micro business-2 Wage labour -3
 2.2. Would you order them according to their contribution to your household income?
 1st _____ 2nd _____ 3rd _____

Part III. Information about Farm Economy

- 3.1.a. Does your household have a plot of land?
 a. yes _____ 1 No _____ 2
 b. Would you tell the number of plots you use?
 c. Would you specify their size in local measurement? (in 'timed') Farm _____ 2. Grass
 _____ 3. Others/specify _____ Total _____
 d. Would you tell us the status of land holing? (Multiple responses are possible) _____
 Private-1 Rent -2 Share cropping -3 Others/specify -4
 e. What do you think the land you used now? _____
 Enough -1 Very small -2 Land available for distribution-3
 f. what about their status of topography? _____
 Plain -1 Gorge -2 Steep-3
 g. What about their status of fertility? _____
 Fertile -1 Not fertile -2 Semi fertile -3

3.2.a. Do you tell us the size of your land compared to the past years?

Status	Yes _____ 1		No _____ 2	
	20 year ago	15 years ago	10 years ago	5 years ago
The land size now is lager than the past				
The same as the past				
Smaller than the past				

3.3a. do you use modern high yielding inputs? _____

Yes-1 No -2

b. If 'yes' to 3.3a, would you tell their type did you use last year (1996E.C)?

Fertilizer used: Urea _____ DAP _____
Improved seed _____ Pesticides _____

3.4. Would you tell the traditional high yielding inputs that you used last year (1996E.C)?

_____ Manure -1 Fallowing -2 Soil burning (guy) -3 Irrigation - 4

3.5.a. Do you have drought animals? _____

Yes-1 No -2

b. If 'yes' to Q 3.5a, would you tell their number? _____

One Ox -1 Two oxen - 2 Three oxen -3
Four oxen -4 Others /specify-5

c. Do you have shortage of drought animals? _____

Yes -1 No -2

d. If 'Yes' to Q 3.5c, what mechanisms do use you to solve the problem? -----

(Multiple responses are possible)

Pair oxen with others -----1

Labour exchange for oxen -----2

Use relative oxen -----3

Rent oxen -----4

3.6a. Do you have labour shortage for your crop production? _____

Yes -1 No -2

b. If 'yes' to Q 3.6 a, when would you face labour shortage?

	Yes-1	No-2
Cultivation	_____	_____
Weeding	_____	_____
Trashing	_____	_____
Crop protection	_____	_____

c. Would you tell as your coping mechanisms of your household?

	Yes-1	No-2
Hire labor	_____	_____
Use relatives /friend labour	_____	_____
Use traditional social support (parka and kanta)	_____	_____

3.7. Would you tell the kind of crop you did cultivate last year (1996E.C)? _____ (more than one response is possible)

Teff -1 Maize -2 Sorgham -3 Haricot bean-4 Millet-5
Others/specify -6

3.8. Would you tell the annual production of last year (1996E.C) of cropping periods?

Crop	Cropping period			
	Belg		Meher	
	Land size (in 'timad')	Product (in 'silich')	Land size (in 'timad')	Product (in 'silich')
Teff				
Maize				
Sorghum				
Haricot bean				
Millet				
Others /specify				

3.9. What would the status of 1996E. C. product compared to the last 5 years ago? ____
 Increase -1 Decrease -2 No change -3

3.10a. Do you take crop to market to sell? ____ Yes -1 No -2

b. If 'yes' to Q 3.9a, how much did you earn from crop sales in 1996E.C? _____

c. Does your family face crop shortage? Yes---1 No-----2

d. If 'yes' to Q3.10c, has your family purchased grain from the market? Yes -----1 No -----2

e. If yes to Q3.10d, how much did you incur in 1996E.C?

3.11. Would you tell the major problem in crop cultivation?

	Yes-1	No-2
Shortage of rainfall	_____	_____
Shortage of land	_____	_____
Poor fertility of soil	_____	_____
Pests	_____	_____
Excess rainfall	_____	_____

3.12a. How many livestock do you own?

Type of Livestock	Number
Cattle	
- Oxen	
- Caws	
- Calves	
Sheep	
Goats	
Pack animals	
Poultry	

b. would you mention the earnings from the sale of livestock last year (1996 E.C.) in Birr?

Amount in Birr	
Livestock sale	_____
Livestock products	_____
Milk	_____
Butter	_____
Cheese	_____
Egg	_____
Sale of hides and skin	_____
Total	_____

c. Would you mention major problems you face in raising livestock?

	Yes-1	No-2
Shortage of grazing land	_____	_____
Lack of breeding animal	_____	_____
Prevalence of disease	_____	_____
Shortage of water	_____	_____
Wild animal	_____	_____

Part IV: Information about Micro Enterprise

(Note: These questioners are filled only for those households engaged in micro enterprise)

4.1a. Would your family has a source of income other than farm? _____

Yes -1 No -2

b. If 'yes' would you specify those micro enterprises that your household engages in?
(Multiple responses are possible)

I	Commerce:	
	Grain trade	_____
	Cattle trade	_____
	Vegetable trade	_____
	Textile	_____
	Hide and skin	_____
	Second hand clothes trade	_____
	Animal product trade	_____
	Honey trade	_____
II	Manufacturing	
	1. Handicrafts	
	Weaving	_____
	Spinning	_____
	Blacksmithing	_____
	Pottery	_____
	Tannery	_____
	Carpentry	_____
	Local bad making	_____
	2. Local beer brewing	
	'Ceqa'	_____

	'Tej'	_____
	'Tell'	_____
	3. Food production	_____
	Injera'	_____
	Butcher	_____
III. Service		
Tea room		_____
others/specify		_____

4.2.a. Would your family members participate to the activities of the business? _____

Yes -1 No -2

b. If 'yes' to Q, 4.2a, would you specify their kind of participation? _____

	Yes-1	No-2
1. Input provision	_____	_____
2. Take one product to the market	_____	_____
3. Selling the product/service	_____	_____
4. Provision of capital	_____	_____

4.3. Would you face labour shortage? _____

Yes - 1 No -2

4.4. Would you tell your family's coping mechanism to labour shortage?

	Yes-1	No-2
1. Use daily labourers	_____	_____
2. Hire labour temporarily	_____	_____
3. Hire labor permanently	_____	_____
4. Use relatives /friends	_____	_____

4.5. Where would you get the main inputs for your work? -----

(Multiple responses are possible)

In the locality-----1
 In the woreda but out side locality -----2
 Out side the woreda-----3

4.6. Would you tell your business location? _____

At home stead -1

Out side/long distance from home-2

4.7. Where would you sell your products /Service? -----

(Multiple responses are possible)

In the local to local people -----1

In the wereda in some markets-----2

Out side the woreda-----3

4.8. Would you tell the means of transporting you products? -----

Pack animals-----1

Family/self carry -----2

Hired vehicle-----3

Hired labour -----4

4.9. When would you start your business? _____

Not more than one year ___1 One years ago ___ 2 Ten years ago ___ 3

Fifteen years ago ___ 4 Five years ago ___5 Twenty years ago ___ 6 It is more than

twenty year
ago/through out my life ___7

4.10. What was your start up capital? (Only for those business activities require start up capita)

4.11. Would you tell where did you get the starting capital? -----

(Multiple responses are possible)

Form own saving -----1

From relatives/friends-----2

Frame credit and saving institutions-----3

From money lenders-----4

4.12. If to Q, 4.11 is own saving, would you tell the source of saving? -----

(Multiple Responses are possible)

Form agricultural income -----1

From sale of property-----2

Frame remittance-----3

From inheritance -----4

From previous labour wage-----5

1.13. Why do you engage in such type of business that you run now? _____

To supplement farm ___1 It is family tradition ___ 2 It is major occupation ___3

It is my hobby ___4

- 4.14. When would you work these activities? _____
 Slack time ___ 1 Any time ___ 2
- 4.15. Would you tell us its time of operation? _____
 Full time ___ 1 Part time ___ 2
- 4.16. Would you mention the effect of your household business on environment compared to farm? -----
 The business reduce burden on environment than farming ---1
 The business facilitate degradation than farming-----2
 The same effect as farming-----3

- 4.17. Would you tell your business compared to farm based on the following points?
- | | Yes- 1 | No-2 |
|---|--------|-------|
| 1. The business is better to save labour than farming | _____ | _____ |
| 2. The business is better to general income than farming | _____ | _____ |
| 3. The business is better than farming to control vulnerability | _____ | _____ |

- 4.18. Would you tell your business status? -----
 Satisfactory /profitable -----1
 Some what profitable-----2
 Not profitable-----3

- 4.19. Would you tell your future plan about your business? -----
 Continue to work-----1
 Abandon the work-----2
 No decision-----3

- 4.20. Would you tell your last year (1996E.C) earning from different businesses?
- | | Amount in Birr |
|-----------------------------------|----------------|
| I. Commerce:
Trade | _____ |
| II. Manufacturing:
Handicrafts | _____ |
| Local beer brewing | _____ |
| Food production | _____ |
| III. Service
Tea room | _____ |
| IV. Others/specify | _____ |

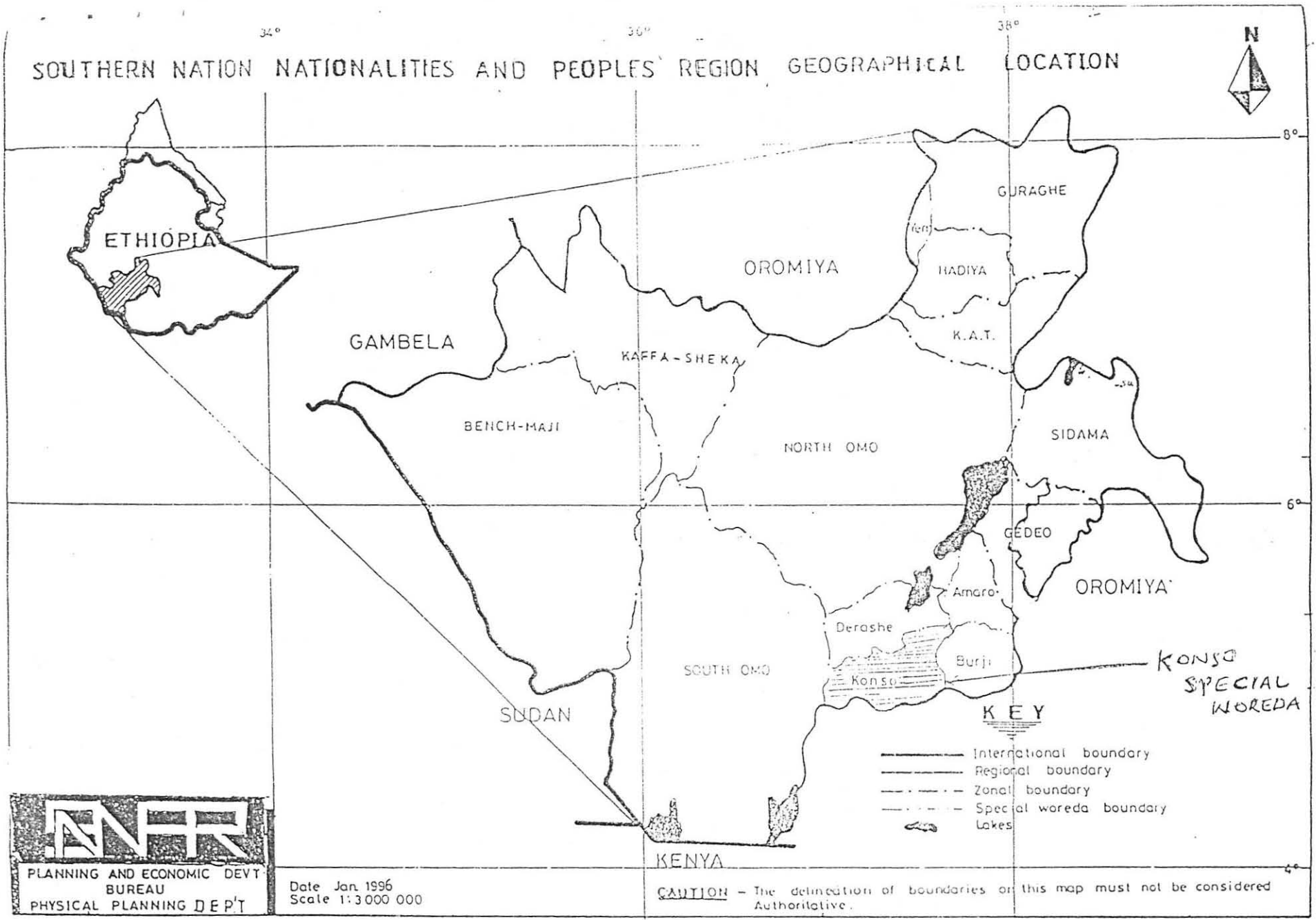
- 4.21. Would you mention the major problem of running your business? -----
 (Multiple responses are possible)
- Lack of capital -----1
 - Lack of input-----2
 - Social perception towards the activities-----3
 - Lack of market/competition-----4
 - Lack of transport-----5
 - Labour shortage-----6
 - Water shortage-----7

Part V. Household Information

- 5.1. Would you mention your family size (number of persons in your family) in the year 1996? -----
 5.2. Would you mention your place of residence from the following locations?

	Location to main road(walk/hours)	Location to nearby periodic market walk/ hours	Location to nearby town (walk /hours)
Home			

SOUTHERN NATION NATIONALITIES AND PEOPLES' REGION GEOGRAPHICAL LOCATION



ANPR
 PLANNING AND ECONOMIC DEVT
 BUREAU
 PHYSICAL PLANNING DEPT

Date Jan 1996
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CAUTION - The delineation of boundaries on this map must not be considered Authoritative.

DECLARATION

This thesis is my work and has not been presented for a degree in any other university, and that all source of materials used for the thesis have been duly acknowledged.

Name: Amenu Bogale Zewde

Signature 

Date June, 2005

SUBMISSION APPROVAL SHEET

This thesis has been submitted for examination with my approval as an advisor for the candidate.

Name: Syed Hsan Qayed (Ph.D)



Signature

Date _____