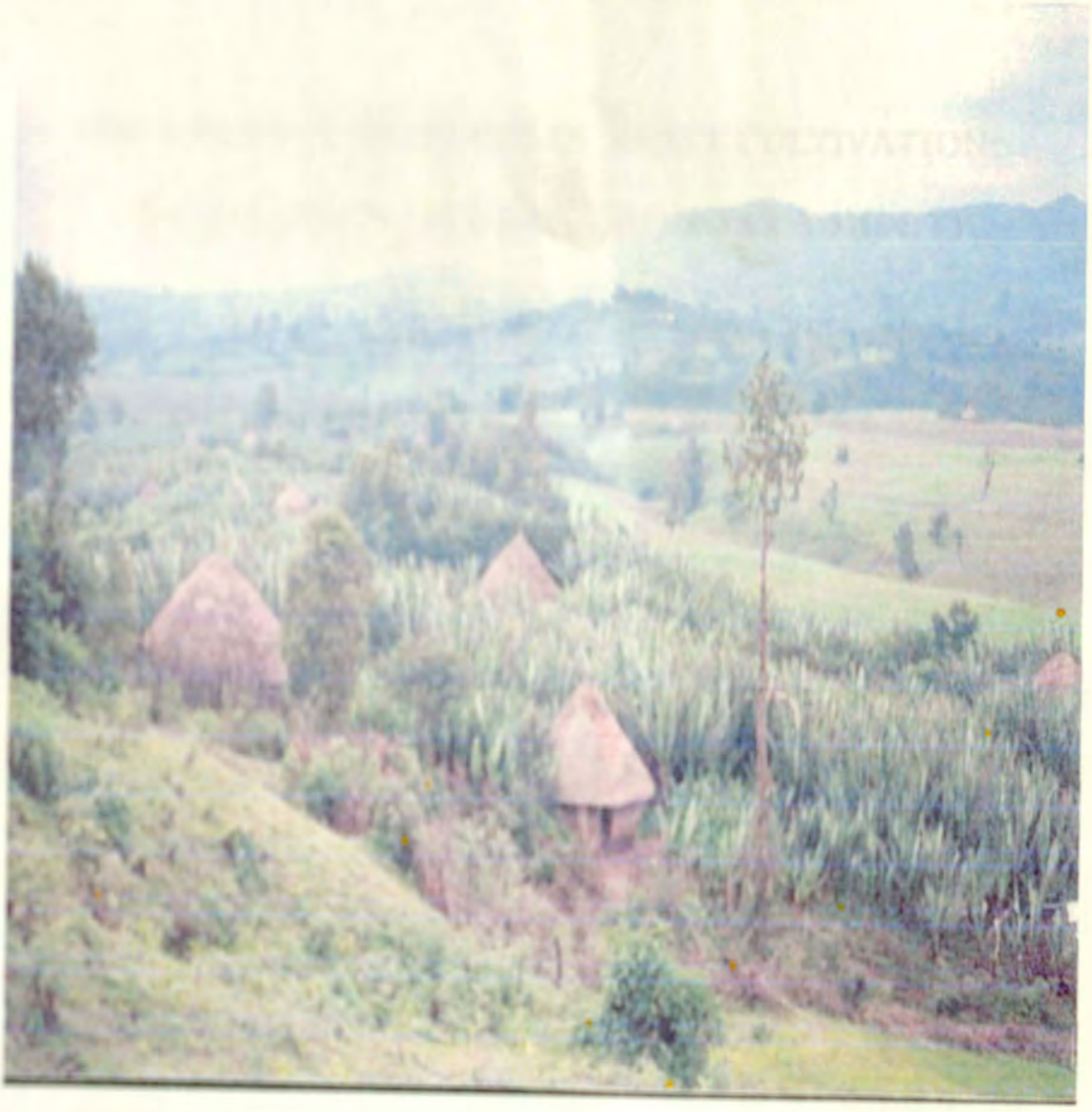

THE PARTIAL VIEW OF THE STUDY AREA: *ENSET* PRODUCTION AS THE STAPLE FOOD OF THE STUDY COMMUNITY.

THE MULTIPLE PURPOSES OF *ENSET* CULTIVATION: A CASE STUDY OF GIMBI OROMO COMMUNITY, AMBO DISTRICT, IN WEST SHOA ZONE.

By

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GLOSSARY

Ammichoo	Corm
Ammichoo- tumuu	Grating or pulverizing corm
Amxixii	Bulla
Aramcaa	Weeding
Arfasaa	Relatively the period when small rain begins (January-March)
Argaa	Gift that is given to both the groom and the bridegroom from their parent, friends, and relatives on marriage ceremony
Ayyaana	*Waaqa's* creative activity in any creature or *waaqa* a particular
Ayyaanaa golaa	Woman's spirit of stall
Birraa	one of the seasons that begins during Mesqal festival
Bonaa	Dry winter season
Boolla-gammaa	Still inside corm
Buqqisuu	Uprooting of ***enset*** for harvesting
Caggimoo/ lagsuu	Taboo
Da'umsaa	Birth giving
Daaddoo	Labor reciprocity
Daaboo	Labor work party that is given free
Dallaa	Fence
Dhukkle	Porcupine, one of the mammals that attack ***enset*** plants
Dhangaa	Kocho
Dhangaa bilcheessu	To ferment *dhangaa*
Dhayaa	The day that is considered suitable for marriage
Dheekkamsa waaqaa	Lightning strike/ scolding of god with somebody or a household
Dhibayyu	Ritual libation
Dhoqqee sa'aa	Animal dung
Diddiqsuu	Hoeing

Donqoora	One of the ***enset*** diseases that attacks the ***enset*** shoot/retards its growth
Duuguu	Scraping sheath
Ekeraa	Ghost.
Facaasaa	To sow or women's splashing ritual.
Farssoo Oromo	Local beer.
Firee-gammaa	Starter
Gaaddidhu	Shadow (human shadow)
Gadaa	system of democratic government based on age grading
Gammojjii	Lowland
Ganna	Summer
Geeddaraa	Exchange
Gidhgalessa	Intermediate
Golobee	Neighbors' mutual help association
Gunii	Suckers
Gunnuuiyee	Pseudostem
Guuluu	A man who ended his ruling period in the tradition of gada system.
Guddifachuu	Adoption
Guyya qulqqullu	'Free work days'
Guyyaa	Day
Guyyaa ayyaanaa	Saint's day
Haaduu	Knife
Haamttuu	Sickle
Hora	Sources of mineral water
Horduu	Traditional digging or hoeing stick
Ittillee	Smooth skin of cow or ox used for sleeping purpose
Iyyessa	Poor man
Iyyibaa	Four years old ***enset*** plant
Jaafgaa	Serrated sharp edge wooden tool used for pulverizing corm
Jaarsaa-biyyaa	Elders of the community

Jibbaa	Sleeping mats prepared from the dried parts of midribs
Kallacha	Important ritual object (iron) to curse
Keewwata	Betrothal forms of marriage
Lafa	Land or earth
Luqqa'a	One of the varieties of grain with removable cover eaten in its parched form
Maarraa	Women's work party organized for ***enset*** harvesting
Marygga-ragaasisa	Engagement feast
Makuu	Mixing ***dhangaa*** with starter for its proper fermentation
Masiyee	Second transplantation of small inset plants
Mijjirii	The spot where the Mesqal fire is set on
Milkii	Sign of good or bad out come and obtained from Fortunetellers during marriage initiation
Moodii	Community ***iddir***
Moggafachaa	Naming of alien after the name of clan
Moorra-loonii	Kraal
Nukkoo	The general name for small ***enset*** plants
Ollaaa	Special type of dish food prepared form ***dhangaa***
Ollixoo	Marriage by elopement
Qaallua	Ritual expert
Qaam'ee	Leap year
Qe'ee	Homestead
Qulqqullu	Clean and pure form sin
Qummusii	One of food dish prepared from *dhangaa* mixed with flour of barely
Qulchaa	Leaf sheath
Saarakkoo	The grass that is considered as symbol of fertility, peace and life
Sibixxaa	Sharp bladed locally made bamboo scraper for *enset* decortications
Soorexxa/ Dureexxa	Rich person.
Tumaa	The enacted customary law by elders.

Tuqaa	Mole rat that attacks ***enset*** plants.
Waaqaa	The creator god
Waaqeffanna	Believe in one god
Waatanii	Wooden plank against which sheath is held for scraping.
Wageexanna	One of the varieties of barely used as medicine
Wankuua	Pit for storing ***dhangaa***
Wanhuubee	Backyard of the homestead
Warqqee	***Enset***
Warqqee duuguu	***Enset*** harvesting
Xibeenua	Temporary labor party served free.

ABSTRACT

Enset, *E. ventricosum*, is widely grown in southwestern parts of Ethiopia at an altitude of 1,100-3,000m.a.s.l. Its cultivation involves complex farming practices of indigenous knowledge. Over 15 million of the farming community uses ***enset*** as a staple food and major source of income (Spring, 1997:822). The economic and socio-cultural significance of ***enset*** is little studied. Thus, this study attempts to address the socio- cultural and economic significance of the ***enset*** cultivation system and its contribution to food and financial security in Gimbii Oromo of Ambo district, West Shewa Zone. The study area is located southwestern of Addis Ababa at about 170 km. Data for this study were collected from 120 sample households using both structured and unstructured questionnaires. Group discussion and interview of key informants were the major sources of qualitative information. Personal observation and experience were also used. Simple statistical tools (e.g. frequency, percentage, and mean) were employed for data analysis. The findings of this study reveal that all farmers of the study area dominantly cultivate ***enset*** as a staple food and use it as means of securing financial stability. However, barley, wheat, beans, peas, and the other minor crops grown in the study area are of secondary importance as staple food, which are the main contributor to the dietary intake along with ***enset***, since the protein content of ***enset*** is reported to be low. ***Enset*** is a status symbol and used as a key factor in wealth classification among the community. Subsistence farmers, by cultivating and maintaining ***enset*** diversity have secured food self-sufficiency, since they have never been experienced drought and famine. Small plots of land at household level provide more efficient use of land and labor. The gross return of **enset** per unit area, whether in food energy or money is high, and it also able to sustain the densely populated areas better than any other crops. Due to its varying growth cycle, the production of ***enset*** is of sustainable nature (it can be harvested throughout the year indefinitely and stored systematically for many years). Furthermore, ***enset*** production is environmentally friendly and resistant to drought incidence and moisture stress. It maintains and enriches soil fertility and serves as shades. Moreover, the ***enset*** cultivation system and livestock rearing are enter-twined, since livestock raising is complementary enterprise for continuous supply of manure for proper ***enset*** cultivation and better harvest. ***Enset*** demands high inputs of human labor from both male and female from land preparation to the final stages of consumption. However, labor is differentiated along side the gender division of labor in the ***enset*** cultivation and processing system. The socio-cultural functions of ***enset*** cultivation system have many implications in the life of the study community, which is expressed in wealth of rituals: its socializing role, it functions as symbolic representation of homestead's ***ayyanaa***. Moreover, it serves as a factor of social bondage between the two communities through food sharing and food exchange experience, which has shaped the wider communication network. The study further pointed out that the vulnerability to food security has been addressed by instituting continuous sharing and exchange of food between the two communities. Furthermore, landlessness, environmental degradation, the decline in livestock production due to the shortage of grazing land, and the prevalence of ***enset*** diseases are the most important factors that exert pressure on the ***enset*** cultivation system. This in turn casts doubts on the households' dependability up on ***enset*** cultivation and their ability to maintain the ***enset***-farming system on sustainable fashion. However, local people generally employed diversities of adaptive strategies in order to survive as manifested through different areas of indigenous knowledge system. For instance, it was found out that the indigenous knowledge of Gimbi Oromo is an important source for the development of sustainable agriculture and conservation of genetic materials.

INTRODUCTION

Despite the fact that close to 85 percent of Ethiopian population lives on agriculture, since the early 1960s Ethiopia has not been able to properly feed its population (Fisseha, 1996). Food shortage is the most serious problem in the country and is such very deep-rooted, since the majority of the Ethiopian populations live under poverty and food insecurity. Food insecurity cannot be explained in terms of environmental factors alone, as combinations of other factors, such as improper government policies concerning food security have triggered the recurrent emergencies.

On the other hand, ***enset*** cultivating people are believed to have indigenous knowledge in utilizing ***enset*** for diverse purposes. Accordingly, some studies show that ***enset*** has important implications for Ethiopian food insecurity, since its users rarely experience famine (Spring, 1997). Furthermore, it is able to preserve, and enhance environmental development. Spring further noted that ***enset*** is gobd food security crop, relatively drought resistant and flexible in that it can be harvested throughout the year. However, little attention has been given to its utilization and development both by the government and researchers.

This study thus, attempts to explore ***enset*** production with the view to analyzing its implication for food security among Gimbii Oromo. It tries to explain the diverse socio-cultural and economic importance of ***enset***, its complex farming system, and various indigenous knowledge systems associated with ***enset*** cultivation, as well as resource conservation. In addition, the researcher believes that proper understanding of farmers' livelihoods and food production and income earning is of paramount importance for designing interventions aimed at attaining food security.

The thesis work is divided into seven chapters and an introductory part that includes statement of the problem, objectives of the study and research methods. The first chapter reviews to relevant literatures. Chapter two is about background information on the study area population, social organizations, and belief systems. The third chapter provides detailed discussion on the ***enset*** cultivation systems, vis-à-vis techniques of production (sucker preparation, propagation, and transplantation), the sequences of harvesting, and identification of its varieties. In chapter four, the economic significance of ***enset*** cultivation system (food sustainability, food preparation and consumption, the financial security and the ecological significance) are dealt with. Furthermore, the medicinal values of ***enset***, labor as factor of production, employment opportunity of ***enset*** and other issues are treated under this chapter. The socio-cultural significance of ***enset***, such as food as a factor of social bonding, cultural practices, and beliefs and rituals associated with the ***enset*** cultivation are discussed in chapter five.

Chapter six discusses the major socio-economic problems prevailing in the study community and the respective survival strategies adopted by the farmers. The resource conservation (environmental knowledge), crop varieties, and related issues are dealt with under this chapter. Finally, chapter seven provides summary and conclusions, along with policy recommendations.

1. STATEMENT OF THE PROBLEM.

Ethiopia is a country of rich flora with many indigenous crop plants, such as, ***teff***, ***enset***, maize, and sorghum to mention some. However, amongst these crops, like ***enset*** has not yet been studied adequately. Until recently, it escaped the attention of national planners and scholars, while some staples have been promoted through nation-wide campaigns.

Available studies indicate that ***enset*** is able to ensure food security in agro-ecologically suitable localities. In spite of this, however, the conservation systems of ***enset***, its role in food securing, and the diversity of indigenous knowledge about its cultivation and processing have not been duly studied. Studies undertaken so far in this vein have suffered from problems pertaining to depth and geographical coverage. For example, ***enset*** is one the several important food crops intensively grown in the study area, in desperately short supply of arable land, however, there is no single study on ***enset*** cultivation and its socio-economic significance in Gimbii Oromo of Ambo District, West Shewa Zone, where it is a staple food. Therefore, this study attempts to explore the socio-cultural, economic, and ecological importance of ***enset*** cultivation system among the Gimbii Oromo.

2. Objectives of the Study

2.1. General Objective

The general objective of this study is to make a thorough anthropological investigation of the socio-cultural and economic importance of ***enset*** cultivation among Gimbii Oromo.

2.2 Specific Objectives of the Study

More specifically, this study attempts to

1. Explain the complex techniques of ***enset*** cultivation and processing system;
2. Explore the importance of ***enset*** in ensuring food security and sustainable livelihood;
3. Describe socio-cultural practices, functions, and beliefs associated with ***enset*** cultivation.

3. Research Methods

Combinations of research methods have been employed. These include observation, interviews, group discussions, and sample survey. Group discussions and interviewing of key informants were the major sources of qualitative information in addition to personal observation. Moreover, secondary sources of data, recorded audio materials, and pictures have been used. Twenty-three key informants have been selected from different categories of people for interview and for series of group discussions. These include eight men, six women, four young people, three rich people, three middle income and four poor people. Simple statistical tools (e.g., frequency, percentage, and mean) were employed for data analysis.

A. Sample Survey

The survey questionnaires both structured and unstructured were designed to capture information on household characteristics, land use type, land size, resource management, major agricultural products (quantity of ***enset*** plantation and annual harvest), livestock

production, and its management system. Moreover, patterns of income and expenditure, ***enset*** cultivation systems, harvesting and processing methods, the traditional practices, and beliefs associated with ***enset*** cultivation systems and the prevailing socio-cultural and economic problems and other issues were covered.

To administer the survey questionnaires, 120 household heads were selected out of 348 households in the Kebele Administration. The selection of the interviewees was done with close consultation of different groups in the community. The Kebele officials, well-known elderly people, and secondary school graduates participated in wealth classification. The informants were asked to suggest on the key indicators of household wealth. Accordingly, three wealth categories were identified: rich, middle, and poor. A total of 120 household heads were randomly sampled from six villages. Female headed-households constituted 10 percent of the total sample. Six students (*Afaan* Oromo speakers) were employed to interview the sampled household heads. The survey was conducted from 24 to 29, August 2004.

B. Group Discussions

In the study, series of group discussions were held with different social strata. These include, elders, women, young, rich, poor farmers who may have knowledge and views of the subject matter. Since the researcher can speak and write ***Afaan*** Oromo, interviews and discussions were carried out in ***Afaan*** Oromo. The focused interviews and discussions were held to obtain the perception of the community about the origin (legendary aspects) and

introduction of ***enset*** cultivation system into the area; and to understand the social organizations, land tenure systems, and the multiple-purposes of ***enset***.

C. Interviews

Intensive interviews were made with key informants (both male and female) for more than a month in intervals. The interview method was used to obtain data on the division of labor in the cultivation, processing, preparation of ***enset*** and other activities. Furthermore, the labor organizations, the traditional beliefs, rituals and practices associated with the ***enset*** cultivation were also identified using this technique of data collection.

D. Observation

Observation was important to learn about people by observing their behavior, actions and all sources information, though it is tedious work. Among other things, attempt was made to observe local land use and resource management, environmental change, land degradation, deforestation, ***enset*** plantations and decortications processes, livestock production.

4. Significance of the Study

The few available studies on ***enset*** indicate that ***enset*** has diverse functions in the lives of the people. Despite its diverse importance, no matching attention has been given to ***enset*** cultivation and utilization at policy level. This is hoped to help in shading light on the

diverse socio-cultural and economic importance of *enset*: its role in sustainable resource conservation, food security, and improvement of household income, and in enhancing social relations and establishment of friendship.

On the other hand, the study also gives insight into deep understanding of socio-economic institutions and behavior in terms of socio-cultural and religious functions of the *enset*-base farming system, which is also the dominant character of economic anthropology. That is, the economic activities are often explained relative to the social systems, since all economies are embedded in aspects of social life rather than a segmented society (Gudeman, 1986, cited in Plattner, 1989:14).

5. Research Site Selection

This fieldwork was carried out in my own community for two main reasons. Given the time constraints to carry out anthropological research, I decided to select the area in which I have personal knowledge and experience. Second, the site was selected because it was the least studied area that deserves immediate attention.

6. Limitations

During group discussions and interviewing processes, respondents hardly explained issues exhaustively because they felt that the researcher is familiar with the study area and the community. Some of the respondents were sceptical and withheld information related to land size, crop yield, and number of livestock. Farmers believe that counting their family members and livestock heads may result in illness and death incidence.

Lack of literature specific to the study area and shortage of financial support to the study were some of the problems encountered.

CHAPTER ONE

1. LITERATURE REVIEW

1.1. Origin and Introduction of Enset

The origin of ***enset*** has been a debatable issue among many scholars and ethnographers. All the existing arguments are based on assumptions, giving rise to further debates. In spite of the debates, however, many of them have accepted the long existence of this plant in Ethiopia. Getahun (1974, cited in Endashaw, 1997: 775) further pointed that much of the Ethiopian plant lore is indigenous, with minor Greek and Arab influence. However, most of such traditions are mainly oral. On the other hand, Spring (1997) for instance, stated that ***enset*** is endemic to Ethiopia and grounded under the family *sctaminene* that has about 25 species equally distributed in Asia and Africa. According to Brandt (1997), one of the first scholars to consider ***enset*** origins was W. Stiehler. Stiehler (1948) noted that ancient Negroid and or "pygmoid" peoples of southern Ethiopia were the first to cultivate ***enset.*** ***Enset*** farming was introduced to the north by "Cushites," only to be replaced by such crops as wheat, barely and *teff* following the migration of "Semites" into Northern Ethiopia.

Furthermore, according to James Bruce (1954), the plant had been in Ethiopia since Neolithic period or even before it. He also reported that he had seen wild ***enset*** plantation in Ethiopia along Nile River while tracing the source of the river. He further noted that ***enset*** was the subsistence of most people in the northern parts of the country. It was being grown in large quantity for food at Gondar and naturally produced in every part of Abyssinia (Bruce, 1790: 584, 589, cited in Brandt, 1997: 848), although the accuracy of some of

Bruce's statements can still be questioned (Pankhurst 1996, cited in Brandt, 1997: 848). On the other hand, Brandt (Ibdi) reported, that an Italian scholar (Cecchi 1886) noted that one hundred years later ***enset*** had all but disappeared as a food source in the north. The reason (s) for the apparently rapid termination of ***enset*** in the northern Ethiopia remains unknown and unstudied even though there are some assumptions and possibilities pointed out by scholars.

Many scholars (e.g., Harlan, 1969, 1993; Sauer, 1952 Vavilov 1926 and Clark 1967, 1976, cited in Brandt, 1997:845) pointed out that with the existence of the restricted geographic distribution of cultivated ***enset***, agronomists, and biogeographers have long considered the Ethiopian highlands to be the primary origin for ***enset*** cultivation. ***Enset*** cultivation is considered indigenous to Ethiopia, of great antiquity as well as the last remaining indigenous sustainable agricultural system to be found in Africa. According to Brandt (Ibid), Alemu and Sanford (1996) and Shigeta (1991) referred to Ethiopia as a sole *enset* cultivator for its food in the world. The "Pre-Nilote" farmers were forced out of the lowlands of eastern Sudan and western Ethiopia some 4000-5000 years ago, due to the increasingly drier climates of the mid-Holocene. Migrating east to the Ethiopian highland, they introduced farming to the indigenous hunter /gatherers, who then began cultivating ***enset*** and other indigenous Ethiopian domesticates on their own. Similarly, the Omotic speaking peoples responded to a food crisis at the end of the Pleistocene by first increasing their consumption of wild ***enset*** and then cultivating it (Ehret 1979). Following the establishment of ***enset*** agriculture in the early Holocene, a large number of domestic cattle and sheep /goats diffused into the Horn from the Sudan circa 5,000 years ago and were rapidly incorporated into existing ***enset*** systems. However, there are not sufficient archeological and historical

evidences to support or refute models of the evolution of ***enset*** food production. This is because long-term archaeological research on the Ethiopian Neolithic is still in its infancy.

1.2. The Cultivation of *Enset* in Ethiopia

Price and Gebauer (1996, cited in Brandt, 1997:847) indicated that the highlands of southwestern Ethiopia became environmental sources/areas where "complex" hunter /gatherers systems emerged and became dependent upon the greater utilization of certain plants and animals as reliable stress-relieving food resources. This in turn led to "incidental domestication where continuous interaction between humans and ***enset*** resulted in genotypical and physical changes in the plant.

Moreover, Brandt (1997) further pointed out that 4000 years ago there were environmental changes reflecting more arid conditions together with the reduction of new farmland for shifting cultivation. This also might have resulted in demographic stress in some regions as population continued to increase. Population increment in turn contributed to the intensification of ***enset*** production.

Furthermore, some studies noted that the ***enset*** cultivation near residential areas became important with more permanent base camps. This in turn facilitated the dependable resource being brought closer to the camp, leading to the domestication of ***enset*** near the residential base (Harris 1978, Ibdi). Scholars like (Moore, 1957 and Shank, 1963, cited in Admasu, 2002:5) also reported that among the species found in tropical Africa, *E. ventricosum* is widely cultivated only in Ethiopia for food and fiber having been so used since the early

Egyptian civilization. ***Enset***, which is differently utilized, is grown both as a domestic and wild plant in different parts of the world (Brandt, 1997:843). Wild ***enset*** grows naturally due to conducive physical situations with limited range of altitude as compared to the domestic one. ***Enset*** grows best in areas of clay loam soils with fine texture though it was reported by Ministry of Agriculture (1977) that it grows in almost all areas with fertile soil. On the other hand, Spring (1997:822), indicated that ***enset*** is grown at an altitude between 1,600 to 3100 meters above sea level, with luxurious growth between 1800-2,650 meters (Diro and Tabogie 1994, cited in Spring, 1997:822). Most of ***enset*** growing areas receive 1,100 to 1,500 mm of rainfall, with relative humidity of 60 to 80 percent (Taye, 1967, Ibid.) and mean temperature of 16-20^{0}c (Admasu, 2002:3). Botanically, E.ventricosum is a monocarpic perennial related fruit banana family in morphological structure and is tall up to 11 meters. It consists of an adventitious root system, an underground stem structure known as corm, pseudostem distinctly dilated at the base, formed from leaf sheaths that extend from the base of the plant, leaves, and an inflorescence (Ibid.).

In Ethiopian traditional agriculture, there are four major farming systems: pastoralism, shifting cultivation, the seed-farming complex, and the ***enset*** planting complex (Westphal, 1975, cited in Brandt 1997: 844). These production systems are dominant in the highlands of south and southwestern parts of Ethiopia where several distinctions in cultural and social organization between ethnic regions exist. Westphal further noted that Ethiopian people living in the central and northern parts of the country prefer to cultivate cereals, pulses, and oils seeds. While tuber crops, vegetables, and fruits are associated with peoples living in south and southwestern parts of the country. These regions are also considered as the ***enset*** culture area and include some parts of Oromia Regional State and SNNPR (Ibdi).

Accordingly, ***enset*** is named differently by different ethnic groups in Ethiopia. For instance, the Oromo call it *warqee;* the Sidamos call it "*wesso, wese, utta*... in different parts of the region. The Gurage refer to this plant as '*asat*' and the Tigerean as *guna-guna* and so on (Ajjab Ligaba 1984).

Ethiopian farmers propagate domesticated ***enset*** (also classified botanically as ***enset ventricosum***), vegetatively rather than by seed, and recognized more than fifty different "varieties," "clones" or "Landraces" (Alemu and Sanford; Shigeta 1991, cited in Bradt, 1997:843). ***Enset*** does not produce immediately directly an edible fruit, (except the corm), but instead the underground stem base (corm), pseudostems and leaf stems are processed by various methods into a wide range of carbohydrate-rich foods (ibdi). On the other hand, sucker propagation is a common practice among the ***enset***-producing people and it is transplanted many times in nursery bed before taking it to permanent ***enset*** field. He further noted that the intensification of ***enset*** production can be achieved through adopting new methods of ***enset*** propagation, by greater utilization of manure to maintain the fertilizer of ***enset*** without having to practice shifting cultivation. This is gained by developing ways of postponing consumption and preventing surplus crop spoilage (the fermentation and shortage of ***enset*** in deep earth pits).

Enset cultivation system is complex and involves multiplicity of farmers' indigenous knowledge, which deserves methodical and closer investigation. The ***enset*** cultivating people have rich indigenous knowledge in utilizing it for diverse purposes and cultivating it. Woldie-Sellasie (2000) also pointed out that indigenous knowledge system plays a central role in the local people's systems of natural resource management. He further explained that

the indigenous institutions of resource management are enshrined within the indigenous people's knowledge systems. These ensure the smooth functioning of the systems in local context enabling the members to properly manage their natural resources. However, there is much variation exists in the production and distribution systems of ***enset***. Differences in ethnic groups occur in the types of farm and off farm enterprises of farmers in management practices relating to all aspects of ***enset*** cultivation. In this regard, different methods are used in planting (spacing and timing) fertilization (manuring and mulching), indigenous disease and pest control and nursery. In addition, transplanting techniques and time of sucker preparation from mother corm, propagation, harvesting and processing techniques, labor patterns and marketing practices are the prevailing variations in the ***enset*** farming systems (Spring, 1995b).

1.3. Socio-Economic, Ecological, and Cultural Importance of *Enset*.

The importance of ***enset*** in the socio-economic and religious activities of the ***enset***-producing people assumed to have led to further dependence upon the plant (Ridose, 1984: 847, cited in Brandt 1997). ***Enset*** is an important staple food that supports a denser population than any other farming system (Brandt, 1997:849). It is cultivated in smallholdings, often near homesteads, and some tuber crops cultivated in Ethiopia for human consumption have been identified as one of the important food crops. Lockhart (1984:245, cited in Pankhrust 1996:49) summarized the multi-purposes of ***enset*** in the following statement,

> "Admirably, ***Enset*** is profitable to man for there is no part of it, which is not used advantageously in his service. In addition to the fact that a small number of its leaves furnish and carpet a house with its sprightly green color, it also serves pleasingly as clean plates when one wants to eat rustically with much fleshiness,

> cleanliness, and delicacy. After it is dry, it is woven, and they make from it certain flax, from which they weave not only rope similar to that made of hemp but also various tapestries of different colors. From the branches or stems in which the leaves are set, they make extremely fine, white, pure flour, than which there is no finer milled anywhere. When it is eaten with milk, for only with milk it has its flavor, it is a very delicious and delightful food. The trunk and roots serve as something like turnips or potatoes, although more substantial since they are as thick as any man is. Travelers provide themselves with this food, which, previously cooked, lasts them for several days. When cooked it resembles the flesh of our turnips, so that they have come to call this plant' tree of the poor' even though wealthy people avail themselves of it as a delicacy or, 'tree against hunger', since anyone who has one of these trees is not in fear of hunger" .

Enset has multiple-purposes; it serves as cattle feed, construction material, and medicine. Farmers say that "***enset***" is our food, our clothes, our beds, our houses, our cattle feed, and our plates (Spring, 1997:823).

Enset may be the principal contributor to the dietary intake along with grain in other ethnic groups or it may be a minor crop used primarily as a hedge on against drought among ethnic groups, living in the lower elevation of its range (McCabe (eds.), 1997:813). Elsewhere in Ethiopia, the leaves are used only as food wrappers; the plant is only ornamental. Some practitioners and researchers have noted that ***enset*** has important implications for Ethiopia food security since its users rarely experience famine and the crop has the quality of preserving environment and enhancing soil fertility (Spring, 1997:822).

The area occupied by people growing ***enset*** encompassed 65,000 m^2 and that ***enset*** contributed to subsistence economy of many people living in Southern Ethiopia. Moreover, Spring (Ibdi) also noted that ***enset*** that fed about 15 million people in Ethiopia and the area covered by ***enset*** plant was estimated to be more than 140,201 hectare. As mentioned earlier, historical records and personal accounts indicate that those ethnic groups dependent on ***enset***

have rarely suffered from famine, even during the tragic drought and famine-prone decades of the 1970 and 1980s (Pankhurst 1986). Shack (1966) also reported that because of ***enset*** cultivation, famine and impoverishment are unknown in the history of the Gurage people; they survived drought that occasionally threatened the economy of many Ethiopian ethnic groups living on the plateau.

In general, in practice ***enset*** can easily support larger population since its yield per unit of land is very much higher. ***Enset*** is attractive to farmers because of its ability to withstand adverse conditions and its potential to produce more food than other cultural crops on a small piece of land with minimum inputs (Yohannes, 1996: 276). He further noted that such factors as the area of leaf influences yield and duration of assimilation, the fertility of the land, and the climate are important in the production of crop yields.

Furthermore, both in the past and now, ***enset*** has remained important as food security crop, drought resistant and flexible for it can be harvested throughout the a year. In addition, Dessalegn (1994) explained that even at present, it supports more than ten million people in Ethiopia even though local and foreign researchers have not given it due attention.

On the other hand, Smeds (1955, cited in Brandt, 1996:38) argued that *enset* agriculture could be rated as superior to the seed farming of the central and the northern parts of the country. The superiority is one way of maintaining the fertility of the soil through extensive use of manure. He further noted that ***enset's*** quality to promote environmental protection requires careful investigation. It prevents erosion and environmental degradation, through its

leaves that hold water around the base and drop become mulch, as well as through farmer's extensive manuring practices that are essential for growth.

On the other hand, livestock play an important role in the socio-economic lives and ecological conditions of both pastoral and agro-pastoral people throughout the country. The use of manure as fuel as or fertilizer, and draft power is often a more important contribution than edible products of the livestock (McCabe, 1996:53). He further noted that livestock play a critical role in the agricultural system of almost all ethnic groups engaged in *enset* cultivation. Livestock appear to be important source of cash and diet and play a vital role in the social and cultural lives for almost all ethnic groups who cultivate *enset*, although there dose appear to significantly vary.

It was indicated that the social commitment has the power to motivate people to increase production (Gebre, 1996:115). Murdock (1959, cited in Gebre, 1996:114) also noted that a system of social, economic, political and ritual practices have been developed around the *enset* cultivation.

Accordingly, in this study an attempt is made to investigate the diverse socio-cultural and economic implication of ***enset*** in the livelihood of the people under study. It has also sought to understand the methods and indigenous knowledge of the people, by which they mange to produce their food, which enables them to adopt a certain way of life. Moreover, the study examines the system of ***enset*** production, processing, exchange, and consumption patterns, as well as the cultural practices, and beliefs associated with ***enset*** production and consumption systems.

CHAPTER TWO

2. BACKGROUND TO THE STUDY AREA

2.1. Population and Physical Characteristics

2.1.1. Physical Characteristics

Historically, the Ambo District is called after the Ambo mineral water. Ambo District is one of the 14 districts found in West Shewa zone, Oromia Region. Administratively, the district is divided into 56 local Kebele Administration and there are five towns in the district: Ambo, Guder, Gorosole, Toke Irrenssa, and Meti. Of these, Ambo (the zonal capital of West Shewa) and Guder (the capital of Ambo district) have municipalities.

Ambo district has a total area of 1,490.94 km^2 or 149, 094 hectares (OBPED 2000). It is bordered by Gindebaret district in the North, Jeldu in the North East, Dendi in the South East, Wenchi, and Ameya in the South, Tikur Inchni in the Southwest, and Chaliya and Midakagn in the West and North West respectively (Map 1).

Altitudinally, Ambo district has elevation ranging from 1400, and 3170 m.a.s.l. Banti, Daro, Sinbero, Dalati, Boko, Gedi, Damot, Lecha, Salani, and Yobiyi are some of mountains found in the district. The district is characterized by diversified landforms, i.e., dissected plateau plains, chain of mountains, river valleys, and depression.

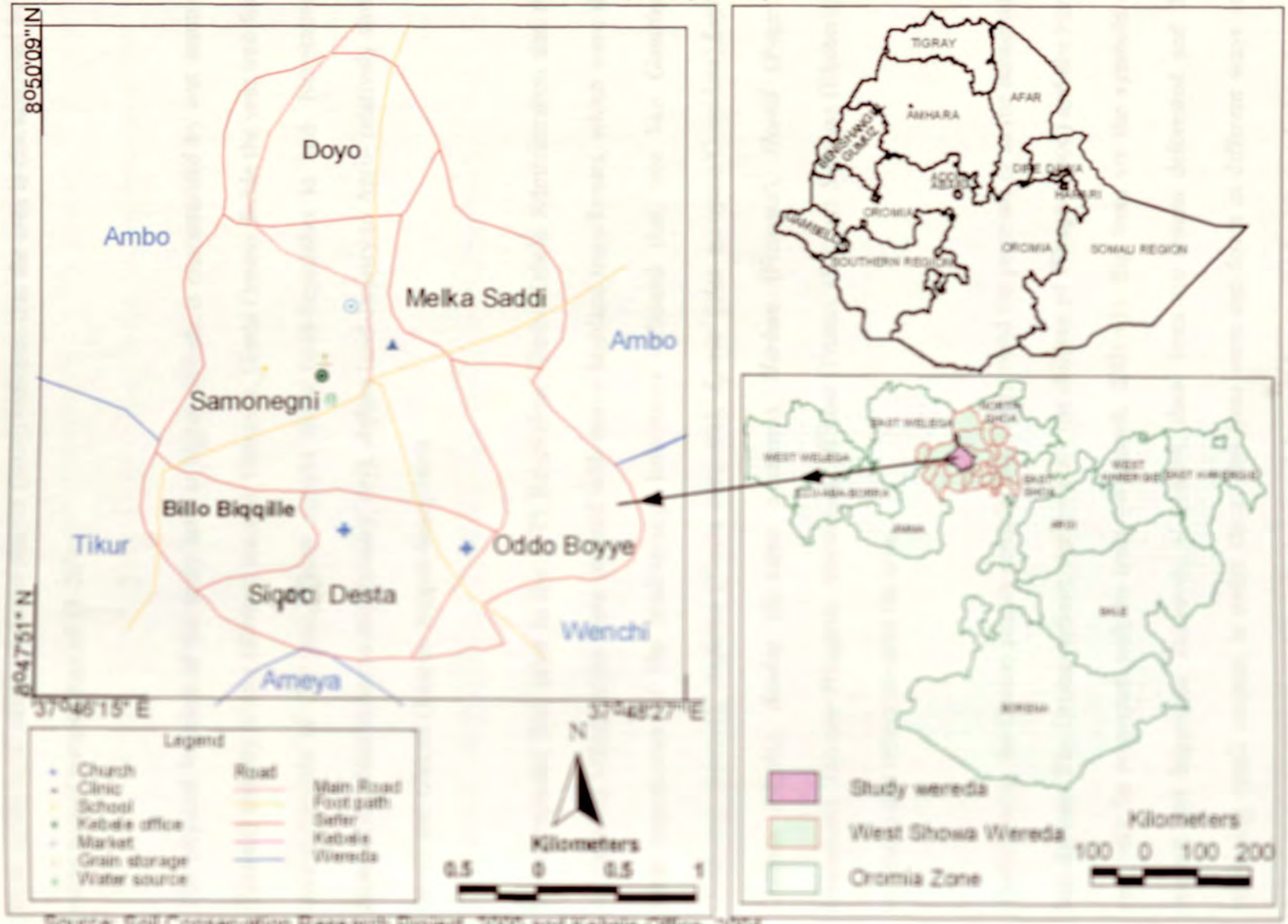
Climatically, the district is divided into ***dega*** (23%), ***woinadega*** (60%) and ***kola*** (17%) zones (OBPED, 2000). Astronomically, the district is located between 8° 47'N-9°21' and 37°32'E-38°3'E.

According to the 2004 population projection of OBPED (2004), the district has a total population of 243,369 in 2004. Of this, 123,948 were female and 119,421 male. Moreover, about 180,144 people were estimated to live in rural areas, of which 91,375 were female, whereas urban dwellers were about 63,225 (i.e., 26.0 % of the district population) of which 32,573 were female. The district also has the largest population in the West Shewa zone.

The district is suitable for varieties of agricultural production. Cultivated, grazing and forestlands accounted for 46.5%, 34.5%, and 1.1% respectively (OBPED 2000). Fallowing, crop rotation, manure, and chemical fertilizers are commonly employed to maintain soil fertility.

Gimbii Kebele Administration is one of the fifty-six local Kebele Administrations located southwest of Guder town. It is about 170 km from Finfinne (Addis Ababa), 40 km from Ambo and 23 km, from Guder. It runs along the road from Guder to Tukur-inchini district further to south east of Tukur-Inchin. Administratively, Gimbi Kebele is divided into six villages: *Malka-sadu, Dooyyoo, and Samoonany, Oddo-booyye Biloo-biqqlle,* and *Siqoo-dantaa* (Map 1). Gimbii has an altitude that ranges from 1650 to 2700 meters (OBPED 2000). According to the traditional national classification of climatic condition, Gimbii falls into wet-*dega* zone. The hilly nature of the terrain seems to have aggravated soil erosion and land degradation. Heavy dew during the coal nights also contributes to the rather high humidity at this level.

Map. 1 Location and Description of Gimbi Kebele (Study area)



Source: Soil Conservation Research Project, 2000 and Kebele Office, 2004

Even though there is no meteorological station in the study area, the climatic data records from agricultural office of Ambo district (2004) indicates that the area is characterized by a mean annual temperature of 15-26°c.

The physical location of the study area at higher attitude is characterized by wet summer (***Ganna***) and dry winter (***Bonaa***) seasons. However, Gimbi Oromo divide the year into four seasons/periods of the year. These include *Birra* (mid-September to mid- November), ***Bonaa*** (mid-November to mid-January, dry), ***Arfasa*** (mid-January to April- relatively small rains), and ***Ganna*** (June to August-heavy rain).

It was reported that, prior to the 1975 Revolution, Gimbi Kebele Administration and the surrounding village areas were covered with heavy highland trees/forests, which were the most repositories of the biodiversity. Informants indicated that, tree like ***Gaattiraa*** (Juniperus procera), ***Anfaraa*** (Nuxia congesta), ***Ejersa*** (olea europaea/Cuspidata),***Laftto*** (Acacia Albida), ***Soolee*** (Sc name unknown), ***Harbuu*** (Ficussur), ***Homii*** (Pygeum africanum), ***Hexxoo*** (Hagenia Abyssinia), ***Mi'essa*** (Prunus africana) ***Somboo*** (Ekeberigia capensis) and others covered the area.

Traditionally, the Oromo people consider big trees around the premises or as the homestead has ***Ayyaana***. The Oromo believe that trees are the children of ***Waaqaa*** (God) and the Earth can only be respected with its trees (Workineh, 2001:41). Big trees are the symbols of respect and happiness. However, at present, these trees are almost deforested and the remaining small amount is under threat that trees were cut down in different ways and forms. Informants reported that the increased demand for cropland with population pressure,

grazing land and construction materials, fuel wood and timber production pressure were the main reasons for the deforestation of the area (Table 1). In this regard, the environmental degradation and other related problems have affected climatic conditions, as well as the livelihood of the people. Informants further explained that the deforestation process has resulted in acute shortage of construction material, firewood, drying up of permanent rivers, streams, depletion, and shrinkage of the biodiversity. This process also removes the top soils, resulting in the loss of soil fertility and soil productivity per unit areas of cultivated land.

On the other hand, the available information further confirmed that lack of tenure security has also aggravated the problem of land degradation and deforestation and constrained the incentive to invest in land improvement measures.

Table 1: Factors contributing to the deforestation processes

	Utility of wood	Respondents	
		Frequency	Percentage
1	Fire wood	55	46.67
2	Timber production	30	25.00
3	Agricultural expansion	20	16.67
4	Construction	10	8.33
5	others	4	3.33
	Total	120	100.00

Source: Field survey (2004)

2.1.2. Population Characteristics

The official documents of Gimbi Kebele Administration (2004) shows that the population of Gimbi Kebele Administration (KA) was 1755, of which 850 (48.4%) were female. There were 348 households, of which 120 households were included in the sample survey. Both the survey and official document results show that there on the average of 5.2 persons in each household (Table 2). Female-headed household constitutes 10% of the total households.

Table 2. Population size of Gimbii Kebele Administration

	Village	Household heads			Household members			
		Male	Female	Total	Male	Female	Total	Ave. F. Size
1	Malka sadii	43	7	50	118	95	213	5.3
2	Dooyyoo	48	4	52	152	133	285	5.5
3	Samoonanyii	56	9	65	137	153	290	4.5
4	Sapoo-Dastaa	56	4	60	159	157	316	5.3
5	Oddo-booyyee	70	8	78	225	206	431	5.5
6	Biloo-biqqiliee	40	3	43	114	106	220	5.1
	Total	313	35	348	905	850	1755	5.2

Source: (KA) official document **(2004)**

The estimated density, about 225 persons per km^2 shows how densely populated the area is. Concerning educational status, the study result indicates that 30.8 percent of the respondents

were illiterate, 42.5 percent of surveyed household head could read and write, and 17.5 and 9.2 percent were reported to have attended junior and high school respectively.

In response to occupational status and major agricultural production, 90 percent of the sample households gave farm and cattle raising as their major occupation. Moreover, 91 percent of the household responded ***enset*** as their major crop and staple food.

2.2. The People and Some Aspects of Social Organization

2.2.1. The People

The name Gimbi was taken from one of the Oromo lineages (called Gimbii) that belong to the Macha branch of Oromo. Macha is the branch that moved towards the western Ethiopia. According to the elderly informants, the ancestors of Gimbi were migrated (came back) from the present Western Wellaga, particularly called Tullu Wallel (Wallel Mountain[1]). It was further noted that the Sayo Oromo (Dembi-Dollo) are one of the ***enset***-producing people. In this regard, the Gimbii Oromo are believed to have brought the ***enset*** culture from the Sayo Oromo, in addition to the existing legendary explanation, that Gimbii Oromo community adopted *enset* from Gurage ethnic group, which requires further investigation.

[1] Tullu Wallel is found to the north of Sayo land, (Dembi-Dollo) and the whole hills and mountains are the Macha places of sacrifice and worship since they are nearer to the sky, near to *waqaa*. Thus, the meaning of Tullu-Wallel connects the origin of Macha Oromo (Bartels 1983:66-68).

Historically, the majority of Macha Oromo branches moved further west and the rest, the minor ones also moved to the eastern and western parts of Shoa region. It was also explained that the sub clans of Liban (the eldest son of Macha) *sadeen* Liban: the three Libans called Wolisoo Liban, Ammayya Liban and Kutayyee Liban (the youngest son of Liban) with their lineages and minor lineages scattered over the present west and southwest Shoa zones (Figure1)

Informants testified that the Gimbi area and its surrounding villages were first settled by the Arroji lineages (*umme*). Arrojjii clan is one of the seven sons of Ammayyaa sub-tribe who had lineages, the major and minor lineages. However, Arorjjii, the clan *Umme* (lineage) and Gimbi (the minimal lineage) are claiming to be the first settlers of Gimbi PKA areas, and it was observed/confirmed that other clans, lineages and minimal lineages of the descendants of three Libans (Wolisoo, Ammaya and Kutaye) are living in almost fair number in the study area. These different lineages and minor lineage groups are dispersed through out the six villages.

The study reveals that these groups are often interrelated through different social gatherings and voluntary social organizations, than through kinship system, which is loose in the community. Villages are called after names of ancestral lineages. These include ***Suluu***, ***Biloo-biqqille Siqoo-Dasta***, and ***Doyyoo***. There are also some groups who claim to have originated from *Chebo*, *Xalfam*, *Sansaliti* (names of minimal lineages) and *Hadiyyaa* and other lineage groups (these groups also came from the major ***enset*** producing area as a staple food). Arrojjii clan descendants seem to have upper hand in seniority. Thus, since Arrojjii clan claims for its relative seniority to the area, the members of this clan have higher status than any other groups in the community during some ritual ceremonies or public blessing.

Clans of Liban Sadeen: Kutayi, Ammaya and woliso Liban

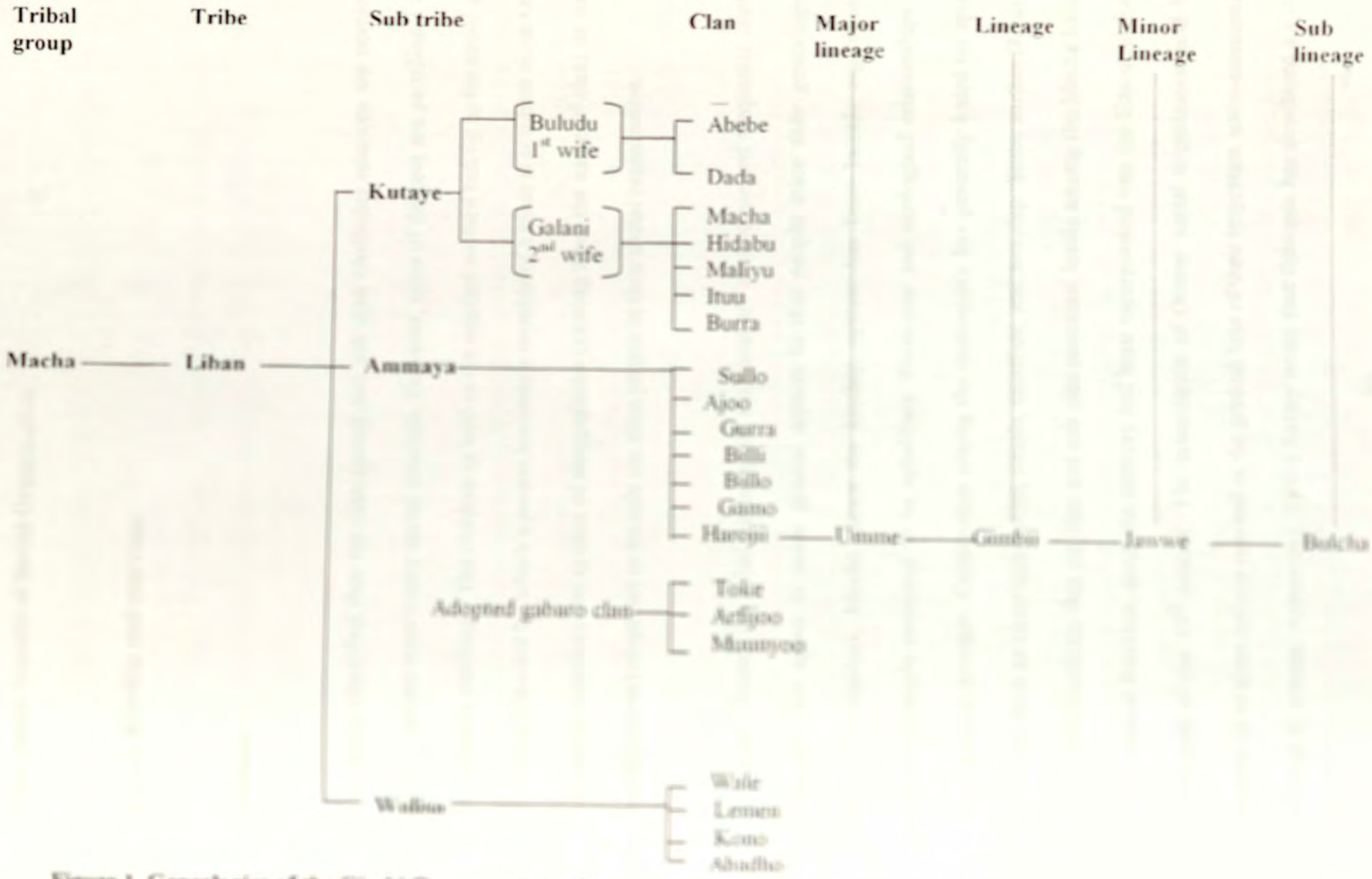


Figure 1. Genealogies of the Gimbi Oromo community

(Knutsson, 1967 and the researcher's field note, 2004)

2.2.2. Some Aspects of Social Organization

2.2.2.1. Kinship and marriage

Kinship

The study identified that the clan (*gosa*) and sub clan (*balbala*) relations are nominal in Gimbii Oromo community social structure. However, rules of descent are partrilineal while residence is patrilocal. The children as well as the married women belong to the social group of fathers. Descent by which a person becomes a member of a class is common since Oromo commonly practices the system of ***moggafachu*** (naming after the name of clan) as well as ***guddiffachaa*** (adoption) to include the alien people in their social organization.

In Gimbi Oromo, the tribal genealogical traditions are also vague and frequently confused although they agree in some general aspects in that people trace their genealogies to common ancestors, Mecha. Since the kinship, system has been loosely organized; the lineage principle remained to be subsidiary. Economic and ecological relationships have been getting stronger. Cooperation among the community has generally based on sporadic activities, such as *enset* cultivation, rituals, sacrifice, and worship. Some studies (Knutsson, 1967 35-42) indicate that the clan and sub clan structural levels among the Mecha have had little political function, since the territory had been incorporated into the Ethiopian Empire at the end of the 19th century. The assimilation of Oromo social organization and belief systems in to alien culture resulted in the gradual lose of their important socio-economic and political functions. Asmerom (2000) further noted that Ethiopia has developed a colonial

culture that partly mirrors the British system, that also despised the culture of the people they governed and they were more contemptuous of the democracies than they were of the kingdoms and chiefdoms. Thus, due to the absence of such domestic social groups, one could not find strong descent group in Gimbi Oromo; the traditional Oromo political organization, the gada system, has little significance in the study area.

Marriage system

In the present study area, it was identified that there are different types or forms of marriage systems. These include *keewwata* (betrothal), *dhuala* (Levirate), *Sabbat-mari* (claiming the girl in the name of divine force), *ollixoo* (elopement), and *butii* (marriage by abduction). Of these types of marriages, *keewwata* is the most prominent/ or common forms practiced among the Gimbi Oromo. The other types of marriage, particularly *ollixoo* and *butii* involve violations of social rules and regulations. In the Gimbii Oromo, marriage is exogamy, meaning marriage with members of the same clan is prohibited.

Traditional marriage arrangement (especially betrothal) involves a series of procedures and has many rules and regulations. In this regard, the boy's family takes the initiative for marriage, and in the past, the boy or the girl had no say over this mate selection. At present, however, there is a tendency towards the two partners selecting their mate according to their wish, even though, there is still strong resistance from the side of parents. After careful consideration of economic and social background and as well as the belongingness to the preferred clan of both families, the boy's father and well-known elders in the area go to the girl's house to make the formal marriage proposal. Among other things, fair amount of ***enset***

plants in one's field serves as criteria for marriage arrangement between households. ***Enset*** beyond its food value serves as a status symbol.

Traditionally, there are certain days, considered to be suitable (*dhayaa*), for arriving at the final decision in marriage agreement, and this has to do with *milikii*, it is an omen, a sign of good or bad out come[2]. Once the family decided to agree to the marriage, the boy's father puts *waarsiiw* grass and some amount of money (usually ten to twenty Birr) on a sieve (the symbol of fertility) and the girl's father will announce that he has given them his daughter.

In former times, the girl's family used to decide or fix bride price (as much as Birr 700) during *marga rugaaniwaa* ceremony and the payment of bride- price was in cash. However, such practice opens the possibility for the girl's family to claim much bride price than the other party can afford. This situation resulted in unaffordability of bride price and affecting girls' chance of getting married. Those who could not afford the bride price resorted to illegal ways, such as abduction. Such problems have been solved through the enactment of customary law (*namaa*) by the *jaarsaa- biyyaa* of the community. Accordingly, the bride price was fixed low and fair (between Birr 100 to 200). In addition to the cash payment for bride price, *awwiaa* (traditional garments) is given for the girl's family, notably to the girl's father and mother, grandfather, grandmother and godmother. The *guulaa* (elders) and the community curse the households who receive in excess of the fixed bride price and who organize feasts for the marriage ceremony in excess of expected. The boy's parent gives some amount of *marraa waraqe* (row of ***enset***) to the boy on marriage as *argaa* (gift). On

[2] The fortune is expected to obtain from *milikii* tellers (luck or fortune tellers-*waabeekaa*,who knows some thing about the proper date for marriage).

the other hand, when some households were asked as to the source of bride payment, many people reported that *enset* helped them to generate income.

Virginity is valued than any thing in marriage life, because parents prize their daughter's virginity more than any other quality they might offer to her husband when she marries. However, nowadays, such traditional marriage system is declining, as pointed by some of the informants, with the introduction of protestant religion to the area. The customary marriage system, beliefs, and values of the community seem to have been changing, which some informants seriously associate with the recent emergence of protestant religion that led to the abonding of traditional practices. Young people have started to select their mate on their own without the consent of their parents. Moreover, the new religious practices are believed to have resulted in the alteration of the traditional social systems, and this is perceived by most people as hindrance to the continuity of the traditional value system. The girls are made to marry without their parents' consent, and the parents consider the practice as the violation of the existing customs by the church (protestant leaders or elders). Though the changing trend in the customary marriage system is associated with the introduction of protestant religion, the dissemination of modern education also seems to have led to the abonding of customary marriage system. However, it could be argued that the socio-cultural change could likely happen because of interplay between internally and externally generated influences that shape the status of young generation in mate selection. Furthermore, it also seems that modern education and getting access to modern life has had effect on the violation and abonding of social values and customs of the community by the younger generation.

2.2.2.2. Voluntary Social Organization

Voluntary social organizations have been visible, countable, seemingly salient social units in every-day activities and behaviors of people in the community. The Gimbii Oromo organize themselves in different forms for their own welfare. These gathering have names, such as *Iqub, Iddir, mahaber, sanbate, Daboo, dukuko* and others.

The social gathering and different associations have functions in the Gimbi Oromo such as distributing lump sums of cash to participants, promising or actually giving aid, and assistance to people, working party, and religions fraternity. They also serve to enhance and intensify social relations within the community among friends and relatives. This study indicates that these associations and social gatherings stimulate and relate the values and attitudes of the Gimbi Oromo community.

One of the most important voluntary associations among the Oromo community in Gimbii is *Iddir (moodii)*. Almost all of the households under the Kebele Adminisration are members of *moodi*. It is to support the bereaved by bringing food, firewood and working on her/his farm. It is organized to help a member who got sick or lost ox/oxen. The *moodii* has oral rules of procedures, which is not actually written by laws, but has written rosters of members and records of the members' performance of their obligations. These obligations include attendance at funerals, the preparation of food, *bikken*, (pan cake-like bread) prepared from *dhangaa* for mourning family. The contribution of money, usually one Birr, for funerals and for other ordinary needs is also another obligation of the members. Members also contribute labor for rebuilding houses, burnt in fire money for the households

who lose on through death. Fines are levied against those who fail to attend at funerals, to work or contribute both labor and money, brings in food for the mourning family. Fee payment is not the weekly or monthly base, alike in the urban settings, but members pay Birr one in time of trouble (immediately on the occasion).

Golobee is another form of mutual association. It is special type of association formed in most cases, by neighbors. It was observed that each village forms a *golobee* comprising 20-25 households as members. Alike *moodii*, the *golobee* has written roster and records of the members. There is also fine levied against the members who fail to fulfill the obligation. Both husband and wife are the members of the *golobee*. The *golobee* has dual functions. Besides serving as *moodii*, it is used for money saving and grain storing purposes. Informants explained that since the *moodi* association covers wider community and cannot immediately give service in case of emergency, neighbors rely on *golobee* association while retaining their membership in the larger *moodii*. The money collected through the sell of grain and the saving is used for buying one to two oxen for meat sharing by the men. On the hand, women buy for house consumption such as *teff*, oil and pepper and other necessary materials and which they share among themselves, especially, during big annual anniversary.

Further more, *golobee* also serves as a means of social gathering for the neighbors, creating the chances of regular meeting that give them an opportunity to talk over their social life, their problems, chatting and interacting with each other. They also use the *golobee* as the nearest means of conflict resolution among the members, the neighbors and even between husband and wife.

2.2.2.3. Belief Systems

Traditionally, there are almost three religions practiced by the Oromo people, namely traditional religion (only one *waaqa*), Islam, and Christianity. To Oromo, the traditional divinity is both one and at the same times many. *Waaqaa* (sky God) is the supreme creator of all things and the source of all life. The Gimbi Oromo community is the follower of indigenous religions and Christianity (both Orthodox Christian and Protestant). Informants reported that in the past the Oromo people were practicing their traditional religion (*waaqeffannaa*). However, the available information shows that at present, the majority of the populations (62 percent) are followers of Protestant religion and the rest (38 percent) Orthodox Christian, who also practices the Oromo religion. The process of conversion is believed to have resulted in the destruction of traditional beliefs[3] and social institutions.

On the other hand, the Gimbii Oromo believe that, the soul of departed ancestors will be separated from the body and goes to *waaqaa* and prayed to the spirit of the dead *ekeraa* (especially, ghost of father) is paramount importance to the well being of a family. The celebration of *ekeraa* ritual involves the preparation of some foods such as thick local bread, well prepared with the mixture of spices, cheese with melted butter, *dhibayyu*, slaughtering of sheep that have unbroken horn. Often such ritual is performed during the nighttime in the middle/center of *mooraa loonii* (kraal) the local beer is poured out, and the prayers by performing such ritual ceremonies, seek the guardian of their ancestors' *ekeraa* both for

[3] The assimilation of Oromo traditional social organization and belief systems in to the alien culture resulted in the forceably conversion of the majority of the population in to Christianity. After the conquest of the area, a number of Ethiopian priests, mostly from Gojjam were invited to the conquest area (Bartels 1990:15, 25). Pressure was put forth on the people to build churches to have them baptized and to bury their dead on the Christian cemeteries.

themselves and for their families from bad fortune. Informant (Nagaraa) stated that he yearly celebrates in the month of November such ritual ceremony seeking security from his father and ancestors' ghost. On the other hand, the Gimbi Oromo believe that, in magico-religious domain, illness are attributed to *waaqaa* and ancestral *ekeraa*. Moreover, in view of the Gimbi Oromo, violation of traditional religious practices and social norms are thought to bring about divine retribution in the form of epidemics (informant Dirribaa and Fayyisa). They also believe that illness and misfortune in general often considered as punishment from *waaqaa* for sins a person has committed. To Gimbi Oromo community, well-being is considered sacred by a peaceful relationship with supernatural world. For instance, Cameda (informant) explained that the guardian of spirits known to Gimbi Oromo as *ayyana,* which are believed to protect the well- being of the community as well as individuals.

Furthermore, there are also some empirical practices of a few syndromes (such as *maggaraysaa* and *michi)* are found in the forms of illness. Both are believed to be brought about exposure to the sun, contract with mist or by ambushing spirit, which strikes a person initiating at dawn.

Sacrifice for *abukarii* is another form of rituals, *dhibayyu*, which means libation, pouring out. *Dhibayyuu* is practiced in thanks giving for the harvest, and during the Masqal festival, which they go to the spot, where the *Masqal* fire was set on fire (*Mijjirii*). They perform it during the morning. They first inspect the ashes to see if they have remained untouched during the night and they curse any one who has stepped on them. The untouched ashes symbolize a perfect New Year beginning. They celebrate *dhibayyuu* ritual on the *mijjiri* and perform prayers, blessing the country, the people, and their family and cursing the sorcerers,

the witchcrafts, and other evil things. Women also bring in pan cake-like local bread (*baxalle*) with supplementary diets such as cheese mixed with cabbage well buttered and other types of dishes. Sheep is slaughtered on the *mijjirii* and its blood splash over the *mijjiri* area in all directions, while the local beer (*farsso* Oromo) is poured out or put around the ashes. Accordingly, it is rule that prayers of the praise thanks giving to *waaqaa* are repeated several times. Hence, the first words of the next leaders.

As stated earlier, the Gimbi Oromo practices both traditional and Christian religion. However, the study revealed that some people are still in a process of using or selecting those Christian elements that can merge with their traditional way of life and thought.

2.3. Land Tenure and Land Use

2.3.1. Land Tenure

The existing literature and the oral tradition of the community understudy confirm that the expropriation of land from Oromo people during the incorporation of the region into the Ethiopian empire has also resulted in land alienation and in worsening the living situation of the people. The informants reported that before the incorporation, the land resources were communally owned. Before the conquest of Menelik land was communal property, however, following the conquest of Menelik, land was confiscated[4] from people and given to his warlords, relatives and to the local leaders who surrendered to the imperial rules.

[4] Bartels (1998) pointed out that among the Mecha, traditionally, all land belong to clan. After the incorporation, all of them became tenants of landlords for whom they had to work and via whom they paid to the emperor. He further noted that the alien governmental policies were clearly aimed at a gradual de-Oromonization of the country.

Nagaraa (informant) explained that the *Kuuzye* land was divided into several *balabatship* (a hereditary title), which at incorporation, was given to those who were the then leaders of the large districts. The position of *balabatts* was strengthened by the redistribution of large portion of land, the way of accumulating property through fiefs (guilt), the land grants (rist) that gave them strength. Nagaraa further explained that land was divided in to different types of land tenure arrangements. These include:

Ginddabalti (guilt), *Sisoo*, *Samoonanyii*, *Dammaa*, **and** *Irboo* land tenure system.

Ginddabalti land tenure was the property, usually in the form of large estate granted to members of the ruling aristocracy. Rights to *ginkiballi* were granted to those who were recognized to have performed loyal service to the crown and recipients were given power to collect taxes or tributes from the people on *ginkiballi* property and exercise administrating and judicial authority in the area. *Sisoo* land was land, which was granted to *balabatts* land in which the tenants share one-third of their products to the landlords. ***Samoonanyii*** land tenure system was the land given to church to enable the church to support its activities, its clergy, and others who provided service to it. ***Dammaa*** land was land for sale. If tenants fail to pay tax or fail to fulfill their obligation, *dammaa* land could be sold any time as need arises. On the other hand, ***Irboo*** land tenure system was a tenure system in which tenants share one-fourth of their products to the landlords. Furthermore, tenants were expected to pay land use tax in cash and/or kind (e.g., processed *dhungaa*, and barely flour). The amount of land taxation depended on the quality of or type of land use. Since it was easy to carry barely than *dhungaa*, the tax collectors use to carry flour on horse or donkey, which took them four to six days to reach in Addis Ababa. Those households who did not have enough grain to pay land tax, sold *enset* to buy grain.

In response to the perception of farmers over land reform, many of them explain that the land reform gave them land usufructs. They further considered the reform as proper measure that has abolished tenant-landlord relations. However, many agree that, the proclamation of 1975 did not do away with all sorts of rights that had existed during the imperial era. That is, the regulatory state interventions invariably undermine popular authority structures, local institutions as well peasant confidence. Furthermore, state ownership of land is believed to have created conditions that made interventionism, land evictions, and rural corruption possible. The farmers also remember that the then land reform involved unequal land distribution, corruption, and favoritism. The study revealed that there is fair number of farmers who were favored by the then land distribution system puts those who end up with relatively larger holdings at a relative advantage. With the official termination of land distribution, land leasing, mortgaging, and other mechanisms of land tenure arrangements became the most common sources of land for newly formed households. On the other hand, those households who managed to educate some of their children and could find some jobs in urban areas, while land obtained in favor of them remained at their parents' possessions. Such land has been used by these households as means generating income in different forms: contracting, leasing out, sharecropping, and others.

2.3.2. Land Use and Access to Land

In Gombi, land is classified under sub-plots: land for perennial crops, cereal crops, pasture, forestland (rare), uncultivable land, and homestead areas. That is, the majority of the rural households, at present, occupy one hectare or less for each land use type. Similarly, the survey and interviews results show that land holding, according to land use types, is

becoming small. As shown in Table3, the sample survey of the households was computed according to the land use type, for all household categories. Accordingly, 70 percent of both rich and middle households owned up to one and half hectare of land for cereal crops and 0.64 and 0.34 hectare of land for perennial crop (*enset)* respectively. Almost all the poor households hold less than one hectare that ranges from 0.10-0.70 for all land use type. In general, the average land holding size ranges from 1.17 for the poor to as much as 3.04 hectares for the rich for all land use types. However, almost all the sample-surveyed households (100 percent) occupy less than one hectare for the *enset* cultivation, which is between 0.18, 0.34, and 0.64 hectare for poor, middle, and rich households respectively. The survey results also show that of the total land use type, only 17.7 percent was allocated for grazing land that ranges from 0.19 to .0.58 hectares for poor and rich households respectively. On the other hand, 58.3 percent of the surveyed households do not have any grazing land, which in turn threatens the livestock raising system that also plays significant role in the *enset* cultivation system.

Table 3: Land use type and the average land size of the sample households in hectare

no	wealth category	The average land use type by size of each wealth category in hectare												total
		Farm land			Enset land			Grazing land			Forest land			
		respondents	Size	%	respondents	size	%	respondents	size	%	respondents	size	%	
1	Rich	39	1.3	46.9	39	0.64	55.2	26	0.58	54.7	10	0.32	57.1	3.04
2	Middle	45	1.0	31.3	45	0.34	29.3	16	0.29	27.4	8	0.14	25	1.77
3	Poor	35	0.70	21.8	36	0.18	15.5	8	0.19	17.9	3	0.10	17.8	1.17
Total		119	3.2	100	120	1.16	100	50	1.06	100	21	0.56	99.9	5.98

Source: Field survey (2004)

The sample household survey also indicated that out of the total land use by types of the households only 9 percent is covered with forests or reserved for forest purposes, even though there is no the actual coverage of forest observed during the field work.

On the other hand, farmers account that the policy on land ownership affects all aspects of their life, such as economic well-being, land use decisions, social equity, and social relations. They further noted that the 1975 land reform and land distribution practices in rural areas were technically nominal. Land shortage aggravated as households did not gain a corresponding increase in land holding with the growth of its family size. The large number of newly formed households and other land claimants remained landless. Landlessness and land fragmentation are very serious problems in the study area. However, it was found out that, some fortunate ones (about 45 percent of young land claimants) obtained land from their parents. Furthermore, the rest 23.33 percent and 18.33 percent of the households have

obtained land through inheritance and land distribution in the land reform of 1975 and others got access to the land presently at their hand through purchase and contracts from private farmers (Table 4).

Table 4: Sources of land of the households (as responded)

No	Source	Response in percentage	
		Frequency	Percentage
1	Inheritance (rist)	28	23.33
2	Through land reform (1975)	22	18.33
3	Shared from parents across the regimes	54	45.00
4	Purchase across the regimes	13	10.83
5	Through contract	2	1.67
6	From FA at present	1	0.83
	Total	120	99.99

Source: Field survey (2004)

On the other hand, it seems decision making on the land moved from local Kebele Administration to landowners' households. That is, farmers with fair amount of land holding were permitted to give their land in the form of contract (actually selling) to farmers, which in turn have developed the mechanisms of local land tenure arrangements/transfer. Thus, the current land policy in place, which formally ends land redistribution, puts those who relatively got larger holdings at advantage. Conversely, the landowners legally give their land to farmers and appropriate them when they want, resulting in land reclaiming problems. However, this system was found the significant ways for indirect access to land by the landless farmers, through contract, rent, and purchase. The landless or the farmers who have small amount of land size may need the land for other purposes or projects, such as for

planting eucalyptus tree for cash and buy land in the name of 'contract' even might investing what they have saved during their life. However, it was identified in the study that while the landowners for its return would reclaim the invested land, since land sale out right is constrained by the state regulation, (land ownership rights are vested in state). Some conscious farmers, after utilizing the money that they got through the sale of land, begin to reclaim the land. According to the available Kebele Administration document and Kebele officials' report, the major conflicts and problems prevailing in the community is land disputes because of the reclaiming of the sold land. It was identified that there were about 15-25 such cases appealed to local Kebele Administration since 1991.The other source of conflict is also border and pathway disputes among the households and neighbors. Accordingly, dispute over sold land reclamations were the most frequent problems and issues in the study area, resulted in conflict and tensions among the households.

CHAPTER THREE

3. *ENSET* CULTIVATION SYSTEM AMONG THE GIMBI OROMO

3.1 Local Perspective on the Origin and Introduction of *Enset*

The Gimbii Oromo have different tales concerning the origin of ***enset*** plants. One of the tales underscores that ***enset*** was grown out of the dead body of an ox. Many years back a man was said to have given his only ox to a brother-in-law (***soddaa***), to herd it for him. After a while, the ox accidentally died. The trustee buried the dead ox in animal dung in the back yard. After sometime, the ***enset*** plants were alleged to have sprouted at the place where the ox was buried.

Accordingly, the Oromo of Gimbii believe that the ***enset*** plant originated from a decay of a dead ox. The legend and mythological[3] explanation of the community show the presence of strong relationships between animal manure and ***enset*** plants. This evidenced how the Oromo community in Gimbii attached importance to livestock in the ***enset*** cultivation system. They never see the ***enset*** cultivation and livestock raising as independent entities, since ***enset*** requires continuous supply of manure for its proper growth.

The other tales emphasize that ***enset*** plant was introduced from the Gurage ethnic group. The legendary process of ***enset*** introduction to the community is explained as follows:

[3] Miller (1870: 171) explains myth as a story dealing with the gods, and he believed that folk tales and fairy tales were originally myths whose meaning had been obscured by changes in language. Accordingly, he saw no need to separate myth from other tales, except for the fact that myths were much older.

'A man called Ankeshe brought ***enset*** sucker from Gurage land by crossing Awash River. Ankeshe, while crossing the Awash River was caught by the gatekeepers /guards/ with the ***enset*** sucker hidden in his girdle. However, he managed to bargain and cross the river with his ***enset*** sucker. Then, he cultivated the sucker in the area under study, from which it has been disseminated to the surrounding areas, such as *Bolaa, Tikur-Inncini* and other areas'.

Furthermore, studies point out that the highlands along the western edge of the Rift valley, particularly the present Wolaita, Kambata, and Gurage Zones are the original center of ***enset*** cultivation (Semeds 1955, cited in Gebre, 1996:114). Thus, alike the study area, these Zones are also places where ***enset*** has been known to be produced widely. Though this needs to be studied further, according to the above tales, the community under study might have adopted the ***enset*** cultivation system from the Gurage ethnic group or near by people. However, as regard to both its origin and introduction into the study area as well as to Ethiopia is still remained debatable issue as it was also discussed in the review part of this thesis.

3.2. Description of *Enset* Cultivation

Enset is usually larger than banana, with the largest plants up to 10 meters tall and with a pseudostem up to one meter in diameter (Brandt, 1997: 3-5). The leaves are more erect and the stem has three parts (Appendix XII). The upper-most portion is the pseddostem, made of leaf sheaths. The pseudostem contains an edible pulp and quality fiber.

3.2.1. Sucker Propagation

The results of this study and the available literature indicate that ***enset*** is cultivation involves many consecutive replanting steps. ***Enset*** is propagated vegetatively from immature ***enset*** plant. After the mother corm is uprooted and the pseudostem is cut-off by hallowing out an old corm and packing the hole with soil and dung, buried underground so treated, buds develop and the resulting suckers are raised in nurseries (Simmonds 1959).

The Oromo of Gimbi plant four years old immature ***enset*** plant locally called – ***Iyyibaa***, for sucker production. The uprooting, hallowing and burying of the mother corm are often carried out in November based on the rhythms of their ***enset*** cultivation system. Farmers emphasize that without removing apical and filling it with soil and pieces of clay from old pottery materials and animal dung, the corm does not produce more than one sucker. Removing apical dominance is aimed at (in order to give a chance for multiple suckering) producing large number of suckers from a mother corm that results in the proliferation of many shoots. According to informants, (e.g., Dirribaa) a number of suckers will sprout after two months, i.e., during January. A corm produces 70-120 suckers on average.

These varied and consecutive replanting cycles, propagation, the expansion of new fields and hoeing activities are the responsibility of men. The farmers further explained that after suckers sprout, they should be well- manured for proper growth. Often, suckers are grown at backyards for their safety (to protect them from animals) and to better manure them. During the early stages of the ***enset*** plant's life, considerable maintenance work has to be done in

addition to that required for transplantation. The preparation of new land requires digging deep down, weeding, pruning, and slashing among other things.

On the other hand, the leaves of young plants are tied round to bunch them up together rather than drop outwards, and such a practice is believed to prevent one plant from shading another, to keep the circulation of air between plants and generally enhance more rapid growth. Furthermore, women are expected to continuously manure and shade ***enset*** plants around the homesteads to ensure safety and fast growth. That is, they deal with domestic activities since the ***enset*** plants at this stage are considered domestic plants. Generally, it was reported that the natural fertilizers (manure and mulching) are used in ***enset*** cultivation system, unlike crops where chemical fertilizers are commonly employed. In this regard, livestock production plays a significant role among the community in Gimbi for maintaining soil fertility, alike in all ethnic groups engaged in ***enset*** cultivation, as noted in the review part. Informants confirmed that the proper ***enset*** cultivation could not be realized without the application of manure. They believe that ***enset*** plants and livestock production are interdependent. Though there is no data on the amount of manure needed for ***enset*** growth up to its maturity, it was noted that those farmers with reasonable number of animals apply manure constantly. Those households, which own relatively more number of livestock, also have large quantity of ***enset*** plantation, farm, and grazing land as compared to the middle and poor households.

Enset contributes considerable forage to the livestock raising. Moreover, animals are a source of cash income, status symbols, and protein food. In general, the intensive manuring

and maintenance requirements decrease as the small plants grow with their well-established root system and strong wide leaves.

3.2.2. Transplantation

Enset cultivation passes through several levels of development, from sucker initiation to final stage when it is ready for food. In addition, these stages of development have different local names. *Gunii*, *Jimdire* (*Dulgee*), *Mantyee*, and *Iyyibaz*.

Gunii (sucker) is the new shoot out, only one-year-old plant, produced from a corm (Plate 1).

Informants noted that the possibility of growing a large amount of suckers out of a corm is mainly dictated by soil fertility and the amount of manure supplied.

Plate 1. One year old newly sprouted *Gunii*/sucker

After one year, suckers are separated from the mother corm and transplanted. Four transplantations are done in the course of ***enset*** development. The transplantation practices are believed to have facilitated faster growth of pseudostem and corm, which are the main food products of *enset*. The practice is also believed to maintain a leaf canopy that covers the soil for most of the year and serves the space more efficiently. Mostly, ***Ganii*** are propagated spacing close together, because farmers believe this system saves them space for planting mature *enset*.

Dalgee is the first transplanting stage in well-prepared and manured nursery field. In this manner, suckers are split from the mother corm and transplanted, the ***dalgee*** may be spaced as close as 20 to 25 centimeters to each other; this practice is intended to save space for other plants and helps to economically and properly apply manure. ***Dalgee*** may last for two years before being transplanted into a new *enset* field. When it is transplanted in the other field, it is called ***Masiyee***. It stays for two years in the same field before the final transplantation into the new field occurs. Afterwards, ***masiyee*** develops in to ***iyyiba*** (Appendix II), which is the final stage of small ***enset*** development, ready to be transplanted to the permanent *enset* field. They are planted at 1.5meter x 1.5meter space between rows and plants. Similar sized plants (especially small ***enset*** plants) are grown uniformly in the same area alone, but not with the matured ***enset*** plants, or those plants at different stages, since big plants are believed to retard the growth of small ones (in order to escape unequal competition with big ***enset*** plants). Framers do not practice intercropping system with other crops, except with small amount of vegetables, such as cabbages and garlic, which are planted around the small ***enset*** plants. The general local name for small ***enset*** plants (from

Gami no Iyyihaa) is *Niaddoo*. The stages or cyclical development, local names and the period of ***enset*** cultivation are shown in Table 5 below.

Table 5. Stages of *Enset* Development, Activities, and Cropping Calendar.

Stage	Activity	Local name	Duration (Year)	Period of cropping
1	Sucker production	***Gamii***	1	November
2	Sucker propagation	***Dulpee***	2	Dece- January
3	Transplanting of *Dulpee*	***Maniyee***	2	Dec-Jan/ *arfasaa*
4	Final transplanting of ***enset*** to permanent ***enset*** field	***Iyyihaa***	4	November - Dec

Based on the transplantation cycle and period, the maturity time for ***enset*** plant ranges from 4 to 9 years. ***Enset*** matures early when properly managed (weeding, and hoeing) and continuously manured. It is said to mature when it produces an inflorescence or nears the flowering period. However, it is not only the flowering of ***enset*** necessarily that signifies its maturity, but there are also other factors: the height, the amount of years for its growth, canopy in the leaves and the diameter of pseudostem and corm. However, the findings of

this study reveal that there are variations among the households with regard to ***enset*** maturity. In this regard, the average and wealthier households are likely to facilitate fast growth of the plants (wealth ranking or classifications by the community will be discussed later in this paper). On the other hand, since poor households, cannot continuously apply manure, it will take more years (7-9 years) for ***enset*** development (maturity), even though they manage to borrow animals from rich farmers for manuring purposes. Accordingly, the variation in ***enset*** maturity seems to have been based on the practical, technical, or the managerial aspects that each household engages in relation to the frequent supply of manure. That is, as explained earlier, those households who have more livestock can afford application of manure and ***enset*** takes less time to mature.

3.2.3. *Enset* Varieties

There are seven varieties/ clones of ***enset*** plants, which are, however, less than the reported amount of ***enset*** varieties in different ethnic groups of the ***enset*** producing people (Alemu, Sanford, and Shigeta have identified more than fifty types ***enset*** varieties, see also the review section of the thesis). The Oromo farmers in Gimbi have used their traditional knowledge to maintain and enrich the diversity of crops, through observation and hands on. The classification of ***enset*** into different varieties is based on color, times of maturity, height, length, and width of midribs and pseudo stems, common purpose and use of the plant. Furthermore, its being used for food consumption and marketable items, ability to resist disease, fermentation period, and its medicinal value are taken into consideration. The selection of ***enset*** varieties is done by men and women alike.

The average number of ***enset*** variety per households is found to be higher in the wealthier households, than in middle and poor households. However, all the household categories have been found relatively to conserve diversity in ***enset*** to enable them secure food self-sufficiency. Depending on their land holding and wealth strategies, the farmers maintain different number of ***enset*** varieties. They report that they use it for a number of purposes and thus select its variety to match their needs and constraints. The most preferred ***enset*** variety is *Baddadeene*, for being qualitative food and marketable products. For example, *amxixii and Illanaa* are the prestigious food dishes prepared from *Baddeeti*. The characteristics, utility, and colors of all varieties are summarized in Table 6 below.

Table 6. The Color, Characteristics, Uses of the *Enset* Varieties

No	Variety	The color of Midrib and Pseudostem	Food quality and purpose
1	*Badadiotii*	The midrib is Red at upper parts, pale red pigments in the middle, green yellow with black patches at base, where as the pseudostem is Reddish brown with black pigments on the upper	Considered as best quality food, can be harvested alone (without mixing with other ***enset*** varieties)
2	*Sabbaree*	Midrib is blackish purple sometimes with discoloration on the upper, and pseudostem is Blackish purple	Preferred for its delicious; boiled corm gives good quality ***dhangaa*** when harvested with other types of varieties
3	*Farenjee*	Midrib is deep red on the upper part, lighter red and black at the base, whereas pseudostem is reddish brown with black patches on the upper	Reddish brown with black patches on upper part
4	*Mareejee*	Has yellowish green midrib, with black stripes at the base and green yellowish with black patches on upper parts of pseudostem	Relatively good in its food quality, but best when mixed with other types of ***enset*** varieties
5	*Awwanjii*	Both its midrib and pseudostem are blackish purple	Good quality when mixed with other ***enset*** varieties
6	*Wargee Bidaree*	All its midrib, the leaf, as well as the pseudostem are deep red	Believed to cure gonorrhea when eaten boiled
7	*Ashawii*	Brownish with yellow green pigment on its midrib and blackish purple at its pseudostem	Used both for its food and medicinal purposes. Used for treating stomachache.

3.3. Agricultural Calendar

The Gimbi Oromo farmers recognize four main seasons: ***Gannaa, Birraa, Bonaa- Ongee, and Arfaasa***. Most of the production, harvesting and processing activities are performed periodically. The community has timetable for all types of production and other activities. It was found out that there is clear division of labor in ***enset*** production, harvesting processing and marketing activities. As indicated in Table 7 below, most activities in the ***enset*** production, such as land preparation, sucker preparation and propagation, planting and subsequent transplantation, hoeing and new field expansions, are among others performed by men. Hoeing (***warqqee diddiqaa***) is one of the most important activities, which is carried out by men, since ***enset*** requires special attention for proper growth among the Gimbii Oromo. It is done twice annually. This practice is necessary for loosening the soil, weeding, incorporation of manure and mulching. Since traditional hoeing stick is used in the digging processes, mostly a man cannot hoe without additional labor support. The traditional hand tools, such as hoeing sticks, sickles and hand hoe, are used for transplanting suckers into nursery, near homesteads. Labor scarcity is addressed in many ways: either through labor party (*dabo*), *daandoo* (labor exchange),or hiring labors.

Table 7. Rhythms of *Enset* Production and Related Activities

No.	Season name	Period	Characteristic	Activities	Done by	
					Male	Female
1	Gannaa	June-august (Leap-year)	Raiy	• Pruning, weeding, slashing of small ***enset*** plants------ • Farming cereal crops and sowing---------- • Manuring small ***enset*** plants---------- • Channeling urine and dung into ***enset*** plants----------	XX XX --- XX	XX --- XX ---
2	Birraa	Sept-October	Wet-dry	• Relatively slack period, however, people engage in: • Leisure activities (crafts work, arbitration, and social capital) and marketing ---------- • Minor ***enset*** harvesting by resource-poor households-	 XX --	 XX XX
3	Bona	Mid of Nov. to Mid of Janu.	Dry	**Pick period**: • Burying corm for sucker production---------- • Sucker propagation---------- • Subsequent transplantation of *Iyyshaa* into permanent ***enset*** field---------- • New ***enset*** field expansion and hoeing---------- • Harvesting and threshing of cereal crops---------- • ***Enset*** harvesting and processing----------	 XX XX XX XX ---	 --- --- --- --- XX
4	Arffaaa	End of Janu. to beginning of May	Small rain	• Preparation of land for the next farm • Main period for ***enset*** harvesting • Slashing and weeding of big ***enset*** plants	XX --- XX	--- XX ---

The hoeing activity is also done during the dry season and *Arffsaa*, from November to January. Weeding of big ***enset*** plants is often carried out by family labor between May to October. Farmers use their hand, sickle (*haxamtuu*) or big knives (*haaduu*) in the process.

Slashing and pruning of immature ***enset*** plants (*nukkoo*) is done more frequently (may be twice a year) than the matured ones, since they cannot resist much weeds in the field. Most of the time, these ***enset*** plants are pruned during the leap year (*qaam'ee*). All the family members may participate in weeding[8], pruning, and slashing of the small plants. This period is believed to grow the small ***enset*** plants (*nukkoo*) faster and the rain fed during such period is believed to have some curative nature. Cutting, removing of the dried parts, (leaves, and leaf sheaths and midribs) of the mature ***enset*** is done during the dry season, i.e., November through January. The removed leaves, leaf sheaths, and midribs are left in the ***enset*** fields for compost purpose. These parts can also be used for firewood, fencing, tying materials, and mulching.

3.3.1. *Enset* Harvesting Procedures

The complex activities involving *enset* harvesting (*warqqee dhugnu*), processing and food preparation are entirely undertaken by women. Decortications are the most difficult task for women. The sitting position during decortications is backbreaking and burdensome. In

[8] Weeding activity can be varied according to the age of the ***enset*** plant; thus small plant are also weed in different months, for instance, weeding of *Ganti* and *Dalgee* is carried out mostly in the leap year (*Qaam'ee*). The rain during the leap year is believed to grow small plants faster and properly, since it is believed that it has some curative nature.

addition, *enset* processing is a year round activity, in addition to household activities and manuring of *enset* plants.

Enset is usually harvested when it matures (during flowering), and sometimes before flowering near maturity. Although other accounts acknowledge that a large proportion of the *enset* plant is harvested substantially before maturity (Olmstead 1974; Shigeta 1990, cited in Tsehebu, eds., 1996:149), the Gimbi Oromo farmer prefers to harvest ***enset*** at its maturity stage. This preference of extensive mature harvest indicates that the yields per plant appear to be greater. This facilitates the storability of *dhangaa* (for its food) and financial security. Informant Desu further noted that, the best quality *dhangaa* foods (*Ollata* and *amxixii*) are obtained only from the mature ***enset***. The flowering duration depends upon climatic conditions, clone/ or variety type, soil fertility, proximity to the house and management system.

Although there is no taboo involved, among the Gimbi Oromo, men rarely enter into ***enset*** field, during ***enset*** harvesting, except for helping boys in cutting the upper leaves and sometimes uprooting preparation for harvest. ***Enset*** harvesting is mainly done twice a year, November and May. November is believed to be proper month for ***enset*** harvesting because water content of ***enset*** begins to decrease. ***Enset*** decortications during the rainy season face high water content, which in turn delays the fermentation time (prolong-fermentation) and decreases the quality of *dhangaa*. On the other hand, much loss of water content does not produce good quality and quantity of ***dhangaa***. May is also an important month for ***enset*** harvest, since ***enset*** decortications during the rainy season is difficult in many respects. Moreover, this month is preferred to keep the continuity of food security of households by

storing large amount of *dhangaa* and reserving marketable *dhangaa*. However, there are variations among different households. The study results show that some well-to-do families do ***enset*** harvesting twice a year. They harvest as many as 70-100 ***enset*** plants that enable them to store enough food for about more than two years. Poor households do harvest frequently up to 5 times a year, in small quantity, as many as 21 ***enset*** plants as their food need arises. This category of households cannot store *dhangaa* (kocho) for more than half a year for their families, even though they are found to be food self-sufficient in terms of ***enset*** cultivation.

Enset harvesting[3] system involves many and varied activities which require intense and different techniques. The traditional ***enset*** processing systems are classified as pit preparation-*wamaasa* (wide and shallow pit is dug to receive the decorticated ***enset*** and a smaller and deeper pit to receive and collect the white liquid which will turn into bulla/*amoosi* after settling, Appendix VI)and others. Moreover, ***enset*** harvesting-cutting leaves, uprooting and bringing to the decortications and scrapping site (*duugu*) of pseudostem (*gumaanya*) or pieces, grating corm (*amicho tumuu*) or smashing, squeezing (*amoosi cuuffee*) and fermentation (*dhangaa bil/heessuu*) are among other activities performed by women.

The internal leaf sheaths (*gol/hoos*) are separated from the pseudostem down to the true stem, and the true stem is separated or stumped under ground corm. The concave side of the leaf sheath is removed and cut into pieces of about one meter long to suit fiber production

[3] *Enset* harvesting also varies from one household to another. The study indicates that wealthier households in most cases harvest twice a year, where as the harvesting practices of poor households can range from 4-5 times per year, since they usually harvest small amount of plants during each harvest.

and to shorten the leaf sheath to a workable size. Then, leaf sheath is decorticated using locally made tools (Appendix V) such as bamboo scraper (*Sibissa*), while the sheath is held on an inclined against a wooden plank (*Wisatsuli*). Women sit on the ground on a traditional stool and use one leg to hold the leaf sheaths in place where the working area is prepared covering it with *enset* leaves (plate 2).

Plate 2. Women decorticating the pseudostem with locally made Bamboo scrapers against wooden plank.

There are **two ways** of grating corm.

The first system is uprooting the corm (pulverization, completely uprooted from where it is grown Appendix III), removing soil, and the end part of corm, which often shows rotten situation. The corm is pulverized separately with locally made wooden tool of sharp serrated edge (*Isuafgua*). The second method is to grate the corm from the hallowed– out corm (inside out still in the ground in which the *enset* is not uprooted but left in situ and pounded.

The decorticating pseudostem and pulverized corm are mixed and put in well-prepared pit lined with fresh ***enset*** leaves. The inside corms are used for the preparation of fermenting agents, the starter[8] (*liyo gumma*). The starter is prepared from different types of herbs and the inner portion of the corm. Women explain that without adding starter to pulp, grated corms, ***enset*** does not ferment properly. ***Enset*** is considered as simple as wood/tree unless mixed with starter. Thus, the starter is added for effectiveness and complete fermentation. A base starter is added to the mixture to initiate the fermentation processes in the pit. It was further reported that one does not produce good quality of *dhungaa* from *warqee* without starter. The preparation of starter is only known among few women, so they use it as a means of earning income. The herbalist prepares starter for sale and those who need it buy; payment can be made both in cash and in kind. Finally, the mixture of scraped pseudostem pulp, the pulverized corm, and stem of the inflorescence is added in a pit for fermentation.

As revealed earlier, the starter is prepared from different types of herbs and leaves of trees (more than 21 types herbal plants were identified during the research work) that are also used in the ***enset*** fermentation processes (**plate 3**). The starter is mixed with the decorticated pulp and grated corms after a month to facilitate the fermentation process in the pit. The mixture is returned to the fermentation pit, then pressed down, and covered with ***enset*** leaves and left to ferment. The women informants further noted that the harvested ***enset*** lasts for six months without showing a sign of fermentation unless otherwise the starter is put in it

[8] Informants account that there are more than twenty types of herbs, root plants and some leaves of trees from which starter is prepared. The *enset* fermentation agent requires special knowledge of women, especially in the application of starter. A woman with special knowledge of these herbal plants collects them and mixes with the over of the pulp, the cut-off bottom parts of inflorescence that are chopped into fine pieces and cover with ***enset*** leaves and leave sheaths to prevent the entrance of air. In this manner, it is kept under ground until the clients come to buy.

Plate 3. Different types of herbal plants from which starter is made

The second round mixing process is carried out after a month and the whole mass is recovered from the pit thoroughly mixed and returned to its original pit with newly prepared leaves and compact to prevent the entrance of air, which is believed to reduce the quality of ***dhangaa***. Informants indicate that the ***emet*** product is considered ready after 90-120 days from the initial processing day, and it is locally called ***dhangaa***. The uses of the products, yields in terms of quantity and quality and the storability of ***dhangaa*** are discussed elsewhere in this paper.

CHAPTER FOUR

4. ECONOMIC AND ECOLOGICAL IMPORTANCE OF *ENSET*

Enset plays a pivotal role in the economic and socio-cultural importance in the lives of the *enset*-producing people. For instance, it serves as human and animal food, fiber, and, sleeping mats, firewood, construction materials, income source and medicine. It prevents erosion and environmental degradation through its leaves that hold water around the base; its drops are used as mulch (compost) and important when it decays, as noted in the review section.

4.1. Food Sustainability

Food sustainability in this context entails food availability through production, storage, and food access through purchase or transfer. In this regard, the study community practices mixed farming system, though ***enset*** is still their staple food. The socio-cultural and economic values, and functions attached to ***enset*** cultivation are greater. For instance, the local term for ***enset*** is *wurqqee*, a term also used to refer to gold. This denotes that ***enset*** is respected like gold, due to its significant role in the livelihood of the community. Informants further indicate that their survival depends on cultivation of ***enset***. One of the informants' statements summarizes the place of ***enset*** in the community:

> Our livelihood depends on ***enset*** plant. ***Enset*** has secured the lives of many people and animals during the worst drought and famine of 1984/1985. The non-*enset* producing people, the low landers (*gammojjii*) have migrated to this area in search of food. They used to buy *wurqee and dhungaa* from us, and we used to provide them with our *dhungaa* food free. Some of the migrants of that time

are still living in Gimbi village. Our socio-economic relationship with the low landers has been strong due to recurrent food shortage in the lowland'.

Moreover, ***enset*** plant and its cultivation system serve as a factor of economic classification of the study people. ***Enset*** serves as a sign of status symbol. That is, farmer households beyond its food and financial security also need ***enset*** for prestige as an indicator of wealth. The Oromo of Gimbi have forms of wealth categories based on local perception. The study results show that there are three categories of households (rich, middle, and poor). A farmer would proudly speak of his massive mature ***enset*** plants near the compound signifying that he is able to properly feed his family and is therefore a successful member of the society. Although such factors as land holding size and livestock are used for determining wealth ranking, the amount of mature ***enset*** and ***enset*** plantation in one's field are key to wealth identification.

Table 8. The average aquantity of *enset* and annual harvest of the households.

Household category	Ave. quantity of *enset*	Av. matured *enset*	Ave. amount of harvest	Frequency
Rich	890	600	70	39
Middle	600	300	40	45
Poor	146	50	21	36
Total average	569	316	44	120

This in turn helps to produce ***enset*** on sustainable basis. For instance, a man is considered rich (*aseweseni*) if he owns more than 600 mature and about 900 ***enset*** plants in his field. Rich households are expected to have more than 4 hectares of land and more than 20 heads of cattle. **Table 8** above shows the quantity of ***enset*** plantation, owned by each category of the household, also serves as a criterion of economic classifications. This classification is also used as analytical framework for this paper. Middle households on the other hand, have been found to have up to 300 mature and about 600 ***enset*** plants, 2-3 hectares of land and up to 10 heads of cattle. Furthermore, those households who have 30-40 matured ***enset***, about 100 ***enset*** plants in their field and up to two livestock are considered poor households. However, this study reveals that ***enset*** is the staple food of almost all the people in the study area.

On the other hand, in spite of rapid population growth and scarcity of farmland, the community manages to produce the amount of ***enset*** plant that can support large family on a limited area of land. The land requirements for ***enset*** to provide the calories need for a household is found to be as low as 0.2 hectares and community members in the study area have ***enset*** dominated farming system, though there are differences among the household categories. Despite such variation, all the household categories produce the amount of ***enset*** that satisfies their respective households' food requirements. Thus, ***enset*** is a staple crop, the production of which assures food sustainability.

One of the contributing factors for food sustainability in ***enset***-based farming system is its potential yield per hectare. For the purpose of this thesis, the report of Pijls (1994, cited in

Shank., eds., 1996: 15)[5] in addition to the field information, is used as an ideal model to compute the average estimated wet yield of ***dhangaa*** for all household categories per year.. Thus, an attempt was made to compute the average estimated products and yields of wet ***dhangaa***, for each category of the household, even though there were variations among them due to some marked factors. According to the result of the survey, the average annual yields of wet *dhangaa* are found to be 24qt/0.64ha, 13.6qt/0.34ha, and 7.14qt/0.18ha for rich, middle, and poor households respectively. This in turn believed to contribute to the household food security and food stability through storage.

Table 9: Amount of average estimated *enset* production and level of consumption of the household.

Wealth category	Ha	Harvest/year	Yield/year in kgs	Level of consumption preference (%)
				Daily
Rich	0.64	70	2380	99.2
Middle	0.34	40	1360	100
Poor	0.18	21	714	97.5

Source: Field Survey (2004)

[5] Pijls (1994:) reported that 46 plants per year were harvested per household of 6.1 persons with an average of 34 kg of kocho per plant. The household average of 0.16 hectare of ***enset*** land divided into the number and yield of plants was found to give 95 quintals per hectare per year assuming 6 years old plants were harvested.

Yield of *enset* per hectare or per plant is not easy to estimate, as there is no accurate measuring device. However, the average annual household consumption and its sales can be used as parameter to measure production, though there are marked differences among the households due to spacing, the level of manure used and the timing of harvesting. Traditionally, the wet yield of *dhangaa* is estimated by horse load among the Oromo community in Gimbii. Informants noted that up to 92kgs of wet *dhangaa* could be obtained from two to three mature *enset* plants, which is almost similar to the report of Pijls on the estimated yield of *dhangaa*.

Furthermore, as a staple food, per capita intake of ***enset*** food may be quite high. Pijls (ibdi) reported that an ***enset*** intake of 0.55 kg per person per day (1045 calories) was estimated to be 82 percent of the total energy though this is only 60 percent of the requirement, which would be 2123 calories. The annual consumption of ***enset*** among each wealth category shows ownership of 70, 40, and 21 ***enset*** plants by rich, middle, and poor households respectively (See Table 9 above). The study also confirms that a family with 50-60 mature ***enset*** plants of less than 1/5 hectare is thought to be food secure. Moreover, it is no wonder that almost every household has ***enset*** plants at each stage of development.

Research reveals that ***enset*** could produce larger quantities of energy food per hectare [10] than any other crops. As shown in Table 9 above, hectare of land and quantity of ***enset*** yield per year for an average of household are, among others, important contributors to food sustainability. In this respect, the fermented and purified/refined part of wet ***dhangaa*** can be

[10] Shank (1996: 68) reports that no other crop provides the productive potential and the flexibility of consumption as that of *enset*.

stored underground in well-prepared pit and maintain its edible state for about 2-3 years. The majority of the households (especially, the rich and middle households) are identified as capable of storing the fermented *dhangaa* systematically. However, very often, ***enset*** that is stored for more than three years may change its taste. Thus, to make it edible, women mix it with fresh or newly fermented and purified *dhangaa*. In this manner, ***enset*** provides consistent household food security.

Dhangaa is fermented product obtained from corm and pseudostem of ***enset*** and is a good energy source, since it is rich in carbohydrates and starch both as form of *dhangaa* and *amixixii*. However, the protein content of wet *dhangaa* and *amixixii* were found to be low, 1.2 percent and 0.25 percent respectively, (Berg 1959) and protein content in dry *dhangaa* is reported to be 2.9 percent (Pijls 1992) and 3.7 percent (Besrat et al, 1979 g/kg)-grams of protein per of dry *dhangaa*.

Ranges of foodstuffs made from ***enset*** (*warqqev*) are extensive. Two main ***enset*** products are locally called *dhangaa* (kocho) and *amixixii* (bulla), where as the minor product is referred to as *ammicheo*. Different types of food dishes are prepared that are supplemented by some diets. *Ollataa*, *Unkuroo ollataa* and *Qummusii* are among some food dishes. They are consumed in different forms occasionally and daily. For instance, bread, porridge, and parched items are food prepared from *dhangaa*. Some dishes (e.g.*Unkuroo allataa* and *Ollataa*) are also considered as status and best quality food, eaten on special occasions, such as when a special guest comes, and on big feasts and ceremonies. *Unkuroo ollataa* is prepared by tapering it out and roasting it and served hot, adding salt, spices for its good taste and as well as for its supplementary diets. On the other hand, *Qummusii* food dish is

prepared by mixing with the flour of barely. It is consumed daily with such supplementary diets as, beans, peas, cabbage, some times meat and so on. It can be preserved for longer time. This in turn facilitates the household's food preservation. Hence, students who travel long distances and stay away from their parents usually take along with them *qummusii*. Parents explained that had it not been for the provision of *qummusii* many young people would have been left uneducated. The interviewed students both in the village and on the way to their school also confirmed the same. Thus, as mentioned earlier, although ***enset*** is a staple food of the study people, they also practice mixed farming system that also integrates cereal crop production and livestock raising. The system plays vital role in supplementing the dietary situation of households and it serves as a means of generating additional income for households, beyond its supplementary diets. Furthermore, cattle are also feed crop residues, grass and ***enset*** leaves that remarkably show the importance of integrating cereal crop production and livestock rearing into the ***enset*** based-farming system to maintain the sustainability of households' food security.

4.2. The Financial Security of *Enset* at Households Level

Farmers in the study area increasingly depend on ***enset*** for both food and financial security. They need cash income for various purposes, such as for paying land use tax, purchasing inputs, paying school fee, buying clothing, and covering other social expenditures (*mesobi gobobee*, *Igob* and others). The study results also show that the entire ***enset*** food products (*dhungua* and *amiroo*) are not consumed. Farmers sell part of their harvest to generate income. ***Enset*** can be sold before and after being processed. Processed and fermented *dhungua* and *amiroo* are sold in the market as wet matter. In this regard, the study

result shows that a good proportion of ***enset*** product (*dhangaaa* and *amxixii*) is sold in the market.

An attempt was made to find out the average estimated income from the sales of ***enset*** by the households based on the report of key informants. Accordingly, it was identified that some of the produced *dhangaa* is sold beyond its consumption. Beyond the frequent sale of small amounts of *dhangaa* by women to buy supplies, the processed and fermented *dhangaa* is also sold by the horse load in bulk. Women often sell relatively small amounts of *dhangaa* at village markets, every week/ and or every other day. Mostly, women carry bundle[11] of *dhangaa* of about 9-12 kg on their back. The selling price of one bundle of *dhangaa* ranges from Birr 4-10[12] depending on its quality and seasonality. Per year, women can generate up to Birr 750.00. This excludes the sales of that on horseback (horse load). Though the marketing system of *dhangaa* product is underdeveloped, its major markets are Guder (24km from Gimbii) and Warabu -Amayyaa district (more reasonable price than Guder market) markets. However, during rainy season, both men and women can sell (horse load of wet *dhangaa* that of 80kg) for 60 Birr and 68 Birr at Guder and Warabuu respectively. It is sold at both village and local markets on either wholesale base (by horse load or *jaambii* Appendix VII and IX) or retail basis by women (Appendix X). Every Monday traders from Addis Ababa go to Guder to buy *dhangaa* and ***enset*** leaves (*baalaa warqee*) on wholesale basis (horse load) from farmers (Appendix XI).

[11] Women take bundle of *dhangaa* on their back minimum two times to village markets per week. which would be 96 times in a year.

[12] The average selling price of women's bundle of *dhangaa* is about Birr 7.5 at the village markets.

The prices of *enset* are high during the rainy season, from June to mid-September, when grain stock is nil. The study results indicate that there was gender differentiation in accessing *dhangaa* marketing and earning benefits from it. The by- products of ***enset***, such as, leaves, fiber and so on are often sold by women. Wives in the research area do not ask their husbands for money, as they generate adequate income for household and personal requirements from the sales of *dhangaa*. Thus, *dhangaa* remains the main source of income for women. On the other hand, men do not control what women do with *dhangaa*, except during the sale of horse load. Moreover, men do not know the quantity of *dhangaa* sold.

4.2.1. Labor as Factor of Production and Income Generating

The cultivation and processing of ***enset*** are carried out around homesteads and yards. It involves high inputs of human labor from both male and females from preparation to the final stage of consumption. The Oromo farmers in Gimbii practice various forms of traditional labor organization, especially, in the ***enset*** cultivation system and in its processing procedures. Among others, wage labor, *daadoo*, *daboo*, *xibeenaa* and *marraa* work party (women's dominant) are the prominent work groups. Accordingly, male farmers perform the following activities: land preparation, incorporation of organic material and hoeing before and after planting, replanting of shoots (suckers), and tilling during the growing stages. Female farmers are responsible for manuring, weeding, harvesting, processing and preparing food. These are all-tiresome and time consuming.

Both men's and women's *daadoo* work groups are organized for such tasks in the ***enset*** farming cycles, since these activities cannot be carried out only with family labor.

This especially holds true for elders, widowed women, and sick persons. Furthermore, the high water content of *enset* and the deep digging procedure in its cultivation system makes its plantation difficult for a man alone. Consequently, when the seasonal nature of some activities makes households' labor insufficient, additional laborers are gained mainly through two sources: *daaddo* and wage labor.

Daaddo labors (reciprocal work groups) are small groups of people who may be relatives, neighbors, and friends, and usually constitute three to four people who work on each other's field in rotation. This is relatively short-lived. These types of labor pool, being economic groups, are preferred as they are also a source of enjoyment to work in the company of others. *Daaddo* groups are usually differentiated along sex division of labor. Both men and women can organize these types of work parties for all production activities according to the assigned tasks. Moreover, *daaddo* labor is used as means of generating income. It is common practice in this system that laborer collects labor in *daaddo* system from his fellow farmers and offers the work party to work in the fields of families who could pay for it. Both men and women use reciprocal labor exchange as supplementary income for their households.

When there is family labor shortage, wage labor is a common way out in the study area. Male laborers are hired for *enset* cultivation, plantation, propagation, hoeing, and cereal crops production (plowing, harvesting and threshing activities), while women laborers are needed for harvesting and processing of *enset*. Members of poor households are often hired on the plots of the rich and middle ones. Moreover, elderly people, sick persons, and widows tend to rely on hired labor. Poor farmers augment their household expenditure through the

income generated from such farm wage. Even though the exact amount of money gained this way is unknown, the majority of poor households indirectly generate income by being employed on the *enset* farms of the well- to-do households.

The payment for hired labor can be either in cash or in kind. However, in most cases, laborers prefer to take their labor wage in kind, i.e., ***enset*** plant, because they know that processing and fermenting *enset* would leave them more income than earning Birr 2.00 on daily basis. For example, a woman receives two ***enset*** plants for harvesting or decorticating ten *enset* plants. If the wage labor is in cash, she receives Birr 2.00 per day per person participated. The cash payment for male laborers range from Birr 2.00 to Birr 3.00. However, the employer does the pit preparations, uprooting the ***enset*** plants, and squeezing the *amicho*. The provision of food and drinks is also the responsibility of the host.

On the other hand, the major sources of income for rich and middle households are found to be from the sales of *warqqee* and *dhangaa*, cereal crops and small animals. Especially, these households use the income they generated from the sales of both *warqqee* plants and *dhangaa* to cover wage labor and other expenses. Thus, ***enset*** cultivation system gives an employment opportunity for resource-poor-households, and it involves economic cost of production for the resourceful households.

4.3. The Multiple Uses of Different Parts of *Enset*

Throughout its development stages, most parts of ***enset*** are used for various purposes: wrapping, making fence, providing shades, controlling erosion, firewood, human food, and animal fodder. The dried leaf sheaths and fresh leaves of ***enset*** are used for wrapping bread (*qummoo'e*), other foodstuff, and butter. The leaves also serve as plates for cooked foods, pit liners to store *dhungaa* and to place household utensils. The leaves can also be sold.

It provides shades and protects soil from erosion. During the rainy seasons, they are used as umbrella. Animal fodder is prepared from leaves and other ***enset*** by-products.

Furthermore, the dried leaf sheaths and midribs are used for firewood. They are usually mixed with small amounts of split logs for light and cooking. It seems that these ***enset*** products compensate for the prevalent shortage of firewood and construction materials.

Fencing (*dallaa*) of compounds and ***enset*** plants with the split logs of *guattiraa* (juniperus procera) wood and bamboo tree had been common practice prior to the deforestation of the area. Fencing has many socio-cultural and economic functions in the eyes of the community. For instance, it is considered as one of the status symbols among the community. Fences protect animals from entering ***enset*** plantation. However, during the field survey, it was observed that shortage of construction materials is becoming critical and eroding the capabilities of farmers. Consequently, farmers are fencing their ***enset*** plantation and other fields with the dried midribs (plate 4).

Family sleeping mats are prepared from softened dried midribs, usually soaked in water. Almost all households use layers of mats made of ***ensuri*** products as sleeping materials, although they spread out animal skins (*ailiev*) over the mats.

Plate 4. Fencing of *ensuri* plantation with dried parts of midribs

Some well to do households use sheets/garments as additional sleeping materials. Small sized mats are also used for baking bread (***pamuusi***). The rope made from midribs is used for tying livestock and loading materials on equines.

4.4. Ecological and Environmental Conservation Role of *Enset* Plants

The *enset* cultivation system involves erosion control measures and enhances soil fertility through different techniques. Mulching and compost preparation practices are among the indigenous knowledge areas. Mulching is the process by which the removed or dropped parts of cut-leaf sheaths, midribs, and weeding are left in the *enset* plantation for compost purposes (plate 5). Farmers have developed such techniques of natural resource conservation through experience. They proudly reported about the great role mulching plays in soil moisture conservation and reduction of run-off as compared to bare-earth farming in the area under consideration, due to deforestation processes. The superiority of *enset* based-farming system in maintaining soil fertility was also noted by Smeds in the foregoing review section.

Farmers testified that the mulching in the *enset* field also suppresses weed growth, preserves moisture, controls soil erosion, and serves as a source of plant nutrients. They believe that *enset* plant improves soil fertility throughout the year. Furthermore, it was found out that in addition to the extensive manuring practices, *enset* plants by nature prevent erosion and environmental degradation. These practices are also considered as relatively long- lived positive effects.

Plate 5. The pruned and slashed part of leave sheathes and midribs are left in the *enset* fields for compost and mulching purposes.

Farmers understand that the mulching system produces organic matter and creates nutrient reservoir in the soil, and thereby contributes to the stability and continuity of ***enset*** cultivation system. Farmers further reported that due to the decline in livestock population, they have started resorting to the over dependence on the natural mulching system for compost purpose, even though they have been practicing the system. Farmers now emphasize that they have learnt the benefit of wider spacing and compost preparation, in the face of the shortage of manure. Soil fertility in the ***enset*** plantation is found much higher than the adjacent fields and pastures. ***Enset*** is, therefore, a reliable crop during seasonal rainfall shortage apart from being used as compost.

CHAPTER FIVE

5. THE SOCIO-CULTURAL FUNCTIONS OF *ENSET*

5.1. *Marra* Labour Cooperation in the *Enset* Harvesting Tasks and Its Socializing Effect.

5.1.1. *Marra* Labour Cooperation in the *Enset* Harvesting Tasks

Historically, the different types of mutual self-help associations and social organizations play a significant role in the socio-economic lives of the study community. The Gimbi Oromo underline that these social organizations exist to meet definite objectives. The complex, and tiresome *enset* harvesting and processing have been undertaken merely by women, using locally made tools (low technology). Diverse activities undertaking during *enset* harvesting process require labor support of more than two to three women.

Among others, *marraa* labor party or labor group is one of the traditional labor formation organized by women when there are a number of ***enset*** harvesting activities. It consists of as many as 10-12 women who might be relatives, neighbors, and friends. Those households who run short of labor (wealthier, widowed, and sick people) during the peak harvest periods often resort to *marraa* work groups. Furthermore, larger households with large ***enset*** farms and relatively large quantity of harvest use *marraa* work labor. There is an expectation that every household would send at least one of its own members to the *marraa* of its neighbors. Failures to maintain its labor reciprocity and send a representative is

warned with social ostracism and by doing households maintain the need for continuous investment in the social network.

During the *marraa* work party, the owner is expected to prepare variety of *dhangaa* dishes for the participants. *Qummeesii* is prepared for breakfast. The pancake-like bread and coffee are brought to the decortications site and the procedure is called *baga-dhuftee* (wel-come). One of the helpers, usually an elder woman, chants the blessing prayers to the owner, wishing her good health, wealth, and good harvest. During such blessing prayers, the owner carries the *qummeesii* bread (traditional dish food) as symbolic representation of prayers ritual. After meal, the women start singing traditional songs praising the host and her property (wealth) wishing her good harvest, longer storage, and safekeeping. This prayer is believed to help the proper fermentation and growth of ***enset*** plants.

In this regard, such practice of labor organization arguably appears to have played a role in setting indirect social obligation and facilitating labor pool, in addition to being economic groups, who are the most important social units at the local level enhancing strong social ties, and establishing friendship.

5.1.2. The Socialising Aspects of *Enset*

Enset harvesting also provides an opportunity to girls to learn and practice traditional values, customs, and culture of work. They participate in the women's work party in specific activities: smashing *ammicheen* (corm) with serrated sharp edge (*jaatfaat*). The girls compete

in the process by continuously smashing *ammichoo* without taking break. The winner is blessed and wished good husband by elders.

The girls are not allowed to decorticate the *enset* leaf-sheaths by lifting up their feet high before they get married. It is believed that they might lose their virginity. Even though the occasion involves some fuss, tricks and teasing, in the actual sense, the girls highly need such occasion for their future destiny (to be engaged to good husband). This occasion is also deemed relevant for familiarizing girls with the culture of work, the socio-cultural practices, and values of the community. The traditional songs chanted by the girls on such occasions are depictive of the cultural integrity of the community.

5.1.3. Food as a Factor of Social Bonding

It has been found out that unlike other people elsewhere in the country that Gimbi Oromo has never experienced drought and famine. They have always been self-sufficient and this is mainly attributed to *enset* cultivation system. In this regard, some scholars (Pankhurst, Shack, and others, as discussed in the review section of the thesis) have also accounted that the *enset* producing have rarely suffered from famine and drought. Informants explain that during the 1985 drought and famine, there was for the first an influx of people into the area in search of food crops. The majority of these people were coming from the surrounding lowland areas. They further reported that the lowland people were never food self-sufficient even before the 1985 disaster. The lowlanders have continued to obtain food from the Gimbi Oromo through different mechanisms. This bond has been strengthened through reciprocity: lowlanders supply cereal crops, such as maize and *teff* to the Gimbii Oromo. Such food

sharing experience is believed to have amicably contributed to good relations between the two communities and ensured continuous food availability to lowlanders, especially, during critical food shortage. Farmers in the Gimbii community have harvested, and supplied ***enset*** for the lowlanders both on sale, and for free, since the lowlanders lacked the knowledge of ***enset*** processing and managing ***enset*** so far.

After strengthening their relationships through continual contacts, and exchanges they pursued their regular meeting as the lowlanders are situated on the way to the big local market, Guder. Every other Monday, the highlanders cross through the lowlanders' village and this has paved possible ways for regular visits between the two communities. These relationships, which have initially marked through exchange of food crops (especially ***enset***), eventually developed into mutual reciprocal relations, regional integration, accompanied by intermarriages and other socialites. Both communities began to give and take wives. These intermarriages have become frequent since the 1985 severe drought and famine.

5.2. Religious Beliefs, Ritual Practices, and Observance

The study reveals that among the Gimbii Oromo, ***enset*** cultivation and its processing systems have become the foundation for some observances, cultural practices, and taboos. Since the ***enset*** plant and its cultivation system are an integral part of their livelihood, the activities and practices associated with the system are cautiously followed and observed. It is believed that engaging in the production of ***enset*** and other crops during *cagginoo* (taboos) is likely to adversely affect the growth, harvesting, and fermentation process of the

enset plant. There are some occasions, observances, and periods of taboos (*cagginoo*) during which *enset* plants are not touched and their leaves cut. For instance, women are not allowed into the *enset* harvesting and fermentation site during their menstrual cycle. If they enter however, it is believed that *dhungxa* and other *enset* products would be rotten and never be fermented properly. That is, the evil influence coming from human shadow in the form of either menstrual cycle or human presence harms the harvest.

Moreover, big *enset* around the houses symbolizes the homestead's *ayyanxa* (divinity or spirit, Appendix VII) and status symbol of a household. This type of *enset* plant would never be harvested unless it flowers or at least another one to replaces it before it is harvested. Informants stressed that if the big *enset* is harvested without being replaced, the homestead's *ayyanxa* (divinity) tends to disappear or evacuate the place. This is therefore believed to harm or affect the whole *enset*, its cultivation processes, and other aspects of the household's life. In Oromo traditional religion, *ayyanxa* is believed to play an intermediary role between human beings and *waaqaa* (God). That is, *ayyanxa* plays the role of a messenger, like saints in Orthodox Christianity. Accordingly, such practice is believed to have enhanced chances for the growth of *enset* plant to its climax maturity stage before its harvest, as a result of which, high quality and quantity *dhungxa* will be obtained. This in turn facilitates food sustainability and financial security of the household. In this respect, the potential asset of a household can be fostered through cultural practices and beliefs of the community in the *enset* cultivation system.

5.2.1. Ethno-Medicine- (The Medicinal Value of *Enset*)

The Gimbo Oromo community uses ***enset*** plants in diverse forms: as medicine, both for human and livestock, and ritual symbol representing many things at the time. It is believed that ***enset*** could heal or treat such ailments as bone fracture or broken bone, gonorrhea, stomach problems, and influenza[33]. According to informants, the following are among the important ***enset*** parts or products that have medicinal values: *Amxixii* after the paste is dried and flavored by pounding, porridge is prepared and provided to a woman who has just delivered to maintain and strengthened her. In addition, the flour of *amxixii* is gradually added to a pot of boiling water and vigorously stirred to prepare gruel. Butter is added to the prepared gruel and served hot to treat backache and speed up healing fractured and broken bone. In addition, *amxixii* is useful to fast treat cough or influenza.

Kurgguv baden is one of the ***enset*** varieties used only for its medicinal purpose. Its fresh boiled *ammichoo* (corm) is eaten 2 to 3 times to treat gonorrhea. *Ashxxii* is another variety of ***enset*** used both for its nutritional and medicinal value. The fresh boiled *ammichoo* of *ashxxii* is served hot for treating/ healing stomachache.

On the other hand, when a woman feels a backache, the sickness is associated with ***ayyanaa polaa*** (a dairy of stall within a house serving as kitchen). A woman informant reported that when a woman gets sick, she selects a variety of ***enset***, called ***sabbaraa,*** and leans against a stand *enset* plant. This way, she becomes well, with lasting curative assurance. After

[33] Some studies (Etkin and Ross, 1982: 29) identified that many of the plants were used as folk medicines and as a food value. For example, cashew nuts were chewed for treatment of intestinal worms, diarrhea, dyspepsia, and they conclude that many plants taken as medicine might in fact also have nutritional value, while some of the plants used mainly as food also have nutritional value.

decorticating and fermenting the symbolic ***enset***, she bakes three small pancake-like bread (*bosillee*) and goes to the back saloon alone (a stall) to perform the splashing (*facasaa*) ritual. She smears her chest and neck with warm butter. A woman is rarely observed/or seen, especially by the outsiders, while undertaking the ceremony. She is suspicious of the outsiders, because it is believed they might bring some harmful things to her family and wealth. She splashes nine times to the earth/ground, nine times upwards, may be to the direction of God. She then starts appealing to her *ayyaanaa gokaa* (a spirit of stall) through prayers words, asking for health and wealth. She usually says, 'May my deities appease me, 'May my family, my health and wealth be well.' May my herds be protected'.

In general, a woman begs God to watch over moral behavior of her household members and their prosperity during such ritual practices. After the ritual ceremony, the woman and her children eat the selected variety of ***enset*** food as medicine. Traditionally, women have stronger psychological and spiritual attachment to ***enset*** plantation and to the products of *dhangaa*, since ***enset*** plantation is considered as women's domestic plant. Furthermore, women are more knowledgeable than men are in traditional medicine. They have developed it through their life experience by observing and hands on.

On the other hand, a common disease that frequently attacks ***enset*** is bacteria wilt. Since there is no modern medicine, the farmers apply different traditional rites and medicine to protect the growing ***enset*** from such attack. According to one of the informants (Workitu), when ***enset*** plants are attacked by diseases, the farmers practice numerous health enhancing rites frequently slaughtering of sacrificial animals, especially, ***weennii*** (colobus monkey). ***Weennii*** is considered as ***qulqulle*** (unsinful) and they believe that the ***enset*** disease arises

for some wrong by the household. The whole body of the animal is put on fire in the ***enset*** field to fumigate it with its smoke and force the disease out of the ***enset*** plantations. However, it was reported that at present, it is difficult to find such animals for such purposes. Nevertheless, the effectiveness of the practice in forcing the disease out the ***enset*** plant was not reported or known, that requires further investigation, and it was only the view of the community.

5.3.2 Thunderstorm- Lightning Strike (*Dhexkama Waapaa*) Ritual

Informants explain that lightning often strikes the ***enset*** plants, trees or even the cattle destroying or killing many of them. When such shock occurs, especially on the ***enset*** plants, it is believed to have come from the anger of God for some wrongdoing during the cultivation system (they believe that God is angry or scolded with a household). The event is locally called "***waaggisi waara dhekati Dhexkame***" ('God scolded against so and so households' and this is considered as warning for the striken household). Often, the misfortune is justified by the community by saying 'It is good, it is good, you did well our Lord, and you did better our ***waapaa***.' This is because, it is believed that, if someone shows his tenderness to the victim, the next strike would be his turn. So every body is expected to act in line with God's will. When such event is considered to arise from the anger of God, the curing or reconciliation process would involve propitiation of the higher power.

Accordingly, this reconciliation process involving the supernatural power and many techniques is carried out only when ***enset*** plantations are striken. In the first instance, the victim of the thunderstorm goes from one household to another to collect cereal grain of any

type, which no body refuses to help. The collected grain is used to prepare local beer for mercy ritual ceremony (to beg the supernatural power treat one with mercy or restraint). After the preparation of the feast, the ***gulas*** (elders, as mediators of prayers), and neighbors will be called on to mercy for the victim and protect the ***enset*** plants from destruction.

The ritual ceremony is carried out in the ***enset*** plantation rather than anywhere else. On the other hand, the thunderstorm is believed to bring down with the lightning some metal particles and the house utensils, especially, metal utensils will be taken out on the ceremonial site. These house utensils, among others, include *eeboo* (spear), *dhagaraa* (axes), *qeesa* (chisel for boring hole in wood), *aadaa* (knife), *kolba* (horn) and other important materials for the ritual practice. The elder who is experienced in making prayers in such occasions/ incidence, kneels down on the ground. The elders and neighbors make the reconciliation prayers to the supernatural power (*waaqaa*) using the following prayers words.

> '*Yaa rabbi yaa goofaa kan kana goote/ siin beekaa siif bagaa!* (three times)
> *Mee yaa waaqi balleessaa warra kanaa dhiisif itti araramii, ilaa yaa waaqi*
> *nyaataa fayyaa siif maqaan araraa kee buusif, beyyaa kanaafis ararami*'.
> Oh God, lord, you know why you did that, any thing you did is welcome.'
> May you put your mercy on the victim, he, the victim and we all are under
> your control, under your supervision; May you put your mercy on his family,
> wealth and health'.

During the reconciliation/or the diagnosis ritual processes, girls and boys attend the ritual ceremony. However, they are instructed to dress unusually, or oddly, i. e., they exchange clothes. In other words, the girl puts on boy's clothes whereas the boy puts on the girl's clothes. This is believed to have reversed the anger of God. A boy and a girl are teamed together as if they were a pair of oxen, for it is further believed that teaming unsinful

children while begging the forgiveness of *wanapa* would calm down God's anger. The prayer takes the form of sacrifice and other material concessions. The attempt is to remove the causes of disorders and to relieve their symptoms. In other words, its function is to restore the disturbed relationships between the household and the supernatural. The begging or reconciliation ritual takes place in public, for it is considered as the concern of the whole community. The value of these public rituals is to visibly restore harmonious relationships between man and his neighbors and the deities in a word between man and supernatural world.

CHAPTER SIX

6. MAJOR PROBLEMS AND THE COPING STRATEGIES OF THE COMMUNITY

6.1. Shortage of Grazing Land and Declining of Livestock Production

The study results show that an increase in population has had additional pressure on the limited natural resources. This holds true particularly with the reduction in the average area of arable and grazing land. This limited amount of land allocated for grazing per household has severely affected securing or producing adequate forage among the study community. This has in turn, significantly contributed to the decline of the livestock population. According to the result of households' survey, out of the land use type, only 17.7 percent (Table 3) of land was allocated for grazing land. Even then, it is found to be poor for grazing. Moreover, the research result revealed that prior to the Ethiopian Revolution of 1974/75 on average a household used to keep ten to fifteen cattle and quite a number of small stock, while at present, rich, middle, and poor households on average own, nine, six, and one cattle respectively. This has had a negative impact on manure and ***enset*** production and availability of draught animals and human nutrition. Inorganic matters cannot easily replace the multiple purposes of livestock, since the community is not used to inorganic fertilizers for *enset* cultivation system. In this regard, it is questionable whether households depending upon *enset* cultivation will be able to maintain the sustainability of the farming system if livestock production is as critical to the system as it is believed to be.

6.2. Some Constraints in the *Enset* Cultivation System

Little attention has been given to the cultivation and utilization of ***enset***, post-harvest processing of *enset* to produce *dhangaa*, *amicho*, *ammichoo*, fiber, etc., which overburdens women. The problem exacerbated by the use of traditional tools and equipment in the process.

Furthermore, it is difficult to transport the main ***enset*** products, such as *dhangaa* and *amicho* from home to distant market places due to their high moisture content. Therefore, the heavy load and lack of marketing infrastructure (such as transportation) have negatively affected the farmers' attempts to transport their products to areas of consumption.

Moreover, the results of this study show that there are numerous diseases that have been attacking *enset* plants, such as bacterial wilt, insects, *dimpogra* (which attacks the inner or shoots of the *enset*, and retards its growth), *xarora* (that attacks ***enset*** corm) and ***enset*** sheath further rots them. Furthermore, wild animals such as *dhukkee* (porcupine), *tuqaa* (mole rat), *worldigeraa* (wild pig) also attack ***enset*** plantation. The damage that diseases can cause and the lack of knowledge about them or implementation of preventive strategies contribute to the severity of the problems in the study community. Bacteria wilt is one of the greatest impediments in the *enset* cultivation system. It has resulted in huge loss of the farmers' several years of labor, and capital investment for the production. For instance, the study results revealed that these major ***enset*** diseases have affected about 50 percent of the households' ***enset*** plantations.

Furthermore, on my visit to a farmer's previous ***enset*** field, I was able to see almost all the mature and small ***enset*** plants have been destroyed by such diseases, and the area smelled smelly. It was also surprising to witness that the neighboring farmers' ***enset*** plantations were unaffected by such destruction. However, such special cases need further investigation; there are some factors that enabled these plantations to survive the destruction. Among other things, these factors include the location, the vicinity of farm fields of each household from each other, the existence of road between the households and the fencing structure. However, this problem is not yet addressed by any concerning party or organization.

6.3. The Local Response to the Prevailing Socio-Economic Problems

6.3.1. Varied Resource Conservation Practices and Local Knowledge

The environmental degradation and other problems that have affected climatic conditions are assumed to be caused by population growth, increase in demand for agricultural land and energy without concomitant increase in economic performance. The government's failure to familiarize people in the area with land management practice, the current land tenure policy in place, in terms of sustainable agricultural production, among others, believed to have negatively affected the livelihood of the study community. However, at present, it seems that farmers to some extent have understood the some causes of the environmental problems and adopted different coping strategies. In this regard, they have resorted to practice different methods to increasing land fertility, for which the long-lived ***enset*** cultivation system is a live example.

Farmers have a wide knowledge in the areas of crop varieties. They have developed strategies to preserve diversities of crops and genetic materials. They have also developed land races/variety crops, which utilize locally accessible resources and help manage farming systems. Sometimes beans and peas, other crops mixtures- *xamajaa, luppa'aa, wageexamma* (a type of barely) are grown together in small amount, often around the homestead, in the *enset* garden/field. This also enables crops to adapt to specific environments and conditions of stress, as indicated earlier.

Farmers have identified and given indigenous names to some crops, such as ***enset*** varieties. For instance, they have identified seven varieties of ***enset*** plants through observation and hands on. The identification also taken into account the color, length of maturity, height, and length, width of both midrib and pseudostems. These ***enset*** varieties have different colors, ranging from red, deep red, black, black purple, yellowish green to brownish with yellow green on both their midribs and pseudostems (Table 6).

6.3.2. Some Adopted Measures In The Face of Shortage of Manure Supply

The Gimbi Oromo grow a mixture of crops according to elevation, but they still live on enset, as their basic staple crop. The farmers also make extensive use of manure and crop rotation in order to exploit the same agricultural plots indefinitely, due to the shortage of farmland. They use manure for improving production, one of the practices frequented in traditional farming system among the Oromo community in Gimbi. Though manure plays a very important role in maintaining soil fertility, at present, it is too expensive to be used in the face of decreasing livestock.

On the other hand, farmers reported that due to high price of fertilizers and its unproductive nature, they began to grow flax seeds as means of generating income. They further noted that the rising trends of the price of fertilizers is not tolerable and has led some of the farmers to reduce the use of modern inputs. Some of the farmers have been complaining that modern inputs have had drastic effects on both the fertility of land and their agricultural productivity. Furthermore, these farmers have found out that organic technology is safe and easy to use it. Tsegaw (informant) is one of those farmers engaged in producing organic fertilizer. He uses crop residues, green plants, dung and ashes, leaves and midribs of ***enset*** for mulching system and other residual materials for organic manure production. The mixture of the collected material put in layers, underground with much water added is used for proper decomposition purposes. Farmers found the organic manure more reliable than chemical fertilizers in many ways, though the preparation of compost requires devotion and hard work. Due to the continuous increase of the price of fertilizers, some people advocate for the superiority of organic fertilizers.

6.3.3. Livestock Raising Management

As discussed in the review section, livestock play a vital role in the agricultural systems, especially in *enset* cultivation system. It also appears to be an important source of income, diet, and manure for proper cultivation of ***enset***, among the study community. Even though manure plays major role in *enset* cultivation, at present, livestock production is decreasing in an unprecedented manner, putting at risk the cultivation of ***enset*** in the area. It is learnt from the study that the number of livestock a household owns has been declining for quite sometime now. This is mainly attributed to decreasing plots of farm and grazing land,

deforestation, land degradation and soil erosion, etc. A decrease in the amount of land allocated for grazing, the existing land tenure system, increased demands for cultivated land as a result of population pressure and so on have more than ever been endangering the role of livestock in both *enset* cultivation and livelihood of the people. The ***enset*** plant requires considerable manuring at each stage of the growth cycle, thus, farmers try to always combine *enset* cultivation with a reasonable amount of livestock raising.

Farmers reported that in the past, there were both sizable communal and individual pastureland, which helped households to own a large number of livestock, compared to the present status. To address this acute problem, some of the Gimbii Oromo farmers have started taking strict measures. In this vein, some of them reportedly reduced their cereal cropland for grazing to secure their family's food through the cultivation of ***enset*** on small plots of land.

Among other things, some farmers have begun keeping some of their cattle around homestead. They are often tethered and grazed in the front yard. They are fed crop residues, grass and *enset* leaves, especially, during dry season. Still other farmers have started producing forage feed from special trees adopted from their neighboring areas. Some farmers started dwelling on the sale and share ownership arrangements of cattle. Furthermore, farmers use their oxen for a few years, fatten them, and sell them when price is high. Such continuous turn over also generate incomes and save plant residue.

6.3.4. Knowledge in the Areas of *Enset* Harvesting, Fermentation and *Enset* Disease Prevention

As indicated earlier, the Gimbi Oromo women have a considerable knowledge in ***enset*** harvesting, processing, and fermenting procedures. ***Enset*** fermentation requires women's special knowledge, particularly, in the application of starter. It is noteworthy that ***enset*** fermentation does not take place without a starter among the Gimbi Oromo community. Only a few women have the knowledge of the starter (***fireé-gammaa***). Before they start harvesting ***enset***, women buy the starter from herbalists, both in cash and kind. The herbalists (informant Workitu) explained that *fireé-gammaa* is prepared from almost more than 20 different herbs and some leaves of tree plants, which include the leaves and roots of different herbs. During the fieldwork, this informant showed me the herbal plants (plate 3). The collected herb plants and the pulp, the cut-off bottom part of inflorescence are chopped into fine pieces and covered with ***enset*** leaves and leaf sheaths to prevent the entrances of air. They are then kept underground for about one to three weeks until the arrival of clients.

On the other hand, there are some traditional preventive measures that have been taken by farmers in the case ***enset*** diseases: removing of the infected ***enset*** plants from the ***enset*** field and planting disease resistant ones among others, since there is no modern medicine in place.

Moreover, it is important to remark that farmers have also understood that bacterial wilt can be infected by the ***enset*** planting and cultivation materials, (during leaf cutting, for example). These materials include *aadee* (knife), and such processing tools- as *jaafigaa*

(serrated sharp edge wooden tool), *waanawi* (wood plunk), and so on. As a result, some farmers reported that they are not interested to lend their production tools to their fellow farmer to prevent possible contamination.

CHAPTER SEVEN

SUMMARY AND CONCLUSIONS

SUMMARY

The Gimbii Oromo are part of the Oromo communities found in Ambo District of West Shewa zone. The district is the least studied area, which inspired this study. This thesis has therefore sought to describe and investigate the complex farming systems of ***enset*** vis-à-vis that of farmers' indigenous knowledge, the socio-cultural and economic significance of *enset ventricosum*, otherwise known as the false banana.

The household unit is the basis of production and consumption among the Gimbii Oromo. The clan and sub-clan relations are loosely organized among the Gimbi Oromo social structure, however, rules of descents are patrilineal and residence is patrilocal. All clans, lineages, and sub lineages trace their genealogies to common ancestor, Mecha. The lineage principle is secondary, losing its importance as a field of social action due to some reasonable factors. Thus, the importance of traditional political organization, the gada system, is not evident in the study area. Rather, the traditional mutual associations such as *mooddi (iddir), golobee* (less than *iddir), iqqub*, etc play significant role in the socio-economic lives of the community. The major functions of these social gatherings and associations include distributing lump sum of cash to the members, giving the necessary aid and assistance to people, working party, and religious fraternity. Furthermore, they also enhance and intensify social relationships and harmony within the community and thereby serve as a means for filling the gap in the social relation that was created by the incorporation of the long-cherished traditional social organization into the alien culture.

Through experience and their every day life, people have understood their interdependence in their subsistence life.

Among the different forms of marriage in the study area, *keewwataa* (betrothal) is the prominent one practiced by the community very often. Marriage is exogamy and lineage is the unit of exogamy, where as endogamous marriage is prohibited. The boy's family takes the responsibility of such marriage arrangements, which involve observing certain traditional norms. Land was communal property before the incorporation of the area. However, it was confiscated from the people and apportioned among the monarchy of feudal lords and their followers through different types of land tenure arrangements. Religion constantly interacts with other cultural institutions in their daily life and hence manifests itself as one of the important aspects of culture. The community under study practices two forms of religion. These are traditional Oromo religion (*waaqeffannaa*), which is monotheist on the one hand, and Orthodox Christianity and Protestantism on the other.

The Oromo farmers in Gimbii have their own cultural rhythms of farming and rituals geared to managing their agro-ecological systems as means of survival strategies. They are among those *enset*-producing people, who have developed the practices and methods of ***enset*** cultivation, harvesting, and processing for longer periods. ***Enset*** is the staple food of the community, though farmers also practice mixed farming systems. The ***enset*** plant is commonly cultivated vegetatively, through continuous replanting cycles and many more steps. Suckers are produced from four-year-old immature plant (***iyyibaa***), mainly during the dry season. Usually suckers and other small plants are planted around the houses, since such plants need close supervisions (weeding and pruning) and more manure on continuous

bases. In addition, they can easily be manured economically by women and children. Labor is one of the factors of production that plays a significant role in the ***enset*** cultivation system and harvesting procedures, as such the tedious and diverse activities are rather labor intensive and necessitate massive labor organization. The traditional digging stick and the burdensome work involved in the ***enset*** cultivation system, forced the majority of the households to seek additional labor outside the family. This additional labor is required for both *enset* cultivation and harvesting purposes. Wage labor, *daboo* and *daadoo* are the major labor arrangements noteworthy. Often, resourceful households use all types of labor parties; whereas the poor ones offer their labor for wage both in cash and in kind and supplement their family's food requirements.

As regards to division of labor, women often carry out the most tedious physical activities apart from the biological reproduction. Intertwining of mats (*jibbaa*), milling, *enset* manuring, and harvesting, processing, and preparing food are merely done by women. They on the other hand dominate in areas of ***enset*** marketing and regulate the supply of *dhangaa* on sustainable bases. Land preparation, propagation, and transplantation are the domain of men.

Using a wealth ranking criteria, the sample households were categorized into rich, middle and poor. The quantity and variety of ***enset*** plants are used as a key factor for measuring the economic resources of households. The findings of the study reveal that all subjects in the study area are predominantly ***enset*** growing, though there are differences among the wealthier, middle, and poor households. They have been self-sufficient in food crops, especially, *enset* cultivation. It could be argued that almost all households secure their food

and livelihood through the *enset* cultivation systems. ***Enset*** is harvested at its mature stage, because farmers preferred to obtain more quantity and quality food. The gross return per unit area, whether in money or food energy, is high. For instance, it appears among poor households that about 0.18 hectare of land is available for ***enset*** with the average amount of 100 *enset* plants in their field.

Thus, it was learnt that they have never experienced drought and famine, unlike those in other parts of the country. ***Enset*** secured the lives of non-***enset*** producers, especially lowlanders, during the 1985 famine. Since the surrounding lowlanders are not still food self-sufficient, they have sustained their relationships with Gimbii Oromo through food supply and other social relations. The two communities have initially begun their interactions through mere exchanges of food crops particularly, ***enset***, which eventually developed into mutual reciprocal relationships. This has created a good opportunity to form sustainable social bondage among highlanders and lowlanders. That is ***enset*** is rich with starch and carbohydrate, and able to sustain the densely populated area better than any other crops. There are two main *enset* products, locally called *dhangaa* (kocho) and *amxixii* (bulla). There are also different dishes prepared from *dhangaa*. *Ollataa, unkuroo ollataa, qummusii* and *ammicheo* are among others. The fermented *dhangaa* is grated and purified to be stored in well-prepared pit underground for about two to three years, in its edible form. Through proper food processing and better cooking methods, the community increases the sustainability of *enset* foods. This is one of the methods of preservation of local foods, that is, varieties of dishes are prepared from ***dhangaa*** in special form. ***Enset*** also provides financial security to the households, since it can be sold both at its halt and in purified forms. *Enset* has multiple purposes other than being a staple food. Its different parts and by-

products are used as animal forage, wrapping material, construction material, firewood, exchange for household utensils, mulching, compost, and medicine.

Enset plant by its nature prevents erosion and environmental degradation, through its leaves and mulch. The removed parts (pruned and slashed parts), often are left in the ***enset*** field for compost purposes/mulching.

There are major cultural practices and beliefs associated with the ***enset*** cultivation systems: the observances of taint days, the prohibition of women to enter into the ***enset*** field either for harvesting or for fermenting during their menstrual period, among others. On the other hand, when lightning strikes the ***enset*** plants, it is believed that God is angry with those who have done something wrong. Thus, its curing or reconciliation methods, in the form of sacrifice and other material concessions, are intended to uproot the causes of disorders and relieve their symptoms. Big ***enset*** around the house is a manifestation of the homestead's *ayyaanaa* (divinity or spirit) and it is perceived as a ritual symbol representing many things concurrently. For example, the healing ritual is practiced by women representing ***enset*** as symbol, when she performs the splashing ritual ceremony for the well-being of her wealth and health of family.

Livestock rearing is complementary enterprise for continuous supply of manure meant to maintain soil fertility, for proper ***enset*** cultivation and better harvest. The Gimbii Oromo also consider livestock as status symbol and a reserve capital in time of crisis. Livestock production and its by-products play a significant role in the socio-economic life of the study community. The ***enset*** cultivation system and livestock rearing are enter-twined. However,

the decreasing trend in grazing land has become a challenge to livestock and manure production. At present, livestock production system is under considerable stress; there is a sharp decline in the number and types of livestock owned by farmers on a household basis.

The effects of successive stages such as deforestation for firewood, timber production, soil erosion, and so on that stemmed from indiscriminate human interference in the natural ecological balance seem to have had serious adverse ecological consequences. The environmental degradation, particularly the deforestation is one of the major disturbing threats to the sustainability of the natural eco-system in the study area. These and other factors might play substantial roles in reducing the survival possibilities of the ***enset*** cultivation. However, local people generally employ diversities of adaptive strategies in order to survive as manifested through different areas of indigenous knowledge system. In this regard, farmers have understood the root causes of the socio-economic problems and hence adopted different mechanisms.

a) Agricultural calendar- time schedules have been worked out for all types of production and other activities.

b) Resource management to improve soil fertility through organic manure technology (mulching and compost preparation). Farmers have also understood the importance of the extensive use of organic manure for improving production, due to the declining trends in livestock production and high price of fertilizers.

c) Livestock management-(tethering animals around homesteads, and fattening), adoption of forage production.

d) Health enhancing rites (ethno-medicine)

e) ***Enset*** cultivation methods and techniques, food harvesting, fermenting (herbal medicine-producing starter) and storing

f) Planting disease resistant varieties of ***enset***, taking care of their ***enset*** cultivation tools from contamination and destroying the infected ***enset*** plants are among others.

CONCLUSION

The ***enset***-based farming system has integrated the agricultural, ecological, social, and economic components. Despite the pervasiveness of the socio-economic problems, the study people have managed to produce ***enset*** as a staple food, to support a large family on a limited area of land (even though land is very scarce). Usually small plots of land are allocated for ***enset*** plants meant for securing the household food. By cultivating and maintaining ***enset*** diversity, subsistence farmers in the study area have secured food self-sufficiency. Although all people have ***enset*** dominated farming systems, there is variation in terms of wealth among the study households.

This study further reveals that the ***enset*** plantation remains in the same place for as long as 40 years, except in some cases, where it is used as one of food storing mechanisms geared to food sustainability. That is, once the cycle is well established, it is possible to have sustainable yield, since it can be harvested throughout the year indefinitely and stored systematically. Moreover, growing ***enset*** in quantity and variety is one of the major criterions for status differentiation among the household of the study area, which is believed to have encouraged the households to maintain ***enset***-based farming system on sustainable fashion, since farmers are proud of their massive ***enset*** plantation around their homesteads.

It could be argued from the results of the study that the mulching practices and compost matter production are compensating for manure supply, since it is capable of highly maintaining and enriching soil fertility and serving as shade. It also protects slopes against

serious erosion as observed during the field study. The prolonged presence of a closed canopy has an ecological advantage similar to that of forest.

This study also reveals that female households often do the most tedious physical tasks (e.g., *enset* manuring, harvesting, processing, and food preparation). Moreover, women play very active role in such areas of storing, managing ***dhangaa*** food, small transactions of both *enset* and grain, the quantity, and quality of ***enset*** harvesting and its consumption patterns.

Furthermore, women, in general, benefit from the sale of ***dhangaa*** more than men do, as they can sell it to cater for the demand of their family both in small and large amount. It was found out that women do not ask their husbands money for mundane house expenditure, since they can generate enough income from such sales.

The intensive cultivation of ***enset*** is explained by its relation with socio- cultural and economic activities of the study community. It has become evident from the study that the *enset* cultivation system cannot be understood without taking into account the socio-cultural situation of the study community, since the general worldview of Gimbii Oromo is expressed in a wealth of rituals. These diverse cultural practices are depictive of the socio-cultural functions in the ***enset*** production system, which have been existed between the *enset* producing community and ***enset***-based farming system.

It is also noteworthy that the food sharing and food exchange experiences have remarkably shaped the wider communication network and social relations between communities. Thus, it could be concluded from the living situations that the material side of the transaction seems

repressed by the social one. Furthermore, it can be deduced from the existing realities that the vulnerability to food shortage can be addressed by instituting continuous sharing of food between the two communities.

The traditional labor organizations (*marraa, daadoo*, and *xibeenaa* work parties) have lasting effects on the ***enset*** cultivation and processing systems through pooling the required labor. These social organizations are also sources of strength for households both during happiness and during strain. They enhance social relations, establish friendship, play the role of socialization, and serve as means of recreation during social gatherings. Mobilizing and instituting labor on smallholdings with relatively low energy technology could be credited to the ***enset*** farming system.

It is also learnt that as ***enset*** is a staple food, its production per hectare at any time in the year or across the years is eminent. The high quantity yield of ***enset*** food from small plots of land makes the ***enset*** cultivation system special, complex, and in fact cherished in the lives of the subject, under study. Thus, this seeks considerable attention from researchers, policy makers and other pertinent bodies.

With population explosion, land degradation, scarcity of both farm and grazing land (severe constraints in getting or producing adequate forage) , decline of livestock raising (reduction manure production) ***enset*** diseases have been eroding their capacity to sustain their lives. This is likely to affect ***enset*** production and availability of draught animals and human nutrition. This in turn casts doubts on the households' dependability upon ***enset*** cultivation and their ability to maintain the ***enset*** -farming system on sustainable fashion.

Traditionally, farmers are considered ignorant of the process of environmental degradation and factors responsible for ecological destruction. However, some studies have pointed that for many years, local peoples around the world have been able to use knowledge of their local environment to sustain their lives and to maintain their cultural identity. This also holds true for the subjects under study. Accordingly, it has been found out that the local knowledge of the Gimbii Oromo is an important resource for the development of sustainable agriculture and conservation of genetic materials. They have developed diversities of adaptive strategies as manifested through different areas of local knowledge as indicated in the summary part of this paper and these are depictive of the Gimbii Oromo farmers' adaptive skills in the face of scarce resources, even though, there are still a lot of problems that remain unsolved. In spite of this wealth of knowledge, however, studies are not conducted on the ***enset*** diseases, its cultivation techniques, especially on the development of improved ***enset*** harvesting and processing devices, and their application, which geared to lessening women's back breaking and tedious activities in both the ***enset*** cultivation and harvesting processes, among other things.

Therefore, issues/problems pertaining to ***enset*** cultivation system (local knowledge) and its utilization in general, and ***enset*** diseases in particular remained to be the agenda for the government and both local and foreign researchers. The knowledge of natural resource conservation and utilization in ***enset*** cultivation system is believed to greatly contributes in the area of food and financial security in a sustainable manner. Unless such traditional endeavors are sustained and considered, the significant role that ***enset*** plays in food, financial security and environmental development may be at stake. That is, to promote the ***enset*** cultivation system in a sustainable manner, the socio-cultural practices, and the local

knowledge should be integrated, guaranteed and as well as recognized in relation to modern development endeavors.

Generally, the government, policy makers, and pertinent scholars should give due consideration to the indigenous crop plants in the country. This is because the ***enset*** producing people, including the Gimbi Oromo community have hardly suffered from famine, even during the tragic drought and famine prone.

Moreover, it should be noted that these people have considerable and rational forms of knowledge for producing ***enset*** on sustainable basis. This can obviously guide policy makers and researchers to undertake research on the ***enset*** cultivation system based on the agro-ecologically suitable areas and socio-economic factors, which have potential influences on its wide spread existence on persistent basis and increase ***enset*** production and ensure food security.

Bibliography

Admasu Tsegaye. 2001. **On Indigenous Production, Genetic Diversity, and Crop Ecology of *Enset***. (Ph.D Thesis). The Netherlands.

Asmarom Legesse. 2000. **Oromo Democracy: An Indigenous African Political System**. Asmera. The Red Sea Inc.

Baxter, P.T.W., Jan Haltin and Alessandro Triulzi, eds. 1996. **Being and Becoming Oromo. Historical and Anthropological Enquires**. Uppsala Nordiska Afrikainstitutet: The Red Sea Press.

Bekure Woldesemait and Kashi N. Singh, eds. 1996. **Population, Sustainable use of Natural Resources and Development in Ethiopia: Proceedings of the First Annual Conference**. Addis Ababa: Association of Ethiopian Geographers.

Brandt, Steven A. 1997. "The Evolution of *Enset* Farming". In Fukui Katsuyoshi, Eisei Kurimoto and Masayoshi Shigeta, eds. **Ethiopia in Broader Perspective: Papers of 13th International Conference of Ethiopian Studies**, Vol. III, PP. 843-848. Kyoto: Shokado Book Sellers.

_____ 1996. "A model for the Origin and Evolution of *enset* food production." In Tsedeke Abate et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceedings from the International Workshop on *Enset***, p.36. Addis Ababa: Institute of Agricultural Research.

Brant, Steven. A. et al, (eds.). 1997. The "Tree against Hunger." ***Enset*- Based Agricultural System in Ethiopia**. American Association for the Advancement of Science.

Bartels, Lambert. 1990. **Oromo Religion**. Berlin: Dietrich Reimer.

_____. 1983. **Oromo Religion: Myths and Rites of the Western Oromo of Ethiopia. An attempt to Understand**. Berlin: Dietrich Reimer Verlag.

Bruce, James. 1790. **Travels to Discover the Source of the Nile**. Edinbugh. Vol.V.

Cres well, John W. 1994. **Research Design: Quantitative and Qualitative Approaches**. Thousand Oaks. London: Sage Publication.

Desalegn, Rahmato. 1994. **Land Tenure and Land Policy in Ethiopia after the Derg: Proceeding of the Second Workshop of the Land Tenure Project**. Land Tenure Project. Addis Ababa University: Institute of Development Research.

Ehret, C.1979. "On Antiquity of Agriculture in Ethiopia," pp. 161-177. Journal of African History, 20.

Ellis, Frank. 1988. **Peasant Economics: Farm Households and Agrarian Development**. New York: Cambridge University Press.

Endashaw, Bekele (1997). "Historical and Biological Accounts of Ethiopia's Unique Position in the Domestication and Utilization of Plant Genetic Resources: Ethiopia's Gift to the World." In Fukui Katsuyoshi, Eisei Kurimoto and Masayoshi Shigeta, eds. **Ethiopia in Broader Perspective: Papers of the 13th International Conference of Ethiopian Studies**, pp. 775 –776. Kyoto: Shokado Book Sellers.

Etkin N.L. and Ross P.J. (eds.). 1982. "Food as Medicine and Medicine as Food: An Adaptive Frame Work for the Interpretation of Plant Utilization among the Hausa of Northern Nigeria." In Helman, ed. **Culture, Health, and Illness: An Introduction for Health Professionals**, P.29.Worcester: Billing Sons Limited.

Fisseha Bagasha. 1996. "Population, Sustainable use of agricultural land and development in Ethiopia". In Bekure Woldesemait and Kashi N.Singh,eds. **Population, Sustainable use of Natural Resources and Development in Ethiopia: Proceedings of the First Annual Conference,** pp. 91-112. Addis Ababa: Association of Ethiopian Geographers.

Fukui, Katsuyoshi, Eisei Kurimoto and Masayoshie Shigeta (eds).1997. **Ethiopia in Broader Perspective: Papers of the 13th International Conference of Ethiopian Studies,** Addis Ababa, Vol. III. Kyoto: Shokado Book Sellers.

Fox, Robin. 1967. **Kinship and Marriage**. Great Britain: Hazell Watson Limited.

Gebre Yntiso. 1996. "Economic and Social Significance of *Enset* among the Ari of Southwest Ethiopia". In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture: Proceedings from the International Workshop on *Enset***, pp. 109-114. Addis Ababa: Institute of Agricultural Research.

Haile-Yesus. 1996." Increasing Population Pressure and Misuse of Natural Resources": Problems of the Highlands of Oromia Region." In Bekure, eds. **Population, Sustainable use of Natural Resources and development in Ethiopia: Proceedings of the First Annual Conference**, P.152. Addis Ababa: Association of Ethiopian Geographers.

Helman, Cecil. 1984. **Culture, Health, and Illness: An Introduction for Health Professionals.** Worcester: Billing Sons Limited.

Hyden, G. 1980. "Beyond Ujamaa in Tanzania". In Ellis, ed. **Farm Households and Agrarian Development: Underdevelopment and An uncaptured Peasantry**, P.10. New York: Cambridge University Press.

Knutsson, Karl Eric. 1967. **Authority and Change: A Study of the Kallu Institution**

among the Macha 'Galla' of Ethiopia. Goteborg: Etnografiska Museet.

Levinson, David, and Melvin Ember (eds.). 1996. **Encyclopedia of Cultural Anthropology**, Vol. III. New York: Henry Holt and Company.

Lewis, Herberts. 1970. "Wealth, Influence and Prestige among the Shoa Galla," A. Tuden and L. Plotnicor (eds.). **Social Stratification in Africa**. New York: The Free Press.

Malefijt, Annmarie De Waal 1968. **Religion and Culture: An Introduction to Anthropology of Religion,** Pp. 2-3, 145. London: Collier-Macmillan Limited.

McCabe, J. Terrence, and Sung A. Lee, (eds.). 1997. "The Role of Livestock in the *Enset* Cultivation System". In Fukui Katuyoshi, Eisei Kurimoto and Masayoshi Shigeta, eds. **Ethiopia in Broader Perspective: Papers of the 13th International Conference of Ethiopian Studies**, Addis Ababa, Vol. III, P. 813. Kyoto: Shokado Book Sellers.

_____1996. "The ecological and cultural significance of livestock in the ***Enset*** Agricultural Complex". In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceedings from the International Workshop on *Enset***. Addis Ababa: Institute of Agricultural Research.

Miller, Friedrich Max. 1870. "Lectures on the Science of Language". In Malefijt, Annmarie De Waal, ed. **Religion and Culture: An Introduction to Anthropology of Religion**, P 173. London: Collier-Macmillan Limited.

Ministry of Agriculture. 1977. **Land Utilization and Crop Production Survey 1976-1977**, Vol. I. Addis Ababa.

Mohammed, Hassen. 1990. The Oromo of Ethiopia: A History 1570-1860.

Cambridge University Press.

Mulugeta Diro, Bezuayehu Haile and Endale Tabogie (eds.). 1996. "*Enset* Propagation, Research Review". In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceedings from the International Workshop on *Enset***, P.243. Addis Ababa: Institute of Agricultural research.

Netting, Robert McC. 1968. **Hill Farmers of Nigeria: Cultural Economy of the Kofyar of the Jos Plateau**. University of Washington press.

Oromia Planning and Economic Development (OPEDB). 2000. **Physical and Socio-Economic Profiles of 180 Districts of Oromia Region**. Finffinne, March 2000.

Parkhurst, A. 1996. "Social Consequences of *Enset* Production". In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceedings from the International Workshop on *Enset***, P. 73. Addis Ababa: Institute of Agricultural Research.

Plattner, Stuart. 1989. **Economic Anthropology**. California: Stanford University Press.

Pottier Johan. 1984. **Food System in Central and Southern Africa**. London: School of Oriental and African Studies University of London WCIE.

Robertson, A. F. 1991. **Beyond the Family: The Social Organization of Human reproduction**. Pp. 8-27. UK, Cambridge Cb2 1ur: Polity Press.

Sahlins, Marshall. 1972. **Stone Age Economics**. New York: Aldine de Guyer.

Shack, W.A.1966. **The Gurage: A People of *Enset* Culture**: London: Oxford University Press.

Shank, Robert And Chernet Ertiro (eds.). 1996. **A Linear Model for Predicting *Enset* Plant Yield and Assessment of Kocho Production in Ethiopia**. For World Food Program. Ministry of Agriculture. Southern Nations, Nationalities,

Peoples' Regional State, UNDP Emergencies Unit for Ethiopia. Addis Ababa.

Spring, A. 1995b. **A Appraisal of Environmental Contaminants in the Lower Black River Morass, Jamaica**. Maimi North-South Center.

_____ 1996. "Gender Issues and Farming Systems, Research and Extension in *Enset* Agriculture," In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceedings from the International Workshop on *Enset***, Pp.173-183. Addis Ababa: Institute of Agricultural Research.

_____ 1997. "An Appraisal of *enset* Farming systems among the Gurage, Hadiya, and Sidama in Southwest Ethiopia." In Fukui, Katsuyoshi., Eisei Kurimoto and Masayoshi Shigeta, eds. **Ethiopia in Broader Perspective: Paper of 13th International Conference of Ethiopian Studies**, pp.822-827. Addis Ababa: Institute of Agricultural Research.

Tsedeke, Abate et al, eds 1996. ***Enset*-Based Sustainable Agriculture in Ethiopia: Proceeding from International Workshop on Enset.** Addis Ababa: Institute of Agricultural Research.

Tibebu Habte-Wold, Stephen Sanford, and Heather Kindness, eds. 1996. "The Age and Sex Structure of *enset* plantation in North Omo." In Tsedeke et al, eds. **Enset-Based Sustainable Agriculture in Ethiopia: Proceeding from the International Workshop on Enset**, p. 149 Addis Ababa: Institute of Agricultural Research.

Vecchiato, Norbert. L. 1994. "Traditional Medicine." In Klos, ed. **The Ecology of Health and Disease in Ethiopia.** P. 157. West View Press.

Wolde Selassie Abate. 2000. "Nature, Culture, and Effects of Encroachment: Indigenous Resource Management of *Gamu* under Stress in *Metekel*, North Western Ethiopia." In Baye et al, eds. **Ethiopian Studies at the End of**

the Second Millennium: Proceedings of 14th International Conference of Ethiopian Studies, Vol. II, P. 1036. Addis Ababa University: Institute of Ethiopian Studies.

Workineh Kebessa. 2001. **Traditional Oromo Attitudes towards the Environment: An Argument for Environmentally Sound Development.** Social Science Research Report Series no 19. Addis Ababa: OSSREA.

Yohannes Uloro and K. Mengel (eds.). 1996. "Yield and yield Components of ***Enset*** with the application of mineral fertilizers of N, P and S". In Tsedeke et al, eds. ***Enset*-Based Sustainable Agriculture in Ethiopia: proceedings from the International Workshop on *Enset***, pp.276-279. Addis Ababa: Institute of Agricultural Research.

Zemede Asfaw 1997. **Indigenous African Food Crops and Useful Plants**, P.2. Nairobi: ICIPE Science Press.

Appendix 1 Local terms for months and days

No.	Days		Months	
	Local terms	English Equivalents	Local terms	English Equivalents
1	*Sanbata durua*	Saturday	*Fulbaana*	September
2	*Sanbata guddaa*	Sunday	*Onkololessa*	October
3	*Wiixata durua*	Monday	*Sadaasa*	November
4	*Wiixata boodaa*	Tuesday	*Muddee*	December
5	*Roobii*	Wednesday	*Amajjii(Furma)*	January
6	*Kamisii*	Thursday	*Guraandhala(Icoor)*	February
7	*Jimaata*	Friday	*Bitootessa*	March
8	.....	.....	*Ebla*	April
9	.....	.....	*Caamsaa*	May
10	.....	.....	*Waxabajji*	June
11	.....	.....	*Adoolessa*	July
12	.....	.....	*Hagayya*	August

Appendix II. Four years old *Enset* plant, ready to be transplanted in the Permanent *Enset* field

Appendix III. A woman uprooting *enset* plant to prepare for harvesting

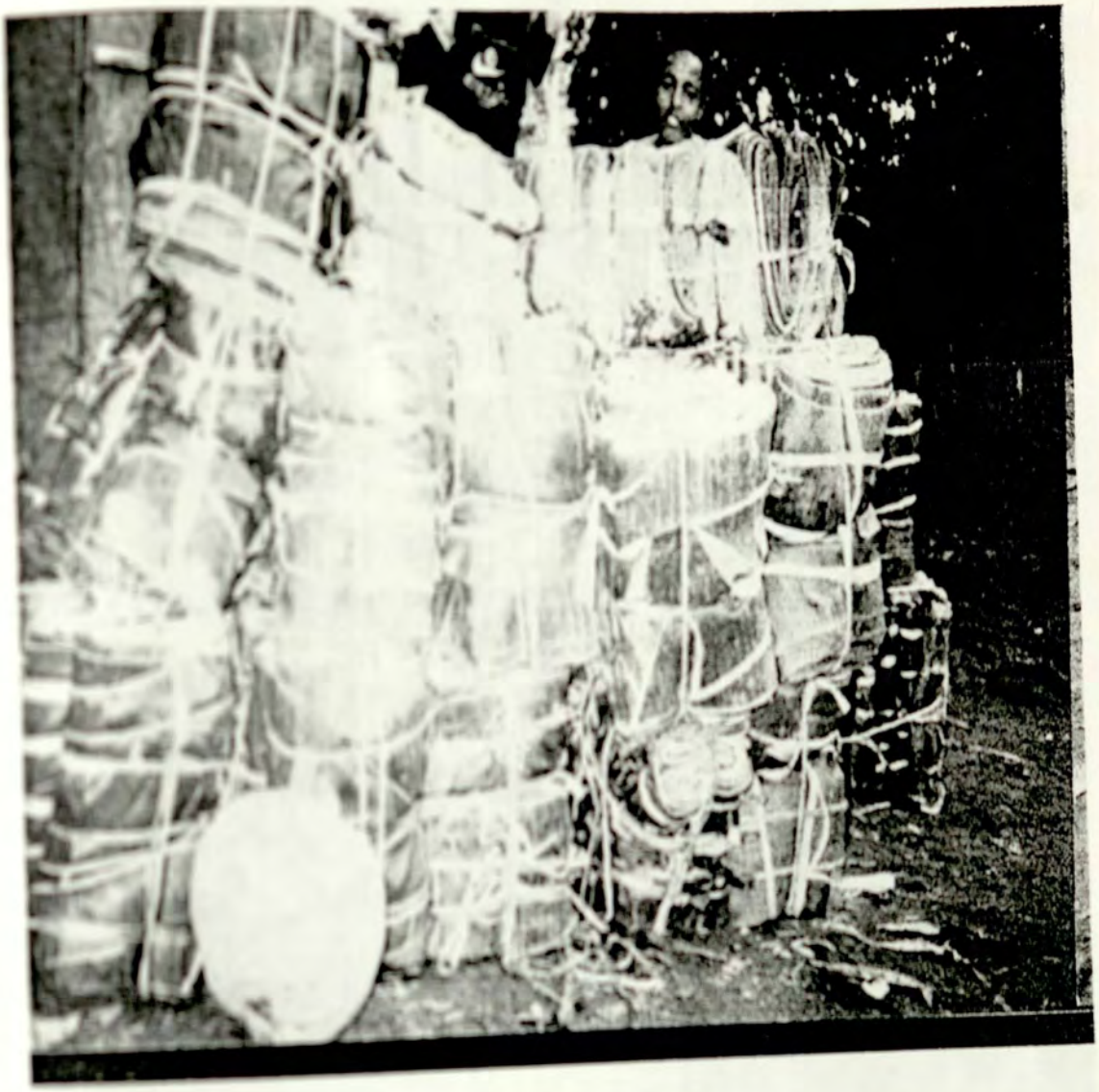
Appendix IV. Key informants during the Group Discussion

Appendix V. Traditional (Local) tools for ***enset*** harvesting: Serrated wooden tools, Scrapers made from Bamboo, Wooden plank, and Big knife

Appendix VI. Pit prepared from fresh liner midribs for storing newly harvested *Dhaincha*.

Appendix VII. Big ***enset*** plant around the household as a Symbolic representation of homestead's ***Ayyanaa*** (Divinity)

Appendix XI. Leave being sold at Guder market on the wholesale base



Appendix VIII. Bulk of ***Dhangaa***-(Horse Load or ***Jaambii***) is being sold at Guder market to traders from Addis Ababa

Appendix X. Women were selling ***Dhagaa*** at Guder market on Retail base

Appendix IX. *Jaambii-Dhangaa* (Horse-Load, may be 80-90kg) ready to be transported to Addis Ababa

Appendix IV. List of key informants

No	Name	Sex	Age	literacy
1	Diriba Hirkoo	Male	68	Basic
2	Fita Debela	Male	79	Illiterate
3	Negera Degefe	Male	65	Illiterate
4	Fufa Afto	Male	63	Illiterate
5	Yohannes Fufa	Male	34	Illiterate
6	Achelu Debela	Male	75	Basic
7	Dendena Fufa	Male	45	12 complete
8	Seya Angesha	Male	70	Basic
9	Dida Muleta	Male	60	Basic
10	Feyisa Dera	Male	55	Elementary
11	Chibsa Refu	Male	67	Basic
12	Feyera Gemechu	Male	30	12 complete
13	Tiezzu Akewek	Male	65	Basic
14	Kebede Arera	Male	32	11th grade
15	Legesse Akewak	Male	52	9th grade
16	Itenesh Megerssa	Female	45	Illiterate
17	Chela Muleta	Male	65	Illiterate
18	Werkitu Medekisa	Female	50	Illiterate
19	Werkitu Terefe	Female	65	Basic
20	Desii Weyesa	Female	67	Illiterate
21	Seyee Medekisa	Female	48	Illiterate

22	Merge Megersa	Female	38	Illiterate
23	Jorgoo Furgasa	Female	30	Illiterate
24	Giditu Muleta	Female	52	Illiterate
25	Dirribi Merera	Female	35	Illiterate
26	Cheru Chibsa	Male	33	9th grade
27	Ijeta Debela	Male	44	12th complete
28	Muleta Bulcha	Male	34	8th grade
29	Dendena Bayisa	Male	26	10th grade
30	Bedesa Dekisisa	Male	73	Basic
31	Wemboru Teremu	Male	76	Illiterate
32	Deba Hirpe	Male	66	Illiterate
33	Abebe Chemada	Male	28	8th grade
34	Bayisa Iticha	Male	35	12 complete

Declaration

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

Name: Kumela Fana

Signature:

Place and date of submission:

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