ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

TRADITIONAL PRODUCTION PRACTICES AND CHALLENGES OF THE PEASANTS OF TIGRAY WITH PARTICULAR EMPHASIS TO ADI SENAY AND ADI AMHARA LOCALITIES IN ADWA

BY
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TRADTIONAL PRODUCTION PRACTICES AND CHALLENGES OF THE PEASANTS OF TIGRAY WITH PARTICULAR EMPHASIS TO ADI-SENAY AND ADI-AMHARA LOCALITIES IN ADWA

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN SOCIAL ANTHROPOLOGY

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GLOSSARY

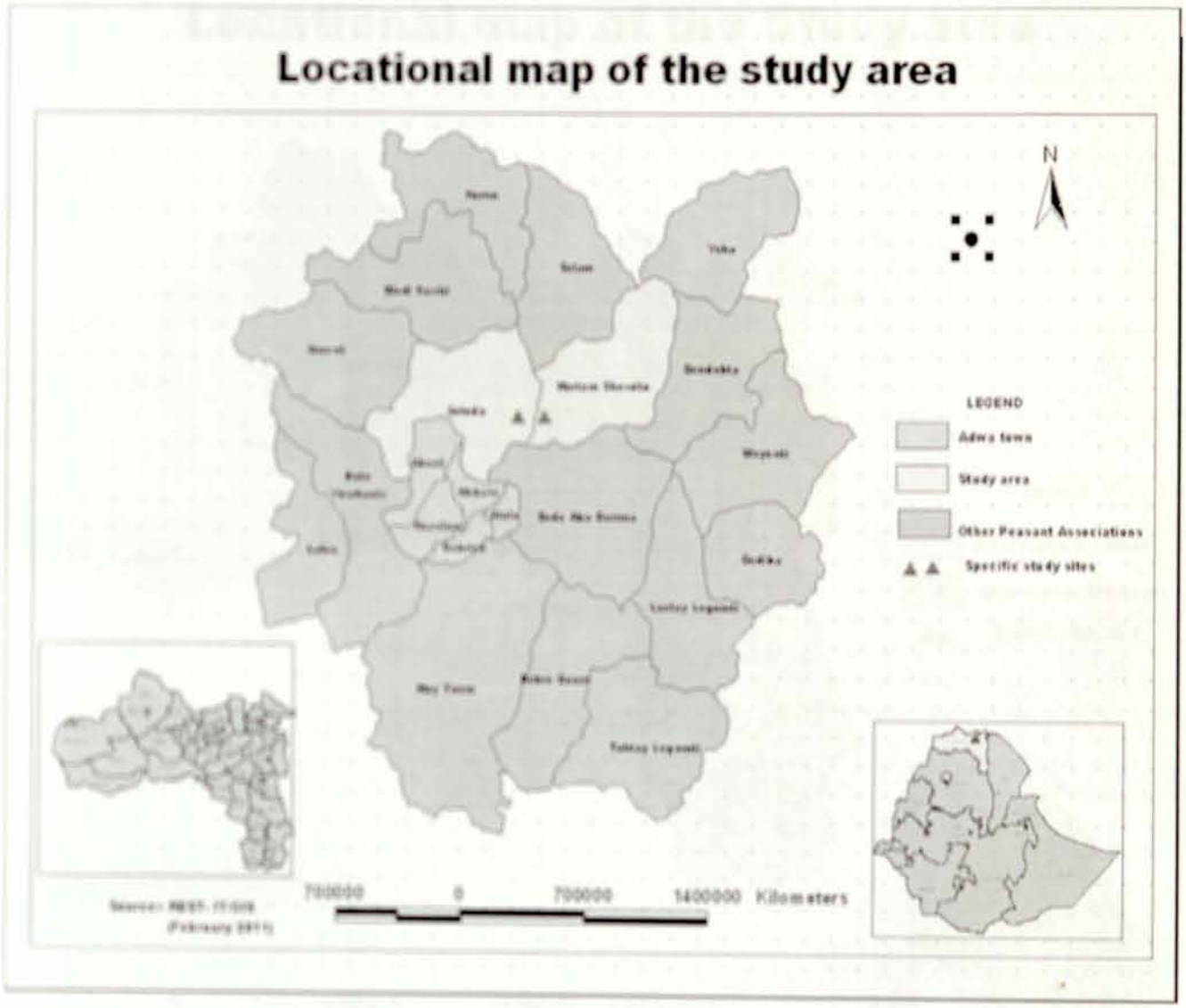
Abish	**shiro** with more pepper powder
Agoza	mat from skin of sheep
Alke	an evergreen tree
Atsid	harvesting
Aynet miwtsae	traditional ritual that enables shy children become sociable
Azmera	time starting from May to June
Berek	white soil that serves for smearing wall
Besero	lazy
Birzi	traditional drink from honey
Chiguraf	rope serving as a prod to drive animals
Degeberi	small gate at the from
Degeselam	large gate at the back
Dilik	stew from ground pepper and other spices
Duka	fertile soil
Dukei	manure from dung of animals
Enjera	staple food of the Tigreans
Felqua	tanned but not yet used for specific purpose
Gebela	room that serves as a veranda
Gemri	crop in a threshing floor (ready to collect after threshing)
Gerfi	plowing slightly
Gezmi	dowry
Gilet	solid residue from **siwa**
Guji	room from wattle and daub with thatched cone roof
Gulbibti	collecting cut bundles during a harvest
Gurdi	kernel still in the husk; chaff or trash from threshed grain
Hagay	dry season from December to February

Hagodti	persons that melt iron
Hamokishti	ash
Haras	a woman that has just given a birth
Hatela	liquid residue from **siwa**
Hilbet	stew from legumes and other spices
Hisyo	nigerseed cake
Kancha	stalk from sorghum, red sorghum and maize
Kayla	special group of people that used to produce clay products
Kebei	oil
Kermed	local self growing tree similar to the wild pear
Kewei	harvest season from September to December
Keyih-meret	red soil necessary for smearing wall
Kimito	small sized wisp
Kiremti	rainy season from June to August
Kismi	festivity of a parish or a nearby hamlet
Kubo	dried dung
Kulio	self growing ever green bush
Kulsas	oval shaped large sized wisp
Lema	fine clay soil
Lifinti	traditional labor organization that originally works on balanced reciprocity considering age and sex
Longi	black muddy soil that serves to smear wall and for clay
Mahber	festivity of group of 12-16 individuals
Mahres	plowing
Mahtsi	traditional labor organization as a result of religious observance by those who support
Malita	ever green local tree
Merakik	infertile soil

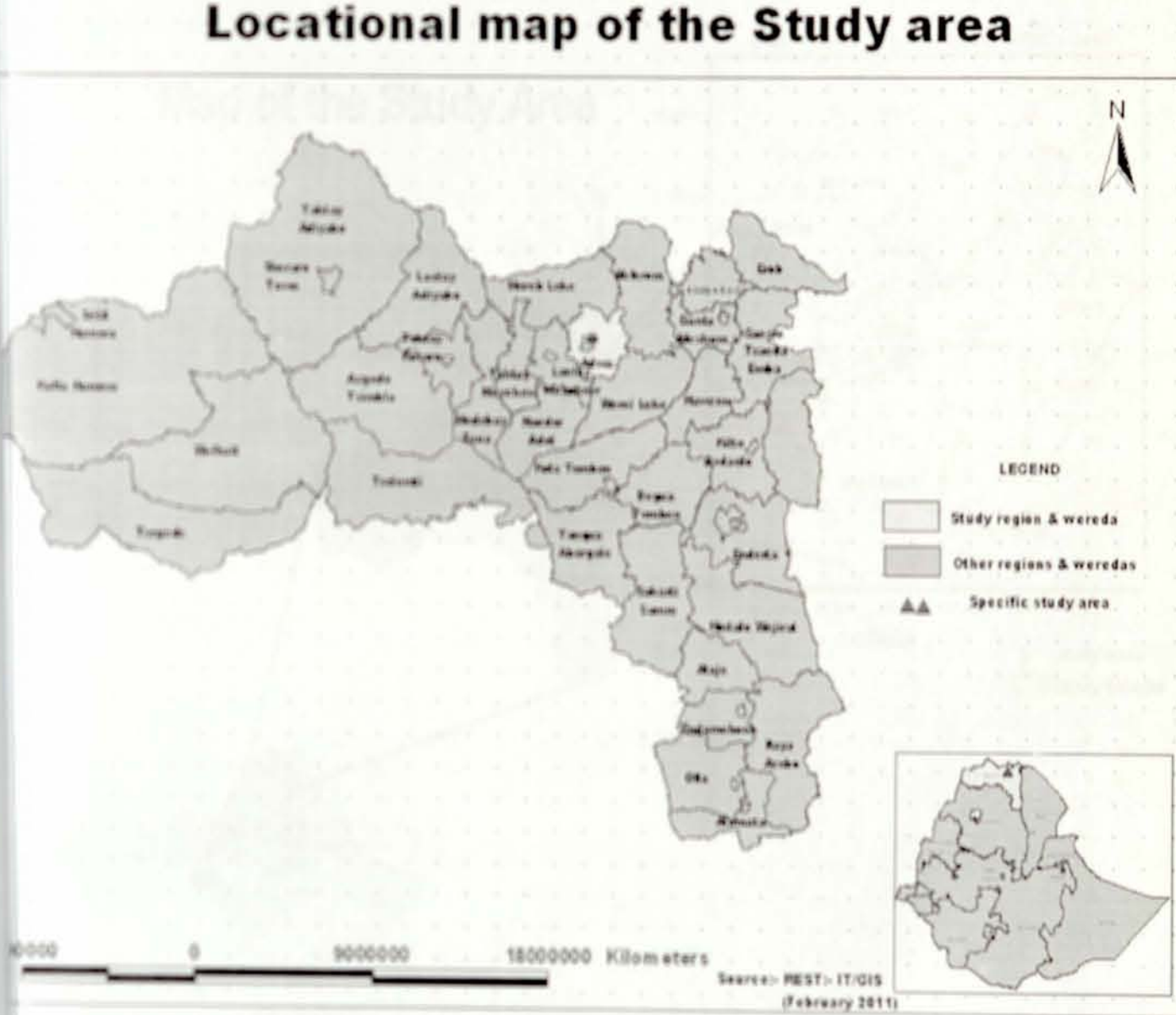
Merea	wedding/marriage
Mereba	the inner part of a compound
Mesarea	a naming for the whole parts of the ox-drawn plow
Mess	mead
Mibiraw	itching in a field following the plowshare during plowing
Micyam	plowing for second time
Miglbat girat	crop rotation
Mihmash	plowing for fifth time
Mimhas	dismantling weeds by hand after the land is plowed
Mirbae	plowing for fourth time
Mirwah	plowing in a way that can hold water
Misilas	plowing for third time
Misqat	stoning
Mitsigae	plowing to leave the land as fallow
Mizrae	sowing
Nay azmera ziraeti	crops those are sown early in May and even before
Qerim	land with crop residues (land which was used last year)
Qofo	granary
Rifudot	temporary stay early in the morning
Sebeyti	full woman
Sewhi	green grazing land, meadow
Shamoda	special purpose stick that serves to drive animals
Shiro	traditional stew from legumes and other spices
Sinqo	soup
Siwa	local alcoholic drink, local beer
Teskar	ceremony for remembrance of a deceased person
Timtimo	traditional stew from bean or pea

Titiko	boiled grain
Tsehayay	weeding
Tsibhat	very early time of harvesting
Tsidya	season from March to May
Tswra	carrying stalks with grains or fodder
Wahrar	mixed cropping
Walka	black soil
Wodihawabo	any one in ones locality
Wofera	marching in group
Zibtanmizrawin	threshing and winnowing
Zikir	festivity in remembrance of a saint or God by Himself
Zura mihras	circular plowing

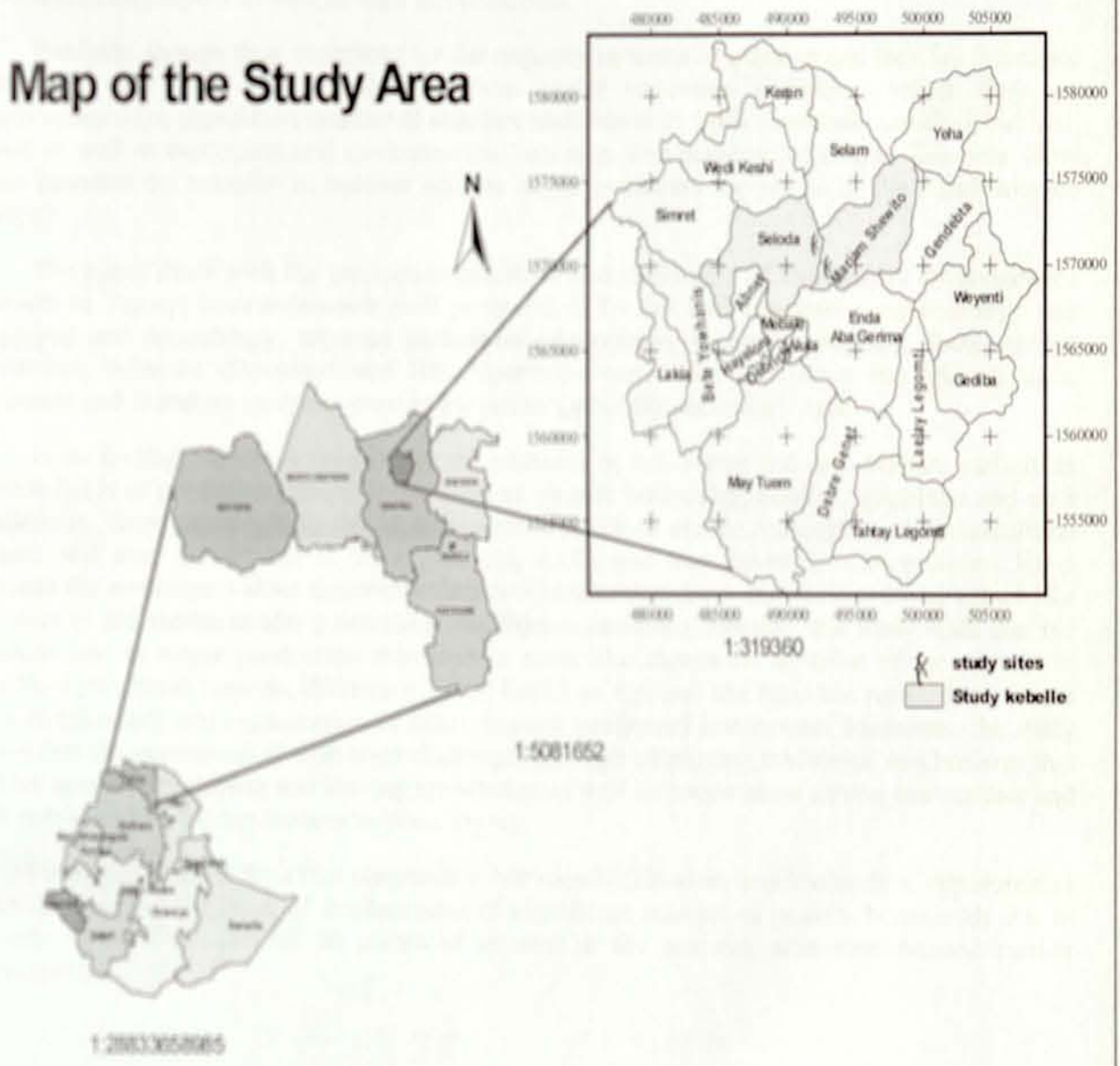
Map 1. Map of Adwa Wereda



Map 2. Location of Tigray



Map 3. Location of the Specific Research Sites



Source: GIS Expert Mekelle University

ABSTRACT

Peasants always account for the majority especially in the technologically least developed countries. More often than not, peasants are not only the majority in terms of number but also they are the major producers. What they produce covers not only their personal needs but also the personal consumption and socio-cultural needs of other groups of people like urban dwellers and government employees as well as their governments.

Peasants, though they constitute for the majority in terms of number and they are the major producers; they live and produce, however, under uncertain situations, where they are disadvantaged (as significant number of scholars underlined it) from economic, political, cultural, social as well as ecological and environmental realities. The paradox, of course, lies here. How come peasants the majority in number and the major producers happen to be the disadvantaged groups?

The paper deals with the production practices and challenges of the equally disadvantaged peasants in Tigray; from anthropological perspective. To this end, qualitative methodology was employed and accordingly, whereas participant observation, in-depth interview, focus groups discussion, informal discussion and life experience were used to collect the primary data; document and literature analyses were employed to gather the secondary data.

In its finding, the study reveals that the peasants in Adi-Senay and Adi-Amhara participate in such fields of production like crop production, animal husbandry, poultry, apiculture and craft production. They participate in the aforementioned fields to secure economic and socio-cultural values, and also to respond to their political, ecological and environmental realities. Here, whereas the economic values determine their production decisions; the socio-cultural values like the issue of the **wodihawabo** guide their distribution decisions. Besides, the study finds that the peasants use as major production mechanisms such like means as: division of the year in to specific agricultural seasons; division of labor based on age and sex (that has resulted in women to be overloaded) and organization of labor through traditional institutions. Moreover, the study shows that the peasants deal with their challenges through employing traditional mechanisms that revolve around developing and sharing knowledge as well as cooperation among one another and with outsiders like the lowlanders in West Tigray.

Finally, it helps to note that cooperation between highlanders and lowlanders, opportunities of production and the issue of displacement of significant number of peasant households due to Midmar Micro Dam can all be points of interest in the research sites that demand further investigation.

CHAPTER I

BACKGROUND TO THE STUDY AND THE STUDY AREA

1.1. Background to the Study

1.1.1. Introduction

Ferraro (2004:160) noted that "peasants usually make up a large percentage of the total population and provide most of the dietary needs of the city dwellers." The reality in Tigray is not a different to this, and thus the peasants account for the majority of the population in the region, and they are sources of the main consumption needs of those in the cities. This latter assertion holds water in relation to the fact that the peasants dominantly participate over the agricultural sector, which is the main source of living in Ethiopia, in general and in Tigray, in particular. In this regard, Webb and Von Braun (1994) noted that "the agricultural sector is crucial to Ethiopia's economy [;] it employs over 85 percent of the active population and accounts for almost 5 percent of GDP" (p.41).

Given the fact that "like other parts of culture, the way people go about producing is not haphazard or random but rather is systematic, organized, and patterned (Ferraro, 2004, p.175); research is mandatory to understand how any production is practiced and how the factors of production are utilized in the process of production. Thus, it is in light of the above fact that I needed to study the production practices of the peasants in Tigray. I did so, thinking of them to be not different in their production practices to any other societies as explained by Ferraro (though they may have unique characteristics), and considering them that they produce in an organized way, a case which needs further research to understand, especially from anthropological perspective.

While studying the production practices of the peasants in Tigray, due attention was given to study the ways the peasants go about producing crops (cereals, grains, legumes, oilseeds and other crops), livestock, crafts, agricultural tools and other of their needs through traditionally organizing the common and basic factors of production of any peasants "land, labour and capital" Barker (1989). In this regard, the focus was not only on studying the fields of production and types of products of the peasants but also on studying the mechanisms that they employ; the economic and socio-cultural values of their products; the basis that guide their decisions, and of course the most serious challenges that they encounter in their production practices and the traditional ways they use to cope with their challenges.

1.1.2. Statement of the Problem

Pankhurst (2002:25) in his article that deals with the overview of the research contributions of anthropologists and sociologists in Ethiopia has written that "there has been a tendency for studies relating to peasants to focus on land tenure and geographically on Northern Ethiopia, whereas studies relating to pastoralists have focused on resource management and geographically on the south and east of the country." Under the same token a reading of the research papers (which are of chief importance from anthropological perspective for this paper) in Tigray, reveals that peasants have been the focal point. In this regard, a mention can be made of notable personalities like Bruce, 1976, 1994; Bauer, 1975, 1977; Kiros, 1995; Alemtsehay, 2002 and Asmelash, 2006 who have all conducted their studies by focusing on the peasants of Tigray.

In nutshell, the main emphasis of the researches of the aforementioned personalities were on land tenure and reform, household economy and development, gender and its role on rural production, survival strategies in the face of famine as well as the dynamics of social organization in response to land reform, war and famine.

In different way to the focus of scholars in Tigray, significant numbers of scholars have focused on the study of the production practices of communities in the South (though not necessarily on peasant communities). Here, Donham, 1978 (with his study on the Malle production); Gebre, 1993 (in which he studied the production practices of the Ari people); Girmaye, 1993 (that he assessed the production practices of the Bench); Berhanu, 1995 (where he studied the production practices of the Wolaita) and Dagne, 2004 (one who assessed the production practices, challenges as well as the local responses of the Gedeo people) are all recognized sources to consult.

Therefore, having seen all these above literatures, it can be stated that the production practices of the peasants in the northern part of Ethiopia, especially in Tigray have not been deeply studied and assessed. Accordingly, the study was conducted in order to fill the evident gap as regards to our understanding of the production practices of the peasants in Tigray in a way which could serve both academic and practical purposes.

1.1.3. Objectives

Any research has to be undertaken in light of certain objectives it needs to meet. Underlining this simple fact, this research was undertaken giving due attention to the following general and specific objectives.

1.1.3.1. General objective: In conducting this paper, the general objective was to understand and know the nature of the production practices of the peasants in Tigray.

1.1.3.2. Specific objectives: This research had also some specific objectives that it set. Accordingly, it was done intending to meet the following specific objectives.

- To identify and discuss the fields of production of the peasants in Tigray,
- To find out and explain the economic and socio-cultural values the products of the peasants do have,
- To examine the mechanisms that the peasants of the area involve in their production practices,
- To find out the basic sources of the decisions that are embedded in the peasant production practices and their distribution systems,
- To identify the challenges that the peasants of the research sites face in their production practices, and;
- To point out the traditional mechanisms that the peasants of the localities under investigation employ in the face of the hardships they face, be it natural or man-made.

1.1.4. Research Questions

It is to date common in Social Sciences Research to have some basic research questions which could serve to augment the statement of the problem. Accordingly, while it was undertaken, this study had been made to have answers for the following basic research questions:

1. In which fields of production do the peasants in Tigray take part?
2. What significances do the production practices of the peasants in Tigray have? Are the production practices done for consumption or do they have some other economic and socio-cultural values?
3. What types of production methods do the peasants employ?
4. Which factors guide peasants' decisions in their production practices and distribution systems? What are the bases of their decisions?

5. What are the most pressing challenges that the peasants' of the research sites encounter in their production practices and how do these peasants deal with their most pressing problems? In this regard, the focus was in finding out, what traditional mechanisms the peasants involve to cope up with their most common and serious challenges?

1.1.5. The Research Methodology

1.1.5.1. Rationale behind the Research Sites Selection

The study was undertaken in two small localities in Adwa **wereda**, known as Adi-Senay and Adi-Amhara. Why?

There were three equally important reasons. First, I opted for the two localities due to that I was native of Adwa. This was so as I believed that being known and familiar in the area, it would be possible for me to have easy access to my informants and participants in particular, as well as to the localities and the people there, in general. Second, I opted for the two localities because I knew for sure that they were among the long established sites where peasants had lived for centuries given the fact that both are situated in a relatively fertile area which is crossed by one of the big perennial rivers that cross Adwa, that is, Midmar. Third I opted for them because of the reason that both the localities are found at reasonably fair and near distance from Adwa town (where I had to stay during the writing up sessions after field work), and for they are both easily accessible through both transport by car or on foot.

Saying so, finally I want to add the reason why I opted for two and why not for one locality. I opted for two because I wanted to get benefit of covering a wide area in terms of geography and by doing so as I wanted to enrich my information about the production practices of the peasants under consideration, in relation to difference in soil and landscape as well as other differences. Besides, I opted for two because it is said that peasants even those very near to each other in terms of geographic proximity, produce diversified products and are faced with varying problems Fasil (1993).

1.1.5.2. Research Design

According to Bryman (2004:27) "A research design provides a framework for the collection and analysis of data. A choice of research design reflects decisions about the priority being given to a range of dimensions of the research process. " Cognizant of this fact, the type of research design that the study under consideration has utilized was descriptive

research design. The aforementioned design was used given the fact that the research was proved to be basically qualitative type of research and hence it needed qualitative data that can better be collected through methods suitable for qualitative data generation and descriptive data analysis.

1.1.5.3. Data Source

This study needed both primary and secondary data. As to the secondary data, I used governmental documents both in and out of the Adwa **wereda** (for demographic and administrative information), and scientific books and other related literatures (to augment background of the study). Concerning the primary data, I conducted field work, meet the informants and/or participants (as we call them in group discussions) in person or face-to-face, while observing what was going on there as participant observer. I also used informal discussions during observation. Finally, I used my life experience as data collection mechanism and for interpretation purpose.

1.1.5.4. Methods of Data Collection

Data collection methods included: participant observation, in-depth interview with informants, focus groups discussion, informal discussions and of course life experience as well as document and literature analysis. All the methods were used, underscoring the importance of cross-checking data, through employing different and several methods. The discussion below is all about the primary data collection methods.

1.1.5.4.1. Participant Observation

To begin with, if it demands to rate one of the most contributing methods in anthropological fieldwork, participant observation is obviously one. " Participant observation is field research in which the ethnographer is not merely a detached observer of the lives and activities of the people understudy, but is also a participant in that round of activities" (Crane & Angrosino, 1984, p.64). In light of this fact about the method, I undertook observation of the activities of the peasants in their everyday life, while participating with them. I observed while participating in economic activities performed by males, and to some extent in those done by females. Some of these were locals' gatherings, such as labor organization or feasts and other occasions like meetings. Here, I observed how the peasants produce and collect their products (for example, I took part in two threshing occasions); what they produce (by observing their various products like crops, livestock, poultry, bees, tools and so on); what

constraints they face seeing them tackling to both natural and man-made problems, and of course what mechanisms they employ to deal with their most pressing problems (in this case for example, I saw them fertilizing their land with a manure, and I have also observed them preparing and plowing their lands). I performed all these and several others which are not mentioned, as participant observer, underscoring the fact that "the best way to reach an understanding of the 'particular circumstances' of a people is to go to live with them" (Crane & Angrosino, 1984, p. 67).

Generally, my participation was in the range what Gans (1968) as quoted in (Bryman, 2004, p. 302) called, "researcher participant," in which my involvement was limited as far as the smooth undertaking of the research required.

1.1.5.4.2. In-Depth Interview

According to Bryman (2004: 319) "The interview is probably the most widely employed method in qualitative research." Accordingly, I used interview as one of my main data collection mechanisms. In this regard, first of all based on age, knowledge, social-status, popularity and gender I had to purposively approach and select some informants for the in-depth interview. I opted for some informants because "not every one in every community knows about everything about every aspect of his culture (Crane & Angrosino, 1984, p. 54).

Since access to societies like peasants in which an outsider could easily be identified is often difficult, I used the role of "gate keepers or sponsors" Bryman (2004), in order to familiarize myself better with the society. In this regard, I met high school students at Nigiste-Saba Comprehensive Senior Secondary School, Adwa; who were coming from both Adi-Senay and Adi- Amhara localities. Here, as explained earlier, the ultimate goal was to use them as acquaintances, based on the belief that being students they would have all idea about research, researchers as well as about what this undertaking, research needs. Besides, I had also to visit the agricultural bureau of the **wereda**[1] on advise that I got by the time I visited the municipality of the **wereda.** My visit was to look for possible help that I could get from the agricultural bureau given the fact that it is much related with the peasants and their affairs. Fortunately, I was able to meet agricultural agents who were assigned to the areas where the research sites are located. These individuals practically proved to be instrumental firstly in

[1] A reference for an administrative unit below the zone administration

introducing me and my research plan to the locals, and secondly in locating my informants and participants based on the criteria I explained above.

So generally, having established rapport in the way explained above and through telling the informants my identity and purpose of the study, I conducted the in-depth interview using a semi- structured question format, in that Tigrigna was used as a medium language. Here, in conducting the in-depth interview the main concern was to find out the peasants' understanding of their production practices; decisions they make and the bases of their decisions as regards their involvement in production and distribution; the socio-cultural values of their products; the main and most pressing constraints they most commonly face and the traditional mechanisms they employ to cope with them. At this level, based on the above criteria set to select the informants, I interviewed seven informants from each locality. From the total informants I met in the two localities, 11 were men, and three were women. Plate 1 and 2 show sample informants from both the research sites (see plates 1 and 2). The women were only three because it was difficult to access and convince them to be interviewed given the fact that they were generally busy.

Finally, I would like to make two things clear. Firstly, that all the in-depth interviews were done based on the suggestion which read "Once one or more informants have been selected, and once the ethnographer is satisfied that their information is trustworthy, the process of 'depth' interviewing can begin" (Crane & Angrosino, 1984, p. 57) and secondly, that all the interviews were conducted once allocating one to two hours with each informant in that all the interviews were recorded, transcribed verbatim at daily basis, and then translated in to English.

1.1.5.4.3. Focus Groups Discussion

From its very nature this method serves "to study the way in which individuals collectively make sense of a phenomenon and construct meanings around it" (Bryman, 2004, p.348). Accordingly, to get the utmost benefit of the method, first I located my group participants, purposively. It was purposive because it was conducted through formation of homogenous groups in terms of age, knowledge and experience. In this regard, the participants were found to be two groups of youngsters and four groups of elderly that differ from each other by age, knowledge and experience. Here in the focus groups discussions, great care was taken in order to avoid any dominance of one group member over the others as well as any extraneous disasters like those resulting from bad settings.

The rule of thumb in focus groups discussions as to Morgan (1997) is, "3-5 groups in which 5-10 participants (p. 34)" are advised to take part in each. Accordingly, I could firstly locate a total of 40 participants from both the localities and with that I was able to have three focus groups discussion in each locality, in which the participants in each of the groups were at average 6 in number (see sample plate 3).

In conducting this method, while I myself in person acted as moderator of the discussions through providing instructions of discussion, posing questions from among the funnel-structured questions and recording responses; trained local individuals, one from each locality were playing the role of a note taker (for this purpose they were trained in a way which enabled them to record feelings and emotions of participants, as well as the settings in where the discussions took place). By implying the method, I could point out why peasants produce certain products; what values they give to these products and what values they think the products do possess; what mechanisms the peasants employ in their production practices; and finally what factors impose challenges to their production practices and how they deal with them, smoothly.

To wind up this section, I conducted all the focus groups discussions around churches and other settings where there were little external distracters, devoting in average 1 ½ hours to each group. I did take these two actions above to avoid any feeling of discomfort on the side of the participants resulting from bad setting and also from sitting for a long period of time.

1.1.5.4.4. Informal Discussion

When in the field I had informal discussions with a number of people from different age groups, children to adults, both males and females. Those informal discussions were very instrumental in terms of helping me to reframe my questions and thoughts, as well as in locating my informants for the in-depth interview, and my participants for the focus groups discussions. Moreover, the discussions proved to be important in terms of filling some gaps like those resulting from what was forgotten during the in-depth interviews and focus groups discussions I happened to have. In this regard, for example, I benefited from my informal discussions in cross-checking the type, naming and function of the small agricultural implements which are discussed in chapter 5 of this paper.

1.1.5.4.5. Life Experience

As I explained earlier I was born in to the society whom I studied. Due to this, I had some background information about the issue of the production practices and challenges as well as some other related cultural issues of the peasants I studied. Accordingly, I have to admit and witness that I also employed my personal life experience to collect the primary data and to interpret cultural meanings amid of the data analysis.

1.1.5.5. Data Analysis

The research proved qualitative in its nature given the fact that the methods employed were instrumental in generating qualitative type of data. Accordingly, the analysis of the qualitative data was done starting from the first day of the fieldwork, and starting from that first day, I was busy transcribing verbatim, translating the transcription in to English (for the Interview and the Focus Groups Discussion were conducted in Tigrigna language), arranging and reducing the raw data in an attempt to connect them in to the very problem of the research, through searching for key themes. Here, it helps to note that, all the primary data were analysed side by side with the supporting secondary data that were found from the consulted literature reviews and documents. The secondary sources were especially very helpful in connecting the analysis of the data to the two famous theories, Formalism and Substantivism, which were used as guiding principles to this paper.

1.1.5.6. Ethical Considerations

In all the implementation and usage of the above methods, I considered some ethical requirements that one research needs to consider. Accordingly, firstly, I went in to the concerned bodies of Adwa **wereda** (where my research sites lie) with a letter from the Addis Ababa University, for easily access to the sites and for legality purposes. In connection to this, before I could meet the inhabitants of the localities, I had to meet high school students in Adwa who happened to come from the research sites and also the agricultural agents who were assigned to the areas where my research sites are found, in order to get help from them in terms of creating rapport with my informants, using them as acquaintances. To this end, first and foremost I told my acquaintances, my informants as well as my participants the very purpose of the research. Moreover, I had to have informed consent of informants and participants for interview, tape-recording the interview and of course for photographing the scenes of the interview and the focus groups discussions as well as other of their activities.

Finally, it deserves to indicate that I showed some highlight of the very content of the draft paper to some of my informants and participants (who were eager to know what will result from the information they gave me), before I left the areas. As a matter of fact, this was done in order to cross check the content of the paper having used the informants and participants as witnesses.

1.1.5.7. Field Experience

20 January, 2011 was the date when I started my field work. In this particular date, I went to the municipality of Adwa **wereda**. There, after I briefed my research proposal to some personalities whom I met there, I was advised by them to better visit the agricultural bureau of the **wereda**.

As advised, I visited the agricultural bureau on the next day 21 January, 2011. The employees of the office were ready to help and support me, in the form of building my moral, and assigning relevant employees who were working as agents in Soloda and Mariamshewito areas, to me.

After this, having briefed the nature and objective of my research proposal, I appointed the agricultural agents for some other specific time. Next, I then went to Nigiste Saba Senior Secondary School to meet students who originally came from the research sites. My reason for looking them was to use them as acquaintances after briefing my research proposal to them. Fortunately, I was able to meet one student whom I knew before; and with his help and the support of the school's vice director (whom I knew before) I was able to identify and meet two students from the research sites.

This was a big leap forward in my research undertaking. As a result, being accompanied by one of the students, it was possible for me to visit one of the localities, Adi-Senay on the 25th of January, 2011.

On the next days, 26- 29 January, I revisited Adi-Senay and already begun meeting locals accompanied by one agricultural agent who was assigned to work in it. In his presence and due to the briefings of my research objectives as well as my known family backgrounds in the area, the majority locals pledged to help me doing all they can. Thus, I was able to conduct my study from then onwards for half of my stay in the research field, in Adi-Senay.

After I conducted half of my work in Adi-Senay in the household of my host family, in the manner of an in and out style till March 1, 2011; I set my journey to visit the other locality, Adi-Amhara.

In the first day of my journey to Adi-Amhara on March 3, 2011; it was unfortunate that I ventured the way alone. This happened after I missed the high school student I had an appointment with, due to confusion of location of appointment. As by the time I missed him, I had already travelled 4-6 Kms by car; it was more advantageous for me not to return. But my daring to go alone was proved to be challenging. It was challenging because I was told that I had missed the right and shortest way to Adi-Amhara. This happened after I travelled for more than 35 minutes penetrating the tiresome ups and downs of the rugged territory of the surrounding mountainous landscape on the way to Adi-Amhara. But, because the passersby who told me that I missed my way meanwhile advised me to continue redirecting my way to the west direction and using a nearby peak as reference point; I had to continue my way. With the help of the advice from the passerby, I journeyed for 1 ½ - 2 hours on foot and I finally reached the locality feeling very tired.

Having encountered the experience I mentioned above, I regretted that I was too tired, more than it actually deserves, but meanwhile, I was happy because I learned a lesson. The lesson was that a researcher must always be accompanied by locals in his/her fieldwork, for better and satisfying results and even for security reasons.

After I reached Adi-Amhara, I immediately went to the household of Ato Teklegiorgis Abedom, my host family in Adi-Amhara whom I could select earlier, with the help of my informants from Adi-Senay. Reaching there on that first day, I told my host family that I was a student and that I was there to conduct a research as requirement for graduation. With that, my host family became willing to help me.

In Adi- Amhara I began my real fieldwork after 3 days of my first visit of the locality on March 3, 2011; on March 6, 2011. At the stated specific time, I was able to select and locate some additional informants and participants with my host family and others who were there at that time. Generally I stayed conducting my study till April 4, 2011, in the form of in and out manner, for writing up and for other additional purposes like buying batteries.

Totally I stayed in the field for three months. Out of these three months though I planned to come and meet my advisor in the middle of my stay in the fieldwork, due to

communication problem, I was obliged to arrive at Addis Ababa by the time my advisor was not around. This first seemed a very serious problem for me but as my advisor had showed and guided me how to tackle problems doing research early in the preparation of my proposal, I was able to solve my problems. Besides, it was not as such serious problem because I could meet my advisor later, earlier than my original plan and I could make things went alright in her presence.

What did I do and learn as well as encounter, while I was in the field in both the research sites? When in the research sites I interviewed a total of 14 informants from the elderly, young, both men and women. I also had focus groups discussions with purposively selected participants based on age, knowledge, experience and popularity. Here I could not include gender as criterion because I had no discussion with women. The reason was because they were not easily met and accessible for group discussions in relation to the work overload that they have and the managerial role they play in their households. Moreover, I conducted observation of agricultural activities like threshing; construction of clay products like **kudo** (bee-hive); feasts like **zikir** (remembrance) and wedding (they are discussed on chapter three); children herding animals and fetching water as well as carrying wood (see plate 4), as a participant in which my participation was limited so far as the smooth undertaking of the research allowed me to do so. Furthermore, I had also had informal discussions with locals from all walks of life about important issues like crops and their variants, soils and their types, challenges and their mechanisms, feasts and their values and so on. More importantly, I used also my life experience as one data collection mechanism.

In performing all these, things were not free of problems, and thus I had to face and encounter some challenges. The challenges were like reluctance by some locals who happened to be government officials (at the lowest administrative structure) and by some ordinary peoples to support me in the claim and ultimatum that they need per diem if they were to participate as informants and participants. They were as such reluctant even reaching the extent of trying to tell the other willing locals to stop cooperating with me unless I pay them some money. Although they were not successful for the majority locals rejected them, their attempt taught me one thing. The lesson was that their action helped me to imagine how much per diem is working to dismantle the very culture of the societies, that is, hospitability.

On the other hand, the other challenge that I faced and that I would like to write about is the uncountable, extremely much governmental meetings that were going on there. The

meetings were as such challenging that I could not even meet locals for weeks long, and I had to rearrange my appointments with them repeatedly and several times. That was as a matter of fact one reason for staying long in the field. So, generally, having seen all that I explained above about the meeting sessions, I was surprised to learn that in the past, the peasants used to count and observe Saints Days not to work on their fields, now they have started counting and observing meeting sessions for the same purpose.

1.1.6. Significance of the Study

This research is believed to have certain significances to yield in both the academic and practical fields.

To begin with, for the research was conducted to study the production practices of the peasants of Tigray; in the academic arena, the findings of the paper could widen our understanding of peasants and their economy in general, and the peasants and the economy of those peasants in the research sites, in particular. That is, from anthropological perspective.

As regards the contribution of the paper in the practical aspect, it is clear that Ethiopia in general, and Tigray in particular, are basically dependent on agriculture, economically; though it could not be said that their economy is totally dependent on agriculture. Hence, in relation to this, understanding the production practices of the peasants, that is, those who are involved in agriculture more than any other section of the societies in Ethiopia could help to augment the economy of the nation through strengthening the strong sides of the peasants' production practices, and avoiding their weaknesses. So, the paper's significance is justifiable in this regard.

Besides, as the research tried to find out the major constraints that the peasants face in their production practices, it could be of chief importance at least in terms of informing those concerned bodies (both from governmental and non-governmental organizations), firstly to understand the challenges of the production practices of the peasants, and secondly to show those concerned bodies the traditional ways through which they can help the peasants in getting rid of their most pressing problems.

1.1.7. Limitation of the Study

Although it has come up with essential findings, this research was limited in some of its parts and thus it could not be claimed, full and complete. Firstly, given the very limited time

and finance which were at my disposal while doing the study, my paper has failed to cover some important areas of discussion which could have been relevant in relation to production practices. These are like opportunities of production in the study sites in relation to irrigation practices, which were going on there.

Besides, the research did not employ methods that could generate quantifiable data. Accordingly it failed to assess issues like efficiency of production by comparing and contrasting the production of the peasants in the present time and in the past. Had I employed quantitative methods or methods that generate quantifiable data, I could have tried to see how much, what the society speaks about, that is, reduction in productivity in relation to shortage of land, soil fertility and change of climate, holds water. But, I did not include methods that could generate quantifiable data (in relation to the reasons I mentioned above) and thus this paper is limited in this regard.

Moreover, while undertaking the research, women were not easily accessible as men due to the reasons explained in the division of labor in chapter four. Accordingly, this study is limited in that it has included more information from the side of men, though this does not mean it does not contain any information from women, for there were at least three women who were interviewed and significant others who were met in my informal discussions.

Finally, the research was limited in that it did consider only Formalism and Substantivism as theories in Economic Anthropology that can guide the undertaking. This was so, because of the limited time and experience I have had to cover Marxism (the other relevant theory) in full, and because my interest was to show that both the theories of Formalism and Substantivism are workable in peasant societies.

1.2. General Background Information about the Study Area

1.2.1. Location of the Adwa Wereda

To use it as reference point, Adwa town, the capital of Adwa **wereda** is found in central zone of Tigray regional state. In relative term, it is located at about 190 km (road distance) north west of Mekelle (regional capital) on the Mekelle –Adigrat – Axum/Shire main highway, and about 21 km east of Axum. Axum is zonal capital. In absolute term, it is located at an approximate geographical coordinate of 14 12'north latitude, and 38 56' east longitude (Federal Urban Planning Institute, 2008).

As to information from the old imperial government central statistical office, survey report on Adwa, the town is almost in the center of the Tigrean plateau and has an elevation of about 1900 meter above sea level. Although it is in a depression formed by the Wer'ee, which itself is a tributary of the Tekeze, it is surrounded by high and imposing mountains that rise to over 2400 meter above sea level (1966).

Currently, Adwa has a new administrative structure that has divided it into Adwa **wereda** and Adwa town. This study was conducted on the Adwa **wereda** which does encircle the town (see map 1).

The Adwa **wereda** is one of the **weredas** in the regional state of Tigray. It is bounded in the north by **wereda** Mereb Leke, in the south by Wer'ee Leke, in the east by **wereda** Ahferom and in the west by Lalay Maychew (Adwa **Wereda** Administrative Office's Year Book, 2002) (See map 2).

1.2.2. Climate of the Adwa Wereda

The **wereda** has three of the known agro ecological zones, **kola** (1000-1500 meter above sea level), **weinadegua** (1500-2500 meter above sea level) and **degua** (highlands and above 2500 meter above sea level). In relation to this, the **wereda** has a total rainfall amount of 600-850 mm in a year, with annual average temperature of 27^0c (Adwa **Wereda** Administrative Office's Year Book, 2002).

1.2.3. Topography, Population and Subsistence of the Adwa Wereda

Adwa **wereda** has a total of 665.6 km^2 area. This **wereda** is divided for administrative purpose into 18 **tabias**[2] and 65 **kushets** [3](See map 1). As to information from the CSA (2007: 392), Adwa **wereda** has a population of 99, 711.

According to the information from Adwa **wereda** Administrative Office's Year Book, all the population in the **wereda** practice agriculture. In connection to this, as to the same source, from the total area of the **wereda**, 13714 hectare of land is arable; 1770 hectare is covered by forest, and the rest 17339 hectare serves as rangeland. Generally, in average the **wereda** has a landmass composition of 0.59 hectare /household.

[2] It is a reference for local administrative unit below the **wereda**
[3] Another reference for local administrative unit below the **tabia**

1.2.4. The Research Sites of Adi –Senay and Adi - Amhara

As explained above, Adwa **wereda** has 18 **tabias** and 65 **kushets**. From the 18 **tabias**, **tabia** Soloda and **tabia** Mariamshewito are the two administrative units, where the specific research sites of Adi- senay and Adi- Amhara are located. In this regard, where as Adi- Senay lies more in Mariamshewito and to some extent in Soloda, Adi- Amhara is totally found within **tabia** Soloda (see map 3).

Adi-Senay

Adi-Senay is a small locality which is found to the northeast of Adwa town, relatively at the distance of 4 -5 Kms on the west of Adwa- Adigrat main highway. Adi-Senay found its naming from the name of an ox called Senay. As to the oral history of the society in the locality, there was an ox named Senay. This ox while passing through the current locality with his owner was said to demand rest by sitting in the place which is currently called Adi-Senay. The owner was surprised by the action of his ox which was not common for him and stayed there with his ox. Thus, from that time onwards, the place where the ox is supposedly believed to have sat later on became to be called Adi–Senay, meaning land of senay. Locals believe that the ox opted for the specific site because it was fertile.

Adi-Amhara

It is the other research site in that its ruins and old settlements with walled masonry indicate that it was long established. Adi–Amhara, is located in the northwest of Adwa town and west of Adi–Senay, relatively at a distance of 5 -6 Kms, and 3 -4 Kms, respectively.

This locality gained its name in relation to a caravan of Amhara merchants. As to the locals' oral history, it was after a leader of caravan merchants who speak Amharic language settled in it for some time on his way to Eritrea that the area was first called **girat** Amhara meaning, farmland of the Amhara. Later on it became to include the naming of the whole area, and thus the whole area became to be called Adi–Amhara meaning, land of the Amhara.

1.2.5. Important Elements of the Material and Non- Material Culture of the Society and Settlement Pattern and House Types

The study is all about the production practices and challenges of the peasants in Tigray. Accordingly, I believe that it is worth writing some about some of the important elements of the material and non- material culture of the society under consideration as reflected in their

food, drink, clothing, hair-dressing style, and also about their settlement pattern and house types. I have preferred to do this; firstly, because these mentioned elements are in one way or another related to production. Secondly, because I have found no literature on these elements and I want to write some on the issues in a way that can enrich the ethnography of the area.

1.2.5.1. Traditional Food

In relation to the fact that the majority Tigreans, 4, 125, 497 out of the total 4, 316, 988 population of Tigray region are Orthodox Christians (CSA, 2007), the food stuff discussed are reflections of the food, as consumed by the Christian Tigreans.

To begin with, according to informants, **enjera** together with stew is the staple food of the Tigrean society. Informants tell that next to **enjera**, breads of different type like **leta** (thin and brittle bread), **fokokta** (medium sized bread in thickness), **himbasha** (full bread) and **hanza** (double-face bread) cover important part of the society's food stuff.

To illustrate them one by one, according to female informants, **leta** is very thin and brittle bread which is prepared from unfermented dough. **Fokokta** is medium sized bread in thickness, and which is prepared from leavened and fermented dough. Both **leta** and **fokokta** are served at daily bases as breakfast and during coffee ceremonies. Unlike the two, **himbasha** is bread which is prepared from leavened and fermented dough and which is served during holidays and on special occasions. Finally, as to the same source, the other type of bread, **hanza** is different from the other breads which are all prepared from wheat. In this regard, informants tell, firstly, it is different because it is prepared from maize and sorghum, and sometimes from **taf**. Secondly, it is different, because it is a kind of double-faced bread. As to them **hanzas** are mainly served during the harvest season when maize and sorghum as well as **taf** are freshly collected.

Earlier I indicated that **enjera** is served with stew. What are the traditional stews served together with **enjera**? The following section discusses the traditional stews.

According to informants, traditionally the stews as used by Tigreans can be categorized into two. The stews are those that can be served during the fasting days and/or out of the fasting days, and those which are strictly served out of the fasting days which are called **naisieret tsebhi** (lit., stews served out of the fasting days). Because the Christian Tigreans observe at least 253 days of the year as fasting days; the majority stews are those of the

fasting days though they are the types of stews which can also be served even in the other days.

To begin with, according to the information I collected from my informants and group participants, the very traditional stews that are served during the fasting days and out of these days have remained to include **shiro** (stew from legumes and other spices), **siljo** (stew from bean), **hilbet** (stew from legumes, fenugreek, lentils and other spices), **abish** (stew from legumes but with more powder of pepper), and additives from powder of pepper like **dilik** (ground and soaked pepper with different spices) and **awaze** (ground and soaked pepper). All of these are salted and spiced in which the types of salt to be added differ as per the preparation of the dish. In this regard, generally the Tigreans identify different types of spiced salt like **dukus** (ground salt), **chew-hilbet** (salt of **hilbet**), **chew-irdi** (salt of turmeric), **chew-abaeke** (salt of fenugreek) and **tsaeda-chew** (white salt without spice). Informants told that from all the dishes in this category under discussion, **hilbet** is most common to be served during the time of the Lent and in the time of the celebration of traditional festivities. They further indicated that festivity is praised if this important traditional stew is present. Plate 5 shows **hilbet** in use together with **enjera** (see plate 5).

Coming to the other part of the discussion, as to information from my informants and pertaining to my life experience, those traditional and most common stews that are served during the days which are out of the fasting days include stews like **zigni** (stew from meat with **dilik** as an additive), **quanta** (dried meat), **kilwa** (fried meat), **meantahamot** (food made from intestine and vine of gall bladder), and **alcha** (stew with turmeric powder). According to informants these stews are all stews that are prepared from meat and meat products.

To sum up the discussion, it deserves to note that according to my female informants, given the fact that cooking is the main responsibility of women, it reflects expertise and shrewdness. In connection to this, informants indicated that failure to prepare quality stew results in shame which is associated with a naming for laziness, that is, the **besero** (lazy).

1.2.5.2. Traditional Drink

Siwa (local beer)

In Tigray, the very traditional alcoholic drink is **siwa**. As to female informants, though **siwa** can be prepared from a number of crops like finger millet, maize, red sorghum and sorghum, the best quality **siwa** is prepared from finger millet. According to the informants,

siwa has different varieties based on the time it remained fermenting itself, and the time gap it remained fermenting itself before it is served, and of course based on its related alcoholic content and strength. In connection to this, they noted that **duqua** (thick), **guesh** (semi-purified), **tsiray** (purified) and **qirar** (watery) are the known varieties of **siwa**, next to the specially prepared filtered type called, **filter**. According to them, **duka** is a **siwa** in its first day of fermentation; **guesh** is a watered and filtered **duka**; **tsiray** is a type that is filtered from the second type called **guesh**, and finally **kirar** refers to the variety of **siwa** that is prepared from the liquid and solid residues (**hatela** and **gilet**) of the other varieties. Its alcoholic content is very small and it tastes water.

Generally, informants told me that **siwa** is prepared by women, and it does reflect expertise. They added and told that **siwa** is very much related to a peasant life, for it is common to be found in festivities and labor organizing parties which are crucial to one peasant. Finally they indicated that, failure to prepare quality **siwa** results in the culturally shameful coinage for laziness, the **besero**.

Mess (mead)

From my life experience, another traditional alcoholic drink is mead **(mess)**. As to my informants in my in-depth interviews, the best quality mead is the one prepared from a red honey (**keyih mear**). According to them its quality stems from its taste and from its color which is captivating for eye. This **mess** unlike **siwa** is prepared by group of men called **tejaeti**[4].

Birzi (kind of mead)

Informants indicated that **birzi** is an alternative for mead and it does not have any alcoholic content for it lacks **gesho** (buckthorn), the main ingredient in the preparation of mead. They further noted that **birzi** is less often prepared and when prepared it is only for personal consumption. As a matter of fact Muslims do serve this traditional drink during their holidays and wedding ceremonies.

[4] **Tejaeti** is an adjective in its plural form, which comes from its root verb **tejea** meaning, ferment. Then **tejaeti** means those who help things to ferment.

1.2.5.3. Traditional Hair – Dressing Styles

The way members of one society dress their hair can reflect the culture of the society and thus can enrich their ethnography when written. So, this section is included to that end and before embarking into the depth of discussing the issue, it helps to note that according to information from informants, in Tigray hair – dressing styles differ based on sex, and based on age among those of whom who have the same sex.

1.2.5.3.1. Men's Hair- Dressing Style

Even though I know from my life experience that as such differentiated and developed hair-dressing styles are not recognized by males, males have different hair styles as per their age.

As to informants, the hair-style of small boys is called **kunchieto** (few groups of hair that remain unshaved on the front part of the head). In this regard, remaining **kunchieto** later when they grow and when they are near to reach the adolescence stage, especially when they are ready to marry, their hair is left to grow and then it becomes a style called **gutena** (bushy hair). Being married as a **gutena** then after, they become **afro** (circular cut and combed hair). With that informants tell that the males remain **afro** in their manhood.

1.2.5.3.2. Women's Hair – Dressing Styles

In Tigray, very young girls are made a hair style called **tellela** (single plait). As to informants, **tellela** reflects that they are very small and young in age. Later when girls grow but they have never reached of age; their dressing style becomes **kunchi- kuncho** (group of hair on the mid of the head that are left unshaved). Following this, the girls reach the adolescence stage and their hair style becomes **gaame** (fully shaved head with little hair and two plaits remaining on the side of the head). According to informants, dressing in **gaame** style reflects that they are ready for betrothal and marriage. Accordingly, it is when girls start to dress their hair in the **gaame** style that they are given in marriage. In this regard, informants further indicated that it is possible for girls, if in case married to remain **gaame** till they give birth to three children.

According to informants, after the girls are married and they have given birth to three children, they become honorable woman that can lead a big family. At this time, the informants noted, **sadula** (full head covered with hair but an oval shaped shave remaining on

the mid part of the head) becomes their hair-dressing style. Having remained **sadula**, they then begin to be considered full women after they give birth to their fourth child. By the time they give birth to their fourth child, they are called **sebeyti** meaning, full woman. Once they reach this stage, their hair-dressing style becomes **difno** meaning, covered. Then after, informants told that the women can make their hair with a number of styles that are included within the broad **difno** style, like styles called **qichin** (dressing with tiny plaits), **albaso** (dressing with seven thick plaits), **gilbich** (dressing with very tiny plaits), **kichin-kebera** (dressing with mixed plaits, that is, tin and thick) in that all are made with and without **sardeta** and **albo**[5].

1.2.5.4. Clothing

According to my life experience and the information I got from informants during the in-depth interview sessions I had, just like the hair-dressing style, clothing style in Tigray is also differentiated based on age and sex.

To begin with, men in their early ages wear a **tibiko** (stitched vest like cloth). When they grow and reach the age of reason, in this case age 7, informants told that males start to wear trousers named **korti** (short and tight trouser) **fido** (relatively tight at shin but buggy at seat), **kumta** (somewhat wide around the seat) and **ije tebab** (complete cloth), respectively. Here, whereas **fido**, **kumta** and the trouser of the **ije tebab** are long and can cover the leg parts till the knee and shin, respectively; the **korti** trouser is very tight and very short that covers only the thigh.

Besides, as observed men especially those who are married, wear different cotton products which cover the upper part of their body including their head. These cotton products are **netsela** (thin sharp like cotton product), **kuta** (medium sized, toga like cotton garment), and **gabi** (heavy, toga like garment). In connection to this, informants told that from the three cotton products listed above, **gabi** and to some extent **kuta** reflect economic and social status.

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[5] **Sardeta** is part and parcel of the hair dressing styles of the women. They are two single hairs which are made to encircle the head of a woman right from her forehead to her hind head through her ears. **Sardeta** can be made together with threads and other ornaments like gold. It gives glamour to a woman whose hair is dressed. **Albo** is a jewelry which has a needle at its bottom and a cross at its top. It is triangular in shape and is inserted by women of Tigray at the back side of their hair-do. It actually reflects economic and social status.

This nearest case was also indicated by Reminick (1973) that it prevailed among the Manz Amhara.

With regard to the females, informants told that in the early age and later till they marry, girls wear a free sized cloth called **difo**, meaning wide and free sized. But once the girls are betrothed, they start to wear other clothes which they receive in the form of gifts, which, meanwhile, reflect that they have reached adolescence and that they are already betrothed. The clothes include **shinshin**, **jersey**, **addidas** and others which are all manufactured products and that are sewed in machine.

Finally, informants noted, when the females reach womanhood, they start to wear clothes from spun cotton that are called **zuria** (stitched dress) and **tilfi** (stitch) with their **netselas**, and the other cotton products which are wore in the upper body called **kuta** and **gabi**. According to my personal life experience and as observed during the field work, while the **netsela** which covers the upper part of the body including the head is decorated with embroidery, the **kuta** and the **gabi** are not.

1.2.5.5 Settlement Pattern and House Types

Kiros (1995:86) noted "Tigray settlement pattern seem to have been dictated by topographic, climatic, and security considerations." In this research, what Kiros has found out in his study area has been ascertained, but further it has been found out that economic factors are also taken into consideration. In this regard, informants indicated that they consider economic factors in building their houses given the fact that they have shortage of land and in relation to its pivotal economic role in the production of crops and in grazing purpose for animals.

Pertaining to my observation of the areas, the type of settlement pattern both in Adi–Amhara and Adi–Senay can be called nucleated. This is because the peasants' homesteads and farmlands are situated very densely to one another in a very small area. I suspect that this is a new phenomenon that happened in relation to population increase and shortage of land (that may have been caused by population increase or by soil erosion).

In his book that deals with the study of the Tigrean households, Bauer (1977) has written that "all homesteads, the physical places where households are domiciled, have the same basic functions" (p.25). He noted further "they serve as places where food can be stored

and prepared; eating, sleeping, and so on can take place; animals can be cared for and protected; and visitors can be entertained" (Bauer, 1977, pp. 25-26).

So, according to my observation and the information I got from informants, homesteads in Tigray having the above functions, are various in type in which each and every class and part serve the specific function they are constructed for. In this regard, not to speak of the particulars like the homesteads of the newlyweds and the very poor, the majority peasants who can be rated economically average and those who are rich but very few in number, have homesteads with five different classes and additional two classes that serve as barns for their animals, as well as a walled compound with two gates that serve as protection.

As observed, the classes are situated side by side to each other as well as somewhat apart from one another. They are all functional in relation to the functions of the homesteads that Bauer (1977) explained and in relation to the functions of the classes as explained later in this paper. Here it helps to note that, it is not only the classes but the compound and its gates also have their own functions.

To begin with, informants told that the five classes and the additional barns that are common to be found in the homesteads of the majority peasants in Tigray are: the **adarash** (one storied class with corrugated iron roof and/or stem and soil roof), the **seqela** (one storied class with thatched cone roof), the **bahri-hidmo** (ground), the **gebela** (kind of veranda), the **bet** (kitchen) and the two barns, the **dembe** (from walled masonry) as well as the **gidgida** (room from wattle and daub), respectively.

To illustrate, according to the informants, the **adarash** and/or the **seqela** do serve as guests' class and as sleeping place for the husband and wife. The homestead is called **adarash** if it has one story and if it is roofed with corrugated iron sheets or with stems covered by soil and flat stones at its sides. But, it is called **seqela** other things being equal, if it is roofed with thatched cone by a grass type called **saeribet** (lit., grass of a house). I have personally observed that, both are constructed as single storied buildings over the **bahri-hidmo**. Plate 6 and 7 indicate the two types of **adarash** (See plate 6 and 7).

According to informants, the **bahri- hidmo** is the main class of the peasants which serves as store room for any of their belongings. Bauer (1977) rightly expressed the structure of a **bahri-hidmo**, saying, "This is a rectangular [may also be circular] masonry building roofed with cedar beams covered with rock, gravel, and finally a slightly doomed layer of

lime" (p.27). As a matter of fact, the **bahri- hidmo** in relation to its being a storeroom is visited by no one except the family members, and no one except the family members is allowed to enter into it.

As observed, the **gebela** is a small extra class which is situated in front of the **bahri hidmo**. It is a kind of veranda. According to informants, the **gebela** mainly functions to serve as security room to the **hidmo** and as store to some extra crops and other properties of the peasant, when the **bahri-hidmo** is already full. Although husband or wife can sometimes sleep in this class, it is most of the time empty and locked.

The **bet** which is a class with a walled masonry is roofed with thatched cone and serves as kitchen. According to informants, it is a class where all equipments needed by women of a household are put, and where the daily chores of women like baking, cooking, grinding and so, are performed. I have also observed that the **bet** serves as place where the beehives are kept. In this regard, when asked why they put the beehives in the kitchen room? Informants indicated that the bee-hives are kept in the **bet**, firstly for the sake of daily attendance (given that a woman in a household visits the kitchen at daily basis without stop and given that bees are sensitive to alien like termites and lizards and hence need attention). Secondly, for the reason that the bees get the warm temperature they need from the heat of the kitchen.

Apart from all the above classes, peasants of Adi-Senay and Adi-Amhara have special classes that serve as barns for their animals. The first is the class for the cattle and donkey called barn (**dembe**). The other is the class for their goats and sheep which is called **gidgida**. According to informants, these two parts of the peasant homestead serve as barns. They differ in that, whereas the **dembe** is with walled masonry, **gidgida** is built from wattle and daub.

The other part of the homestead is the walled compound which serves as protection and that encircles the homesteads. Within the compound, there is the **mereba**. According to informants, the **mereba** serves as open air ground to perform some activities like pounding grains, feeding animals with fodder, and during festivities as a suitable place for the construction of the pavilion. Besides, informants told that **mereba** is suitable place for the traditional Tigrean dances during a wedding. The naming **kuda mereba**[6] ascertains this.

[6] **Kuda** refers to one traditional dance of the Tigreans, and **mereba** means the inner part of a compound. Therefore, **kuda mereba** is then to mean dance of the compound.

To sum up, pertaining to information from informants and as far as my life experience is concerned; it is **hidmo** with a walled masonry and as the type of the one explained by Bauer (1977) and not **gojo** from wattle and daub that the peasants in Tigray prefer. That is justifiable, given the security issues **hidmos** provide to camouflage with the ground during attacks[7], as well as due to climatic conditions in relation to the head piercing sun light during the dry season and the heavy rain during the rainy season and the capacity **hidmos** have to withstand all. Generally, homesteads of the majority peasants have two gates, the **degeselam** and the **degeberi**. Whereas the **degeberi** is small and it is found on the front, the **degeselam** is wide and it is found at the back of the homestead leading to the farm yards. These two gates are functional.

[7] According to informants, more recently during the civil war period in the **Derg** regime and even during the Italian invasion in the 1930s **hidmos** serve as where to hide from aeroplanes' bombardments.

CHAPTER II

REVIEW OF RELATED LITERATURES

Literature reviews are instrumental in that they help the research undertaking to have a sound background. Accordingly, I have tried to find out some related literatures and use them as background information for this research.

To speak about the arrangement, firstly, the concept of traditional knowledge and its wide dimensions is treated. Secondly, the two famous theories of substantivism and formalism are presented one after the other for these theories serve as guiding principles over where the analysis and discussion of the research are be based. Thirdly, the conceptualization of the peasant(s) from anthropological perspective is treated. Following this, the concept of production is dealt with together with distribution and its subdivisions as major topics. Then after, other related concepts like decision-making, division of labor and labor organization are treated one after the other.

2. 1. Theories of Production in Economic Anthropology

In Economic Anthropology: Substantivism, Formalism and Marxism are noted for being theories that treat production and distribution as their points of focus (Donham, 1978). The fact being this, however, due to the limited time and experience I have had to use Marxism in full, and due to the desire I have had to show that the strongest propositions of both theories of substantivism, that is, "the economy is a type of human activity, embedded in different social institutions in different kinds of societies"(Wilk, 1996, p.11) and that of formalism, that is, "the economic rationality of the maximizing individual [is] to be found in all societies in all kinds of behavior"(Wilk, 1996, p.11) work in peasant societies; I have employed only the two theories of Substantivism and Formalism.

2.1.1. Substantivism

To begin with, "The appellation substantive, which has come to be applied in connection with the views of Karl Polanyi and his followers,[was] an invention of Polanyi himself " (Schneider, 1974, p.2). For Polanyi ([1958], 1968), "The substantive meaning of economic derives from man's dependence for his living upon nature and his fellows. It refers to the interchange with his natural and social environment, in so far as [that] results in supplying him with the means of material want satisfaction" (p.122). Polanyi and his

followers considered the economy as "instituted process" and they opted for "economic institutions" and "social structure" as points of focus. In this regard, cases in point may be Dalton (1967) for saying "the substantive meaning of economy has universal validity in that it refers to the fact that men everywhere need sustenance and the social system must see that it is provided" (quoted in Schneider, 1974, p.5); Nash (1967) for witnessing that "economic action is only a part of the system of social action. It is tied to the whole social system in three ways; first by normative integration, second by functional interdependence, and third by causal interaction" (p.9) and of course Bohannan (1964) for noting that in substantive economy "decisions about production and distribution are made in terms of obligations (which has the effect of achieving the persistence of the society) and not in terms of profit" (quoted in Schneider, 1974, p. 7).

Generally therefore, as far as my reading goes, for substantivists, the economy is a type of human activity which is different from social but which is meanwhile guided by the social. The proponents of this theory claim that the economy is embedded in such social institutions like kinship, marriage, family and religion. They say that social sanctions from social institutions deter individuals from thinking individually in a way which could maximize their profit. They rather underline that individuals, especially in the less developed countries, sacrifice their need of maximization for the sake of the social. No one is seen intending to maximize profit at the expense of others or in a way which can harm and endanger the social system. That is because his/her actions will result in harsh social sanctions which are by far more powerful and strong as well as more valuable than the economic (Polanyi, [1958] 1968; Nash 1967; Dalton, 1967; Bohannan, 1964; Donham, 1978; Wilk, 1996).

Hence while conducting the study, taking a note from the above assertion, effort has been exerted to consider substantivism at some points in the analysis and discussion. This is because I believed that substantivist thinking is common in peasant societies, though not the only. In this regard, the peasants desire to be involved in extravagant festivities with little regard to their extraordinary expenses that can even endanger their families is a case in point.

2.1.2. Formalism

As indicated above, the naming formalist was the coinage of Polanyi as can be seen in his writing that "the formal meaning of economic derives from the logical character of the means-ends relationship, as apparent in such words as "economical" or "economizing." It refers to a definite situation of choice, namely, that between the different uses of means

induced by an insufficiency of those means" (1968[1958], p.122). As to Donham (1978, p. 21) "It was mainly in reaction to the substantivists' idea of whole societies rigidified by cultural values that neoclassical or formalist studies in economic anthropology began in the late 1950's."

According to formalists, the economy is a type of human behaviour which is distinguishable from the social and with which the behavior of human societies at every corner of the globe can be looked at. It is a way of looking into other aspects of human societies including their social aspect. Here, individuals and their decisions as well choices are prioritized over the social structures and the society in general, as points of focus when studying all societies and their economy. Its proponents believe that in the presence of scarce resources and unlimited human wants, it is possible to predict the behaviour of all human beings at every corner of the globe with little regard to their level of technological development, that is, through the implementation of the formal economic principles. They intend to apply formal economic theories cross-culturally thinking that all human creatures tend to maximize at least utility (satisfaction) and not necessarily profit on one hand, and avert risk "rationally", on the other hand (Schneider, 1974; Donham, 1978 and Wilk, 1996).

So in line to the above discussions about formalists, in the research under consideration, the formalist thinking was also consulted when necessary. That is, especially, in relation to the supposed changing characteristics of the peasantry in the localities. Here, the peasants desire to produce some ignoring others in a way which could help them to avoid risk and to satisfy their utilities can be cases in point.

2.2. The Concept of Indigenous Knowledge and its Dimensions

According to Atteh (1992) there has been revival in the development of research interest towards indigenous, local and/ or traditional knowledge since the recent past. In connection to this Grenier (1997) wrote "since the early 1990s, [indigenous knowledge] has been fertile ground for research" (p. viii). Accordingly, a number of studies that focused on local knowledge "have described identifiable management strategies employed by rural people to exploit the environment, such as in farming systems, animal husbandry, health care delivery, engineering and others (Atteh, 1992, p. 2).

For Atteh (1992) "Indigenous local knowledge is . . . the accumulation and dissemination of information in the form of shared environmental knowledge, beliefs and

rules and techniques for productive activities. This body of traditional knowledge has developed over generations as a product of man-environment interactions" (p.3). Grenier (1997:1) wrote "such knowledge systems are cumulative, representing generations of experiences, careful observations, and trial-and-error experiments." Moreover, for the same author "[indigenous knowledge systems] are . . . dynamic: new knowledge is continuously added. Such systems do innovate from within and also will internalize, use, and adapt external knowledge to suit the local situation" (Grenier, 1997, p.1).

Who owns indigenous knowledge? Indigenous knowledge systems are the properties of all members of a community though the knowledge of these members differ in quantity and quality based on the characteristics of the members concerned (Grenier, 1997). As a matter of fact " [indigenous knowledge] is stored in people's memories and activities and is expressed in stories, songs, folklore, proverbs, dances, myths, cultural values, beliefs, rituals, community laws, local language and taxonomy, agricultural practices, equipment, materials, plant species, and animal breeds (Grenier, 1997, p.2).

Speaking about the multifarious areas of indigenous knowledge, Atteh (1992) has written:

> The dimension of rural people's knowledge is wide, encompassing the whole range of human experiences, with regard to both tangible and non-tangible entities. Their fields of knowledge include history, linguistics, economic science, social knowledge, political and administration communications, energy related technology, physical environment of soils, water, and climate, biological entities of plants, crops weeds, pests, domestic and wild animals and insects etc., medicine, taxonomic systems, time, skills, artifacts, religion and a host of others (p.6).

So, indigenous, local or traditional knowledge are as such wide which influence the communities concerned in almost every aspects of their life. For both Atteh (1992) and Grenier (1997) indigenous knowledge systems are very helpful for societies in that they enable the latter to use their environments and to survive in the face of disasters be it natural or man-made.

Therefore, cognizant of all the above discussions about indigenous knowledge, its characteristics, dimensions, way of transmission as well as its significance, in this paper an attempt is made to include traditional knowledge system of the Tigreans as reflected in their traditional production mechanisms in agriculture and craft productions and also in the

challenges they face and traditional mechanisms they employ to deal with them. That is, side by side with the guiding principles of Formalism ad Substantivism.

2.3. Conceptualizing Peasants in Time Perspective

The word peasant has remained to connote manifold definitions in different disciplines, including anthropology, since many decades ago. To have a glimpse at some in a way which could reveal the changing understanding of the peasantry through time, especially in the anthropologists' arena, here under some definitions of Peasants are included.

To begin with, for Kroeber (1948), "Peasants are definitely rural yet live in relation to market towns; they form a class segment of a larger population which usually contains also urban centres. . . . They constitute part- societies with part cultures" (quoted in Cancian, 1989, p. 127).

Firth (1950) was in a position to treat peasants from economic point of view. In this regard, he noted that "the term peasant has primarily an economic referent. . . . The primary means of livelihood of the peasant is cultivation of the soil" (quoted in Foster, 1967, p.4). Moreover, Firth (1951) said, "In economic terms, a peasant is presumably a man who produces-usually through cultivation-mainly for his own household's consumption, but who also produces something to exchange in a market for other goods and services. This is the economic aspect of the peasant community's semi-autonomy" (quoted in Fallers, 1967, p. 4).

In different way to the above attempts to understand peasants, some have tried to conceptualize peasants as mere creation of the cities. In this regard, Redfield (1953:31) who related peasants "to a human type [that] required the city to bring it into existence"; Wolf (1966) as quoted in (Foster, 1967, p. 6) who noted, " it is only when a cultivator becomes subject to the demands and sanctions of power-holders outside his social stratum-that we can appropriately speak of peasantry" and of course Foster (1967) in that he wrote, " in a culture-historical sense, peasant society is also dependent on and essentially formed by the city, from which it takes far more than it gives"(p.10), are all to be noted.

In other occasion, Foster (1967) preferring the classification of the peasants based on "structural and relational rather than occupational" factors, he has depicted peasants "as a peripheral but essential part of civilizations, producing the food that makes urban life possible, supporting (and subject to) the specialized classes of political and religious rulers and the other members of the educated elite" (P. 16).

Shanin (1990) taking a note from his predecessors, especially Redfield, has noted that the "peasantry consists of small agricultural producers who, with the help of simple equipment and the labour of their families, produce mainly for their own consumption and for the fulfillment of obligations to the holders of political and economic power" (pp. 23-24).

Above and beyond, most recently Ferraro (2004: 160) has written:

> Peasant farmers differ from American Indian horticulturalists, Polynesian fishing people, or east African herders in that they are not isolated or self-sufficient societies. Instead, peasants are tied to the larger unit (the city or state) politically, religiously, and economically. More specifically, peasants are subject to the laws and controls of the state, are influenced by the urban-based religious hierarchies, and exchange their farm surpluses for goods produced in other parts of the state. Peasants usually make up a large percentage of the total population and provide most of the dietary needs of the city dwellers.

So, as can be seen from the above literatures, it can be concluded that through time peasants have come to be depicted less self-sufficient groups of people who produce mainly for their consumption and some also for sale, living more often than not in the rural areas, and having strong relations with the urban centers.

The Tigrean peasants, with whom the study dealt, are not in different to the above assertions about peasants. Hence, when dealing with the production practices of these peasants in Tigray, the fact that they are not self-sufficient was underscored, and all the analyses in this paper were done in line to it.

2. 4. Conceptualizing Production and Subsistence Production

"Regulation of resources," "production," and "exchange" can serve as referring points to study "economic systems cross-culturally," (Ferraro, 2004, p. 169). Thus, in light of this, and due to the research was meant to study the production practices of the peasants in Tigray, it deserved to include the conceptualizations of production and subsistence production (which is very common in peasant societies) and the following discussions are included, accordingly.

To begin with, referring to economists, Ferraro (2004:174) defined production as "process of obtaining goods from the natural environment and transferring them in to useable objects." When referring to production practices of societies like peasants, the other related concept to production is subsistence production. Barker (1989) when he tried to conceptualize production in relation to peasant farmers, divided the word subsistence in to two equally

meaningful definitions, "production for own sustenance and making a bare living." In this regard, he wrote that "self provisioning, or production for own consumption, is a central part of the definition of the peasant production units" (p.61).

According to Fasil (1993:17) "Subsistence production" is often times associated to the "production systems which prevail in predominantly rural societies." As far as this author is concerned:

> The most basic features of this system of production are the fact that production is primarily aimed toward meeting household consumption needs and that the level of production which is a reflection of the rudimentary technology employed, generally affords a very low level of living. While some part of the produce may be sold by the producers, the quantities sold are usually very small. (Fasil, 1993, p. 17)

Any production in general, including production of subsistence producers does require certain inputs. These inputs may come in the form of land, labour, tools, capital and several others. Here, since mere presence of these factors cannot guarantee production and distribution, there is a need to systematically utilize these inputs. In connection to this, Dalton (1967:66) has noted that "production in all economies requires organizational devices and rules to direct labour, land, and other resources to specific use."

Thus, in light of this nearest assertion by Dalton, the study has already tried to discuss the ways through which the peasants of the research sites produce their products, in which emphasis was laid over their employment of systematic use of labour, tools and capital on the one hand, and the distribution process together with their decisions and their bases, on the other hand.

2.5. The Concept of Distribution and its Characteristics

Speaking of production, one essential thing is distribution. Once goods are produced, they need to be allocated. In this regard, the distribution system that one society has plays a lot. To this end, Ferraro (2004: 179) has written that "systems of exchange are essential for every economy, for they allow people to dispose of their surpluses and, at the same time, maximize the diversity of the goods and services consumed."

Polanyi (1957) (quoted in Ferraro, 2004, p. 179) noted that "goods and services are allocated in all societies according to three different modes of distribution: reciprocity,

redistribution, and market exchange." Here under, all these types of distribution are presented one after the other.

2.5.1. Reciprocity

Noting that "reciprocity is the exchange of goods and services of roughly equal value between two parties without the use of money" Sahlins (1972) as quoted in (Ferraro, 2004, p. 180) has witnessed that "economic anthropologists generally recognize three types of reciprocity, depending on the degree of closeness of the parties involved in the exchange: generalized reciprocity, balanced reciprocity, and negative reciprocity."

To illustrate each and every one of these; as Ferraro (2004:180) noted, "Generalized reciprocity, which is usually played out among family members or close friends, carries with it the highest level of moral obligation. It involves a form of gift giving without any expectation of immediate return."

As to the same personality, "Balanced reciprocity is a form of exchange involving the expectation that goods and services of equivalent value will be returned within a specified period of time. In contrast to generalized reciprocity, balanced reciprocity involves more formal relationships, greater social distance, and a strong obligation to repay the original gift," (Ferraro, 2004, p. 181).

Coming to the other form of reciprocity as identified by Sahlins, Ferraro (2004:181) wrote, "Negative reciprocity is a form of exchange between equals in which the parties attempt to take advantage of each other. It is based on the principle of trying to get something for nothing or to get the better of the deal."

So, taking a note about the characteristics and nature of the three types of reciprocities as recognized by anthropologists, it has been tried to find out which of these three reciprocities prevail more, either in labor organization in the process of production or else in the distribution processes of the peasants under consideration.

2.5.2. Redistribution

As explained earlier, apart from reciprocity with its varieties, another system of allocation in the name redistribution is recognized by anthropologists. As to Ferraro (2004:183) this system is "whereby goods are given to a central authority and then given back to the people in a new pattern." Pertaining to my knowledge, this system is less practiced by

the society under consideration, and thus I have preferred not to deal with it more. It is included only to show that there is such system of distribution namely, redistribution.

2.5.3. Market Exchange

The third and different type of allocation which is believed to be common specifically in advanced and industrialized societies is the market exchange (Ferraro, 2004). This system of distribution is " based on the principle of market exchange, whereby goods and services are bought and sold, often through the use of a standardized currency" (p.187) and that "the value of any particular good or service is determined by the market principle of supply and demand"(p.188).

As a matter of fact, though market is common to be found as Ferraro noted in advanced and industrialized societies, it is also common in peasant societies. In this regard, Nash (1967) has written that "the market system is wide spread among peasants" (p.7). Hence, in the study under consideration, the peasants' involvement in market exchange was considered whenever some part of the economic value of their products was needed to be treated.

2.6. The Concept of Decision- Making

Another important issue to be raised for playing a central role in production and distribution of societies is decision-making. This concept in Economic Anthropology is approached in different ways. To mention for example, as to the limit of this paper, where as the substantivists treated it as something embedded within the instituted process of the economy of one society (Polanyi [1958], 1968; Dalton, 1967; Nash, 1967); the formalists approached and thought of it as resultant of the rational maximizing motive of individuals in their economic activities with their societies (Leclair, 1967; Schneider, 1974; Ortiz, 1980).

So, in light of the above debate points about decision-making and how it is differently treated in Economic Anthropology, I have tried to situate the issue of decision-making in finding out what basis the decisions of the peasants in the research sites have, that is, in both their production practices and related activities, as well as in their distribution systems.

2.7. Division of Labor and its Characteristics

"One very important aspect of the process of production is the allocation of tasks to be performed-that is, deciding which types of people will perform which categories of work" (Ferraro, 2004, p.176). Societies at every corner of the globe--no matter for their

technological level of production-- have since long devised different mechanisms in which they allocate labor to their members using, age and gender as common criteria; besides other criteria. In this regard, explaining the fact well, Ferraro(2004) noted that " Even though many societies have considerably more complex **divisions of labor**, all societies make distinctions on the basis of gender and age"(p.176).

But as indicated above, gradually, division of labor based on age and gender have not been proved to be enough, especially following the agricultural revolution; thus "labour specialization- another term for divisions of labour" (Ferraro, 2004) has come to be another criterion to consult.

As a matter of fact, although this division of labor based on specialization is less common in subsistence producers like peasants', "in that if specialists do exist, they are usually part-timers, engage in political leadership, ceremonial activities, or specialized tool-making"(Ferraro, 2004, p. 176), it has been indicated by earlier researches that specialization of labor has resulted in the emergence of occupational groups (though as part timers) even within the technologically less advanced subsistence producers, like peasants. In this regard Foster (1967) noted that "in most peasant societies, significant numbers of people earn their livings from non-agricultural occupations."

When we see Ethiopian cases on this matter, we find that the universal criteria, age and sex have remained to be the main points of reference for the division of labor. This has been reflected by a number of studies that have been conducted in different parts of the country as in Ari (Gebre, 1993); in Bench (Girmaye, 1993); in Wello (Daniel, 2002); in Gedeo (Dagne, 2005) and in Tigray (Bauer, 1977; Kiros, 1995; Alemtsehay, 2002 and Asmelash, 2006).

Additionally, it has been shown that women's main role is related to managerial issues at household level (Yared, 1995; Alemtsehay, 2002). In this regard, referring to his study site Wogda, Yared (1995:188) has written that "Once the produce is threshed and put into the *goteras* (the storage bins made from thatch and mud), it is almost always the woman who manages the utilization of grain." He added and further noted "the women are responsible for regulating food consumption and regular sales of grain, with the goal of making grain stocks last until the next harvest."

In addition to this, some studies have indicated that the division based on sex has resulted in women to be overloaded. Here, for example, in his study in Bench, Girmaye

(1993:50) has concluded his discussion about labor division noting that "the division obviously shows an imbalance where women are overloaded." As is discussed later, this paper under consideration has also found that division of labor based on sex has resulted in women to be overloaded.

So, in line to the above notes about labor division, the study has tried to throw light on what bases the division of labor among the concerned peasants is based; on what basis the peasants share labor; and what areas of specializations exist assisting the agricultural production. This latter concern has been more dealt with when studying the different fields of production over where the peasants involve themselves. Craft production is a case in point.

2.8. The Concept and Characteristics of Labor Organization

"Although it may be that the peasant family is the most self- sufficient small unit found in any society, it cannot exist as a social isolate. Peasants must be able to call up on members of other families for mutual economic, social and emotional support," (Diaz & Potter, 1967, p.156). This is so, given the fact that "peasant farming is "labour intensive" rather than "capital intensive" (Wolf quoted in Diaz, 1967, p. 53) and that extra labor is necessary specifically at certain periods like planting and harvesting seasons (Wolf quoted in Diaz,1967; Nash, 1967; Barker, 1989). Even though this involvement of outsiders is so common, especially in farming societies when the production practices are at their summit, take the case of "planting or harvesting" (Nash, 1967), it has been noted by Diaz (1967: 53) that the " extra familial ties are necessary even for the routine jobs of a peasant farmer."

So, given the fact that the way societies organize labor can determine the production and distribution processes of these societies; organization of labor is crucial to consider. To this end, the following literatures concerning the nature and characteristics of labor organization in societies like peasants are included.

Donham while studying the production practice of the Malle has quoted two personalities in relation to labor organization. So, as far as Erasmus (1956) and Moore (1976) are concerned, there exist "two types of work parties" (quoted in Donham, 1978, p.204). For both Erasmus (1956) and Moore (1976), the first of these work groups, called a "reciprocal work group" . . . is composed of a group of households that work on rotation on each others' fields [and where] reciprocity . . . is strictly defined"; that is in a way which enable each to give equal labor as it receives (quoted in Donham, 1978, p.204).

The second kind work group of Erasmus (1956) came in the name "festive work group" (quoted in Donham, 1978, p. 204). As to him, here in the festive group, "the sponsoring household brews beer or prepares food and, [summons] neighbors to come and help them on the appointed day. After the work is done, the sponsoring household often retains an obligation, a loose and unenforced obligation, to send a worker at some future date to the festive work parties of the household who have worked for it" (quoted in Donham, 1978, pp. 204-205). As to Diaz (1967) " labour exchange of this kind is often validated and celebrated by ritual and ceremony, by drinking, feasting, and dancing, so that participants, feel they have gained in enjoyment for what they have contributed in work"(p.53).

In the case of Ethiopia, scholars like Donham, 1978; McCann, 1987; Gebre, 1993; Ayalew, 1995; Yared, 1995 and Daniel, 2002 have identified and written how the societies they studied exchange labour. In this case McCann (1987) indicating that peasants do not only exchange labor but they could also exchange other things like draft power, has written that "The most common form of the exchange of draft power [is] the institution called *makanajo* in Shewa or *mallafagn* in much of northern Wallo whereby households with one animal borrowed that of another and, in turn, lent their own for an equal period calculated in plowing days" (p. 80). I have found the institution **mallafagn** in my study in Tigray to be called **lifinti** and it seems to work under the same ways as has been explained by McCann. This is explained in the analysis part. Similarly, in his own case, on his study of the Ari, Gebre (1993) has identified a number of work parties through which the society organizes its labor. As to him, the work parties are: **aldi, mola, idir** and **wod**. Moreover, Yared (1995) stated that members of the community in Wogda where he conducted his study support each other in cooperative terms. In this regard, he mentioned that work groups like **wenfel** and **debo** are effective in helping the communities cooperate and work in group. He further noted that the work groups are essential to perform tasks like plowing, weeding and harvesting. In the same manner, Ayalew (1995) has indicated that the Arbore have work parties called **banecho** and the **hailla**. Under the same token, Daniel (2002) has also indicated that **Jige** and **Wonfel** are essential institutions of labor exchange in his study area in Wello.

Generally, as Dalton (1967) noted "the specific arrangement of work in any production line is the combined result of physical environment, technology, economic structure, and social organization, (p. 68). This and the other above assertions were therefore taken into consideration while conducting the study in relation to labor organization institutions.

CHAPTER III

AGRICULTURAL FIELDS OF PRODUCTION AND THEIR ECONOMIC AND SOCIO-CULTURAL VALUES

The peasants in Tigray participate as agriculturalists not only in crop production (though it is the main base of their subsistence) but also in animal husbandry, poultry and apiculture, that is, to secure economic and socio- cultural values that their products offer.

In this section of the paper, I will present major sub topics namely: crop production, animal husbandry, poultry and apiculture, in line with their economic and socio-cultural values as well as the related guiding principles in decision- making of the peasants while participating in each field.

3.1. Agricultural Fields of Production

3.1.1. Crop Production

The peasants in the research sites practice much diversified crop production. They produce cereals, grains, legumes, oil seeds and other crops. Here, amid of their production, the peasants consider a number of factors like: risk aversion by having diversified types of crops; securing quantity and quality of production in relation to the land size, soil fertility and amount of rainfall; securing source of income which can cover their expenses for consumer goods (economic), and also securing the socio-cultural values that the crops have.

3.1.1.1. Cereal Crops

Pertaining to the economic and socio-cultural values that each cereal provides, and in relation to their diversified needs, the peasants produce diversified types of cereals. The cereals are as such diversified that even a single cereal has its own various varieties. The discussion below shows this fact and the cereals are discussed one after the other, randomly.

Taf (eragrostis tef)

Peasants of Tigray produce three different types of **taf** (**eragrostis tef**). These varieties of **taf** are different in relation to their productivity, in relation to amount of rainfall and soil fertility they require as well as in relation to their length of growth and of course as per their economic and socio-cultural values. The varieties are **qeyih/wafey taf** (red **taf**), **tsaeda taf** (white **taf**), and **sergen taf** (mixed colored **taf**).

Informants indicated that they ideally produce three of the above land race of **taf**. They use them for **enjera** (which is their staple food) by either using any of the three alone or mixing any of them with other crops for example, grains. Each differs in its quality for **enjera**. Here informants witnessed that **enjera** from the white **taf** is of the best quality, with **sergen** and **qeyih/wafey** arranged then after, consecutively. According to them, the white **taf** is sown due to its quality of **enjera** not only at household level but also at festivities (which are discussed in this paper later). Besides, the white **taf** is sown despite its lower productivity in comparison to other varieties; to safeguard one household's source of income. Here, if a peasant wants to get money either to cover his need for consumer goods or to buy other crops like grains to substantiate his basic need for food, he will most probably sell his white **taf**. This was ascertained by informant Gabreigziabiher Tekle when he said, "From all the three types the land race white **taf** is used for market exchange. It is sold in expensive prices when in the market, and it can compensate the daily requirements of a household" (Interview, on February 26, 2011). So as can be seen from the above discussion, it can be said that the peasants produce white **taf** more for market exchange, though they also produce it for personal consumption and also for festivities.

Informants indicated that they produce the red **taf**, because it grows fast and can serve as an emergency crop. In this regard, they told that this variety is instrumental if in case there is shortage of rain, when the soil is infertile and accordingly, when they can no longer sow the other varieties of **taf**. As a matter of fact, though this land race can also serve for **enjera**, it is less preferred in comparison to the other two varieties, namely the white and the mixed.

Informants and group participants in all the focus groups discussions realized that the mixed type of **taf** is a land race which is preferred for its productivity. Accordingly, it is most probable for a peasant to harvest more amount of harvest on land where the mixed type was sown than on a land where the other two especially the white **taf**, were sown. In this regard, informant Tsehaye Nirea indicated that they can harvest 150 Kgs of mixed **taf** from the same farmland where they previously harvested only 100 Kgs sowing white **taf** (Interview, on March 8, 2011).

Generally, as observed and according to informants, all of the varieties are not used only as **enjera** for personal consumption, but they are also used to serve as soup, bread(less preferred), and as preferred alms next to wheat for a church so that the church can use it later in whatever way it needs. Here, the church can either sell it in the market or it can use it to

exchange for wheat that it uses during the communion. Above and beyond, the three varieties are all marketable though the white is most preferred for marketing purpose.

Sigem (barley)

Barley is among those crops the peasants of the localities do not want to miss in their households. The peasants in the research sites rate this cereal crop as "king" of all other cereals. A Tigrean legend explains the preference of barley. According to informant Abrhet Hawerya (Interview, on Feb 2, 2011) the legend goes this way:

> One day in the long past a king wanted to know who among his servants was shrewd and knowledgeable. At this time he wanted them to contest on one issue. For this purpose he asked all of them to tell him which one of all the crops they know, is the king of the others. A number of servants missed the answer, but one. The successful servant replied that **sigem** (barley) is the king of all crops. Raising her reasons, she added, it is the only crop that can fulfill all of our needs. If my king wants **enjera** I can make it **enjera**. If my king wants bread I can make it bread. If my king wants **siwa** (local beer) I can prepare from it the **siwa**. If my king wants **qolo** (roasted grain) I can make it. So, it is due to this that I dare to say barley is for sure the king of other crops, she said. The king became very happy with her answer. Since then, it is said, the king appointed her as the leader of all the other cooks.

As in the legend above, barley is recognized by majority of my informants and focus groups participants, as the king of all other crops and all stated that they did not want to miss it at their households, from year to year. I was also told that they produce a number of its varieties which help them to produce barley indifferent areas with difference in soil fertility and type, amount of rainfall, and as to the upcoming socio-cultural occasions want them to do. I personally identified ten varieties of barley during the field work. Table 1 indicates the varieties of barley and the functions of each.

TABLE 1

Varieties of Barley and Their Function

Barley varieties	Functions
Tsaeda sigem	**enjera** (most preferred)
Ikli-zguy	**enjera** and bread
Demastefa	**siwa**
Tselimo	bread(of less quality) and roasted grain
Tsematewahyo	**enjera**
Birguda	**enjera** + **tihni** (powder that is mixed with water and serves as juice, preferably served by those who have gastritis. Besides, it is also used as food to be eaten during the Lent).
Gunaza	**kolo** (roasted grain)
Atsa	**enjera**
Saesae	serves as new seed that replace the old barley which remain to be sown for some time in the past (it is exchanged with **taf**)
Demhay	**kolo** (roasted grain)

Source: field work, 2011

Generally, according to my observation of the feeling of informants during the field work, I can say that the peasants seemed to be proud when they spoke about being producers and owners of barley (**sigem**). They like it not only for the reasons mentioned in the legend above, but also because it is a fast growing crop that supports the peasants when their granaries go empty following the rainy season. In this regard, for example, I was told that the land race **tsaeda sigem** (white barley) is harvested after 80 days of it's sowing; a case that makes it very instrumental in relieving peasants from shortage of food during the transition period from the rainy season to September in the early harvest season.

Sirnay (wheat)

Wheat is another important grain crop produced for house consumption; for market exchange; for alms giving to the church and also for festivities. Informants told that wheat, being valuable, has different varieties. The following varieties of wheat were identified during the field work. Table 2 shows the varieties of wheat and the functions of each.

TABLE 2

Varieties of Wheat and Their Function

Wheat varieties	Functions
Shihan (white in color)	bread (of less quality in comparison to **ziban seseha**, other variety)
Ziban seseha (mixed having no single color)	best quality bread, roasted grain
Kinkina (red in color)	**enjera** and **siwa**
Chilay (white in color)	bread
Kuaday (white in color)	**enjera**, bread and **kolo** (roasted grain) as well as **meboe**/alms for a church
Tselimo (black in color)	bread and roasted grain
Gider (white)	serves for all purposes and it is generally preferred for its productivity

Source: field work, 2011

When asked why they differentiate between the different kinds of wheat, informants said that they differentiate one variety from the other because their actions help them to avert risk of failure of production in relation to bad climate (from failure of production of any variety) on one hand, and because their actions help them to enhance production as well as satisfy their various needs, on the other hand.

Generally speaking, informants told that their varieties of wheat differ in the type of soil they are better produced; in the time of calendar they are sown as well as in the qualities of their flour. With regard to soil preference, I was told that whereas the variety **ziban seseha** grows well in **walka** (black soil); **kinkina**, **chilay**, **tselimo**, **kuaday**, **shihan** and **gider** grow well in **hutsa** (sand soil). Concerning the quality of the varieties, they rank and arrange them in such a way that the first named from the list is the first in quality and the last is the last in its quality. The list includes **Ziban seseha**, **gider**, **kuaday**, **shihan**, **chilay**, **tselimo** and **kinkina**.

Dagusha (finger millet)

The other important cereal as produced by the peasants of Tigray is finger millet. According to informants, finger millet needs a lot of rain and it is sown only when there is sufficient rain. Even if the main socio-cultural value of finger millet is raised in relation to its

use for the preparation of **siwa**[5]; finger millet can have other values too depending on its varieties.

During my stay in the field I was able to personally identify common varieties of finger millet like **walya** (black finger millet), **qeyih dagusha** (red finger millet), **tsaeda dagusha** (white finger millet) and **gobozay** (light colored finger millet). All of these varieties have their own unique function as well as characteristics. According to informants, the variety called **walya** is slow growing finger millet that needs sufficient amount of rain preferably starting from April till October. This variety is the most preferred because it is very instrumental for the preparation of **siwa**. As explained above, given the fact that **siwa** is necessary in the time households undertake agricultural activities with the help of extra labor; in the time households prepare any festivities; and above all, because **siwa** is the most liked traditional alcoholic drink, the peasants' very preference of **waliya** is justifiable.

According to informants, **gobozay**, the other variety of finger millet is produced for its productivity and fast growth, as well as for personal consumption as **enjera**. Similarly, they produce the other variety **tsaeda dagusha** (white finger millet) to use it for personal consumption as food in the form of **enjera** (mixed with other crops especially with **taf**) and also as **kicha** (bread) and **sinqo** (soup).

Mishela (sorghum)

According to significant number of informants, sorghum is a crop which is least produced, due to the unfavorable weather and climatic conditions in the area (for its growth) and in relation to the presence of birds and rodents attack. Informants told that though it is least produced and preferred, it is however, produced to some extent. Accordingly, I identified some varieties of sorghum namely: **koden**, **gumbilu**, **shilkuit/safiday** and **wediaker** (chickling vetch).

According to informants and participants, all varieties of sorghum have their own significance and characteristics. To begin with, informants told that **shilkuit/safiday** is a sorghum that is known for its fast growth, especially when the rain starts late, and when peasants can no longer sow the other varieties. In connection to this, informants indicated that despite the fact it is fast growing and draught resistant crop, **shilkuit/ safiday** is less preferred

[5] As it is used in the distribution systems which are explained later in this paper and given the fact that **siwa** is the most liked and important traditional alcoholic drink in Tigray.

because it needs too much attention, especially during its harvest time; which the peasants cannot however offer better than their more preferred cereals like **taf** and barley. This is because unlike the other cereals and even unlike the other varieties of sorghum, it is viable to fall easily even if touched let alone when it is harvested. According to the informants, this variety becomes ready to harvest and dry within a short period of time, and thus, its collection is at least impossible. One informant, Abrhet Woldearegay talked about **safiday** in such a way, "**safiday** is not good. We only harvest it when we have no alternative. It is not good because it is difficult to collect. It falls on ones back like hailstones by the time one tries to collect it when it is dry and ready to harvest. So, generally it is not good and above all it hurts a lot in that it falls to the ground when one tries to collect it" (Interview, on February 6, 2011).

According to informants, **gumbilu** is the other variety of sorghum which is known for its productivity, and which the peasants consider as one of the main varieties of sorghum next to **koden**. Informant Tsehaye Nirea has the following to say about the fact that **gumbilu** is very productive, "**gumbilu** happened to be very supportive for us in 1978 E.C, following the time of famine and drought in Ethiopia in 1977 E.C. In 1978 E.C we were happy that we produced the sorghum type **gumbilu**. It could stay in our granaries till 1980 E.C, that is, for three successive years" (Interview, on March 8, 2011). So, as the case above reflects, **gumbilu** is productive and it is produced for its productivity. In relation to this, it is common to hear the peasants singing a song and talking about the hope and confidence they have on the variety **gumbilu**. The following is one of such songs which are sung by peasants, and which reflects that they are confident in the continuous productivity of **gumbilu** from year to year.

Mishela gumbilu sorghum **gumbilu** has grown,
Tehazazilu one over the other
Ayoka harestay kidegm eye elu saying behold peasant I want to repeat the same

The other essential variety of sorghum is **koden.** According to informants, this type of sorghum is used for personal consumption as **enjera** mixed with **taf** and also as **siwa** (though less preferred in comparison to finger millet). Moreover, **koden** does also serve as a kind of popcorn in which it is served with chick- pea (see plate 8). In this regard, informants indicated that it happened to be the most preferred substitute for popcorn before the introduction of the latter. Here, I can tell from my observation that the whitish ball like bursts that explode when

the **koden** is heated, add glamour to the coffee ceremony when they are served alone or together with other roasted grains like chick-pea and sunflower. Above and beyond, this variety is believed to be the most plentiful variety by grace (**birkut**) of all other varieties of sorghum, when in the store. To express this, the peasants say in their local language **ab geza misatewe birkut iyu** (lit., it is plentiful by grace when it is in the homestead).

Finally, informants told that **wediaker** is another variety of sorghum which serves for **siwa** as substitute of finger millet (though much less preferred). Besides, they told that this variety may also be used for personal consumption as bread and **enjera**, by families who are economically poor and who cannot get the other types of crops. Generally, I found this variety of sorghum to be much less produced and above all less preferred, by the peasants in Adi-Senay and Adi-Amhara.

Lequa (red sorghum)

Although it is less preferred and less produced in relation to the same reasons I mentioned above for sorghum, as observed and told by informants, the peasants in Adi-Senay and Adi-Amhara produce three varieties of red sorghum. These varieties are termed **hatsiro** (short), **zariro** (spacious) and **kolkol kelbi** (dog's tail like).

To illustrate, **hatsiro** is a variety which has short stalk and which is productive but meanwhile which is believed culturally to be **hawtati** (less plentiful) when in the store[9]. In contrary wise, **zariro**[10] has long stalks and is believed to be plentiful by grace when in the store. Finally, the other variety, **kolkol kelbi** has very limited productivity and hence it is less preferred in comparison to the two. Its use is very limited in that it is produced to use it only for **enjera** and it is neither praised for its productivity when in the field nor for being plentiful when in the store. It has got its name from its husk which looks like a dog's tail.

Generally, informants told that they produce red sorghum for preparing **enjera** (only and only when mixed with **taf**) and **siwa**.

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[9] Peasants believe that some crops are plentiful when in the store due to that God wishes them to be like that. On the other hand, some crops are not plentiful because God does not allow them to be. So, **hatsiro** is one of those crops which do not become plentiful by grace on the will of God when in the store.

[10] The variant **zariro** serves to better substitute finger millet in terms of its use to prepare **siwa**. Despite this fact, the **siwa** that is prepared from **zariro** is feared to be drunk freely for being very strong that could cause drunkard easily.

Mishela Bahri (maize)

As I explained it above, the peasants of the research sites practice diversified production of either crops or others in order to satisfy their diversified economic and socio-cultural needs. As part of this reality, informants told me that they produce and recognize maize as one of their main crops and in that they need it to be at their home from year to year. Traditionally, they produce this type of cereal crop when there is sufficient amount of rainfall.

According to informants, the peasants in Adi-Senay and Adi-Amhara recognize two varieties of maize, namely **anji** and **wediarbea** (lit., "son of 40 days"). Whereas **anji** is a slow growing variety that requires sufficient rainfall for long period of time, May to September, and has long stalk; the **wediarbea** is of short stalk, fast growing (grows in 40 days of its sowing) and is a variety which is sown when the rain starts late, later than May. Generally speaking, in comparison to the two varieties, the peasants prefer **wediarbea** to a much lesser degree. To substantiate the case it helps to include what one informant said. Informant Abrhet Woldearegay said, "We sow **wediarbea** only to let our land be covered when the rain starts late. Otherwise, we prefer not to sow it at all" (Interview, on February 6, 2011).

To sum up this section, it helps to indicate that maize is praised and produced, for being emergency and fast growing crop. According to informants, it is one of the first two crops (besides, barley) that serve a family at its verge of failure into hunger, during the transition period in a year which the peasants call **kisad werhi**[11]. At this very time, maize proves very instrumental. Generally, maize is produced only for personal consumption and accordingly it is more often than not, served when in the field being fresh. Mostly, it is not taken in to the grind mills, unless the harvest proves to be more and they cannot finish all what they have produced (when in the field) and hence they have to store some.

3.1.1.2. Legumes

Legumes are among the other group of crops that are produced for their economic and socio-cultural values. Informants indicated that they produce legumes like chick-pea, pea, bean and lentil. Traditionally legumes like pea, chick-pea and bean are used to prepare the traditional stew called **tsebhi shiro**. Even if black chick-pea (**asebere**) can also serve as

[11] **Kisad werhi** lies in between the rainy season (**kiremti**) and September from the harvest season (**kewei**) when the firstly harvested fresh crops from the harvest of the New Year are used. At this time most peasant households will have nothing in their granaries and if no new harvest is collected, they may even fail victim to hunger.

alternative to any one of the three legumes indicated above during the preparation of **shiro**, the best quality **shiro** is made from chick-pea, pea and bean. Besides serving for **shiro**, bean specifically serves as ingredient for **hilbet** (other traditional stew) and together with pea it also serves for **bukulti** [12](sprout of crop soaked in water).

As a matter of fact, whereas bean does have two varieties namely bean of the Italians (**ater-bahri talian**) and bean of the mother land **(ater-bahri adi**), chick-pea and pea do have only one variety. From the varieties of bean, informants told that it is the variety of the Italians which is productive.

Birsin (lentil)

The other important legume which is produced by the peasants in Adi-Senay and Adi-Amhara for its economic and socio-cultural significance is lentil. Informants told that they produce lentil to use it either in the preparation of a traditional stew named **birsin** or else to use it as ingredient in the preparation of **hilbet**. In connection to this, informants further noted that traditionally lentil is believed by females to be aphrodisiac seed when it is served as stew. They added and said that it is the reason why the females in Tigray say, **birsin nisebay yerisin** (lit., lentil motivates a man).

To sum up the discussion about legumes, legumes do serve as significant source of income besides to satisfying the above socio-cultural values. For example, during my field work, I observed one **shahane** (traditional implement for measurement and which is measures around ½ kilogram) of chick- pea, to be sold with 30 Ethiopian Birr. A case in point, which I actually thought and considered to be very supportive for the peasants to cover at least their expenses for consumer goods.

3.1.1.3. Oil Seeds

Before the introduction of the manufactured oils, to satisfy their need for oil and also to use them in various traditional ways, the Tigrean peasants have remained to produce a number of oil seeds. In the research sites, oil seeds like **nihug** (nigerseed), **intatei** (linseed) and **shuf** (sunflower) are produced by the peasants.

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[12] **Bukulti** is a crop that has started germination when it is soaked in water. In Tigray **bukulti** mainly serves as alms in a church that is served after consecration and as important food to be presented in some festivities (as discussed in the next sub topic about distribution). **Bukulti** is mainly prepared from legumes, especially from bean.

Nihug (nigerseed)

According to informants, **nihug** (nigerseed) is one in its type and its main socio-cultural function is proved during the threshing time. Peasants in Tigray have a special food which they use during threshing and winnowing time, in a threshing floor, especially when the crops to be threshed are in large amount and when they have to stay there, day and night. The traditional food which is prepared from nigerseed is called **hisyo** (nigerseed cake). It is prepared from unfermented dough of **taf** hulling it with slightly pounded nigerseed. It is oval in its shape and informants told that it is very satisfying to the extent that it even enables them to stay for long period of time without having to eat again and again, and also being energetic. Energy which I think is necessary given the fact that the threshing and winnowing activities are very tiresome.

Besides its use for **hisyo**, nigerseed is used as **kebei** (oil). According to female informants, the oil from nigerseed is prepared by women after a group of men pounded the nigerseed with a mortar in a postle for hours. **Kebei** serves as oil especially during fasting days when the traditional stew called **hilbet** is consumed. **Kebei** is dark yellow in colour and very thick in texture.

Intatei (linseed)

Linseed is another economically and socio-culturally important oil crop. With regard to this crop, informants told that they recognize two varieties, based on their supposed sex. These varieties are male linseed and female linseed. Whereas the female linseed is very oily, the male is not as such. Generally speaking the main socio-cultural function of linseed is related to its usage as soup (**sinqo**), especially for a woman who has just given birth (**haras**). Culturally the soup from linseed is believed to strengthen the **haras** in the first days after giving birth. In addition to this, linseed can serve as stew which is most preferably served at the end of the Lent before anyone who remained fasting starts to eat meat, milk as well as egg products. Here, informants indicated that stew from linseed is mainly served at the dawn of the eve of the Passover or Easter holiday. This is done for linseed is culturally believed to soften the entrails which remained fasting for almost two months. Finally, it helps to indicate that because linseed is culturally believed to be sensitive and viable to evil spirit, it needs to be kept carefully in a very clean container with a strong lid; otherwise, it is most likely to be spoiled and to cause danger when served.

Shuf (sunflower)

The third type of oil seed that the peasants of the study sites produce is sunflower (**shuf**). During my field work informants told that they recognize two varieties of sunflower which they separate based on their color. These are the black sunflower and the white sunflower. The white sunflower can be drunk as soup after it is pounded and can also serve as additive to roasted grain of sorghum and other crops like chick- pea, barley as well as wheat. In this regard, it is put in the middle of the ball like white bursts of heated sorghum in a way it gives the popcorn like white bursts of sorghum a special beauty, especially during coffee ceremonies. In addition to this, sunflower can also be served as rapidly prepared raw stew, that is, a stew that has never touched heat/fire.

Speaking about the black sunflower, informants told that it is served as roasted grain and as oil. Generally, peasants in Adi-Senay and Adi-Amhara produce very few amount of sunflower always alongside other crops, like maize. They do that because its use is very limited to the explained socio-cultural values.

Finally to wind up the whole discussion about oil seeds, besides the explained socio-cultural values, all the oil seeds are very much supportive as source of income to the peasants when they are taken to the market.

3.1.1.4. Other Crops

Shinfae (cumin)

It is a crop that has two varieties which are separated from each other based on their color. Informants indicated that the varieties are namely, black and red. This crop is medicinal crop and its production is limited to that end. Here, though the two varieties can serve and have medicinal value, the black **Shinfae** (cumin) is the most commonly used and most culturally preferred type. Culturally cumin serves as medicinal crop for both human beings and animals (especially the poultries). Informant Gebremariam Zeray said that they use cumin together with water to sprinkle the place where a fresh wound was caused, and also on the fresh and swelling part of the body itself. When asked why they do that, the informant told that they do what they do because cumin is culturally believed by them to prevent the wound from becoming severe (because of evil spirit during the time it was caused) and because cumin is culturally believed to help the wound heal very early (Interview, On January 27, 2011). As explained above, the medicinal value of cumin to animals was told to me by female

informant Abrhet Woldearegay. She told me that they use mixture of cumin and lemon to cure their poultries from deadly birds' diseases. In this regard, though they most of the time succeed in curing their poultries from the fatal diseases of birds, the informant witnessed that they sometimes fail (Interview, on February 6, 2011).

Abacke (fenugreek)

Another very important crop which is produced by the peasants in the research sites is **abacke** (fenugreek). It has two varieties which are identified based on color. These varieties are namely, green fenugreek and white fenugreek. Informants told that the white fenugreek is the most preferably produced variety, because it serves as a main ingredient in the preparation of **hilbet** and also because it is mixed as an ingredient into a floor of **taf**. It is added into the flour of **taf**, in order to improve the taste and odor of the floor. In this regard, one glass of fenugreek is added into one quintal of **taf** to be ground together. Furthermore, fenugreek is added in the form of roasted grain or together with salt in the form of powder, into milk. This is culturally done to prevent stomachache which is thought to be caused by drinking milk, especially fresh milk. Finally, although it is more preferably used by Muslims, fenugreek is also used as non-alcoholic alternative traditional drink which is culturally believed to prevent any diseases and feeling of discomfort in the entrails and stomach, as well as for the sake of fattening one's body.

3.1. 2. Animal Husbandry

Peasants in Adi-Senay and Adi-Amhara also practice production of animals or animal husbandry. They produce and herd animals like cattle, sheep, goats and donkeys. The peasants produce them all, for all of the animals have their own socio- cultural and economic values which are discussed below.

3.1.2.1. Cattle Rearing

As I explained earlier peasants practice cattle rearing. According to informants, the peasants in Adi-Senay and Adi-Amhara raise cattle to use them as source of income in the market, to satisfy their differing personal consumption needs and also to get further socio-cultural values. As regards the personal consumption, cattle are very valuable because they do provide peasants with meat, milk and its products, hides as well as with manures and when dried with fuel in the form of **kubo** (dried dung cakes) from their dung.

Beiray (ox)

Speaking about their ox, informants indicated that it has economic and socio-cultural values. Economically ox is valuable because it can be sold either as live animal or else, its meat can be sold to serve as source of income. Moreover, in the economic arena, ox can be source of income in the form of selling its hide and skin. Furthermore, peasants rear ox because ox is means and source of their living.

Ox is the very instrumental animal in peasant production and distribution systems. In the production arena, ox helps peasants in the plowing and threshing occasions, and it is only in the presence of this animal that households enter into labor exchange agreements that are practiced the whole year round. These labor parties that come in the form of colleague- client or patron-client styles of the Mexicans (Foster, 1967) are proved only in the presence of this essential animal. Though, I would not repeat the same words, for in the research sites labor is by far considered more important capital than ox/oxen in relation to lack of lands and grazing areas; a number of scholars (Hoben, 1973; Bauer, 1975, 1977; McCann, 1987 and Asmelash, 2006) have rated oxen as the main scarce capital in peasant households and especially in the northern part of Ethiopia. Apart from the above socio-cultural values of ox during the production practice, informants indicated that ox has remained to play a very pivotal role in such distribution systems like dowry, in the case of marriage in Tigray. In dowry, households have remained to be required to offer at least one pair of oxen to be used in the future, by the family of the newlyweds, though this is actually diminishing nowadays due to that the value of oxen has decreased with the decrease in size of land.

Informants indicated that one ox can serve if kept well, for 12 years without rest. In one focus groups discussion, participants raised that in its early period of birth, when it is **mirak** (calf), an ox does not have any value. But later, from the time it becomes **zirabei** and/or **arha** (bull) after three to four years of its birth, an ox becomes very essential. In connection to this, participants indicated that they start to train their ox, starting from its three and half years of age for five consecutive months. They train their ox from February to May. When asked why the train their ox in the above specific periods, they told that they prefer these months because the months lie in the dry season, when it is very sunny and the farmlands do become dry and easy to plow. That is making them very preferable for training ox/oxen. Since any ox cannot be docile and easy to operate if not castrated, peasants in the research sites more often than

not, castrate their ox in its six years of age. By then it is called **testay** (bullock) and it becomes very experienced for plowing and other of the agricultural activities, like threshing.

Lahmi (cow)

The other important animal is cow. According to informants, a cow serves peasants with its calf, milk and milk products like **tesmi** (butter), **riguo** (yoghurt), **hiquan** (skimmed milk), and **maycheba** (whey). Besides, it serves them as source of income either when it is sold alive or when its meat, skin or hide are sold. In connection to this, informants indicated that they do not always sell the hide and skin of their cows and that they rather use them to produce leather products like **maesi** (leather that serves mat on a bed), **mesian** and **miran** (straps from leather) and others which are discussed in the craft production section. Moreover, cows are also given as **gezmi** (dowry) to the family of the boy from the family of the girl and they are made remain there to be milked till they are taken by the newlyweds. Hence, cow has also very important socio-cultural values and the- peasants produce it to secure these values, too.

3.1.2.2. Production of Shots

Begei (sheep)

Another very important animal which is liked by the peasants in the research sites is **begei** (sheep). Informants told that sheep has a lot of economic and socio-cultural values.

According to informants traditionally sheep is most preferably served in Tigray from September to December, that is, from the time following the rainy season to the time the dry season begins. According to them, this is because traditionally it is believed that sheep has quality meat when it can eat fresh grasses which are very common to exist in the indicated time. A newly born sheep the **rema** (lamb) becomes **magula** (ram) within six months after its birth. More often than not, whereas the female sheep serves as source of the **rema**, the males are either used for personal consumption slaughtering them or else they are sold in the market. According to informants, traditionally a **magula** sheep is preferably sacrificed in a church so as to remember the 40th day of the death of a deceased person. Generally therefore, sheep is highly regarded by the peasants in Tigray for its socio-cultural as well as economic value.

Tiel (goat)

Goats are also produced by the peasants in the research sites. Goats are produced for their economic and socio-cultural values. According to informants, goats economically can

serve as source of income when the peasants sell the kids, the billy-goats and the nanny-goats, when they are alive. Besides, peasants produce goats to secure a number of socio-cultural values like to use them as source for manure and fuel, to slaughter them at some specific times in the year, and also to use especially the **mikit** (castrated goat) by a newly married groom as sign of respect for his bride and for her family by offering it to the bride's family.

According to informants, **mikit** is a two years and above of age goat. One goat becomes **mikit** after it is castrated in its two years of age. In Tigray, **mikit** is most commonly served on the Easter holiday. This is for the reason that culturally goats in general and **mikit** in particular are believed to develop best quality meat during the dry season, from January – May/early June. Besides personal consumption, as explained above, **mikit** is the most preferred animal in which a bridegroom gives to his mother in-law and her family as sign of respect and happiness for his living with her girl (which is his bride) and her family. This happened always in Easter because marriages are conducted in January and for the bridegroom performs this action I explained, after the Lent.

Generally therefore, all goats either **mikits** or the other goats (from the kid to billy-goat and nanny-goat), do have a lot of economic and socio-cultural values which guide the peasants' decision to produce them.

Adgi (donkey)

A very important pack animal which the peasants want to produce is the donkey. Donkey does serve them as pack animal to carry their crops, firewood (in and out of the household) and also to fetch water. Besides, donkey is well marketable in the market. Nowadays donkey is serving peasants as source of income because it is rented for a day to carry stones during masonry and house construction of other households.

Speaking about the importance of donkey, informant Gebremariam Zeray said that "donkey is supporter of a woman in a house." (Interview, on January 27, 2011). He said that a woman in a household where donkey is present is highly supported. She is supported because she does not have to fetch water (as her husband and children may fetch water by the donkey); she does not have to carry cereals either to home or from home to market and grinding mills (because either her children, her husband or herself can carry them on the back of the donkey); she does not have to carry firewood and charcoal to sell in the market (because the donkey can carry them for her). So, as the informant said and as I observed the

case personally, I would say donkey is such an important animal that can revolutionize the labor load of a woman in the household of a peasant (see plate 9 for the role of donkey).

3.1. 3. Poultry Production

Poultry production is also another field of production over where the peasants of the research sites are involved in. They practice poultry production for subsistence consumption given their socio-cultural significance and also to use them as source of income.

With regard to their production practice, informants told that they traditionally let their hens to incubate in the harvest season. When asked why they do that? Informants indicated that they do prefer **kewei** (the harvest) on one hand, for they think that the chickens and their mothers will have a lot of food to eat given that the season is season of harvest; and on the other hand, for they think that the season is somewhat cool, a preferable whether condition for successful incubation and brooding. According to informant Mantegbosh an excellent hen can brood twice a year and traditionally a hen can incubate only twelve eggs for better brooding (Interview, on March 6, 2011). In connection to this, they rate crops like maize, sorghum and barley as best quality food stuff for poultry and for excellent result, either in rapid growth of the chickens or in terms of enabling their hens to lay full eggs at daily base.

Traditionally, more often than not, a number of female hens are kept with a single male hen, the **kukunay** (the cock). Here, whereas the male hens except the one are often times sold (though not the only, for females are also sold) the females are made to lay eggs to be sold in the market, and also to brood chickens.

According to informants, culturally eggs of an **arhi derho** (a hen that lays eggs for its first time) are used to conduct a kind of ritual on children who are extremely shy and disturbed. The ritual is called **aynet miwtsae**. In this ritual, three eggs are broken on the head of the supposed child. Here, to perform the ritual a **debtera** (a learned clergy) reads spells over the eggs and then breaks them over the child's head so as to finish the ritual. The ritual is performed because it is culturally believed that a child over whom such a ritual is conducted becomes normally sociable, stable in personality and not extremely shy. As a matter of fact this ritual today is performed in very rare cases due to religious and social sanctions.

3.1.4. Apiculture

A production practice that involves significant number of people from the research sites is apiculture. As far as their production of honey is concerned, informants told that they recognize three types of honey based on the honey's colour and quality, namely **tsaeda mear**(white honey), **keyih mear** (red honey) and **sergenay mear** (mixed honey).

Speaking about their production practices, informants told that they undertake production of bees either by enabling them to reproduce themselves or else by collecting them from mountains as wild bees. Traditionally bees give best quality honey from September 18 up to 24 October (all in Ethiopian calendar) due to that in the mentioned months the earth is covered with flowers (creating favorable conditions for the bees to serve rectum) and that springs of water are relatively found to be more in number. Bees are kept in a material called **kudo** (bee- hive) which is made of a special purpose soil which is collected from the ant's hill and dung. **Kudo** is prepared by women (see plate 10) and it is one of the responsibilities of women as far as the division of labor that I will discuss later is concerned. Side by side with this, as regards the honey collection from the **kudo**, informants indicated that it is a male who collects honey. In this regard, besides to using a smoke to prevent the bees from stinging him, the one collecting honey is said to say repeatedly **biziban nigus Iyob**[13] (lit., on the name of the biblical king Iyob).

Informants told that traditionally they could separate an old king from the new king from a **kudo**. They mostly do this from the months of June to September. Here, they say when a new king is born, the old one gives a special sound. At this time, to prevent the old one from leaving the bee-hive, the owner needs to prepare another **kudo** where he puts the old king. This is in contrary wise to what the Aris do in that they separate the young, leaving the old in its bee-hive (Gebre, 1993).

Generally, informants told that producing bees has economic and socio-cultural values. The economic significance of bees was told to me by informant Gabreigziabiher Tekle. According to him bees enable them to secure income from the selling of their honeys. The informant further noted that they use the income ultimately to cover their expenses for

[13] They mention the name Iyob to refer to the biblical Iyob from whose leg the peasants believe God created bees. The peasants believe that because God created bees from the wounded later cured legs of Iyob, the bees never sting any one given that he mentions the name of Iyob who is their master as assigned by God.

consumer commodities like dress for children and wife as well as expenses for salt, oil, soap and so on (Interview, on February 26, 2011).

Socio-culturally, honey, especially the red honey is used to prepare mead **(mess)**. Mead is culturally very important alcoholic drink which is especially preferred to be prepared and served during some important festivities like wedding and the culturally important ceremony of **teskar** (ceremony for the remembrance of a deceased person). Traditionally, festivities and **teskar** are praised, and are believed to reflect social and economic status when mead from honey is present. Besides, other very socio-cultural value of honey is that in the past, family of a boy had to take **qurae mear** (a small pot of honey) to a girl's family during betrothal ceremonies. And still now mothers in-law take honey in **qurae** as entrance ticket to see her son's bride while she is with her son as a groom during the honeymoon. Moreover, according to informants honey has additional significant medicinal value. In this regard, honey can be used to cure stomachache when served together with cumin, and to purify blood when served as juice (especially, the white honey).

Hence, generally the peasants produce bees to secure the economic as well as socio-cultural values they get from producing them.

3.2. Economic and Socio- Cultural Values of the Agricultural Fields of Production in Relation to Distribution Systems

Peasants having produced most of their products, they are involved in the distribution of the same. These mechanisms with which the peasants distribute their produce do serve also as leveling mechanisms. This is because they, as "leveling mechanisms" force the peasants to expend what they could have otherwise accumulated (Nash, 1967). The peasants in Tigray are not in different to this. Thus, they are observed to be involved in a number of activities which can be rated as to Nash, leveling mechanisms. These mechanisms come in the form of festivities to be celebrated or ceremonies to be observed. The festivities and ceremonies may be annually celebrated and/ or observed, or else once in life as a kind of rite of passage. **Kismi**, **mahber**, **siwabeal/zikir**, **teskar**, **merea** are among others to mention, but very few and very dominant. Here under they are all discussed one by one.

3.2.1. Kismi (Festivity of a Parish)

This is a festivity which is recognized and celebrated once in a year by inhabitants of a parish or hamlet (in recognition to the nearby church if they do not have their own church as

in the case of parish dwellers). According to informants and participants, **kismi** is celebrated or else is expected to be recognized by all of the dwellers of that parish or the hamlet in remembrance of the specific Saints day or else God's name with which the church is named. All participants in all the focus groups discussions I had agreed on the fact that in **kismi** every one who happened to visit the church and who does not have a relative and who is only a passerby is most welcome to any household within the parish, or the type of hamlet indicated above. In connection to this, they added that if that one has a relative in the parish, he/she is expected to go to the household of his/her relatives.

In **kismi**, since most of the time there are a number of individuals who come while they do not have relatives around the parish, they are more often than not served when they are in the church. This is done either in the form of contribution from each and every household in the parish or through the other mechanism in that any peasant household lets some number of new comers in quota form to visit it. According to my own experience, in **kismi, enjera** with stew and the local beer, **siwa** are the most commonly served food and drink. This differentiates **kismi** from the other festivities to be discussed later.

According to group participants, **kismi** besides to its religious value helps the peasants to strengthen their familial ties in terms of introducing the newly born individuals with their relatives. Here, they said that it strengthens the peasants' relationships as relatives, which otherwise could have been broken/ forgotten due to distance. This is justifiable given that it is in **kismi** of one's relative that relatives from different localities other than the parish or hamlet celebrating the **kismi** do come.

3.2.2. Siwabeal (Festivity in Remembrance of a Saint or God)

A festivity that is also celebrated once in a year, but which is celebrated by a single household is **siwa beal/ zikir**. This festivity is result of a kind of patron – client relationship which Foster (1967) explained to exist in the peasants of Tzintzuan in Mexico, in between them and their any saint or God by Himself. According to participants, **siwabeal** which is also called **Zikir** (remembrance) is prepared when owner of one peasant household believes that, that particular saint or on that particular date God has miraculously saved him from danger. That is, either to himself or his family including his animals, cereals and homestead. Here, what group participants tell as experience of one peasant can serve as an example.

> One day there was a peasant whose goats and sheep went out of the house in the night. It was not possible for him to find them even if he searched around, the whole night. At that time he lost hope of finding them and he returned and slept at his home. He thought they were eaten and to realize that he had to search for their carcass. Surprisingly he found them in the forest in Gesoria (a name of a peak around both the research sites). He was astonished meanwhile thanked God. He then after believed that all of them were saved because he trusted God and he sprinkled a holy water of **Abune** Gebeemenfeskidus before he lost them. Thus, starting from that time, the participants said that he began to remember the name of the saint annually in a **zikir**.

So, as the case does reflect, **zikir** is a festivity prepared by one household in respect of the saint with whom it is attached more or in respect of God by Himself through remembering either of the religious days which are recognized for God's remembrance. According to informants, in **Zikir** inhabitants of the nearby parish, if no church is around including inhabitants of the nearby hamlet, are all invited. In this regard, unlike in **kismi** when one is visited by people from different localities, in **zikir** he is visited by people of his own locality. Here, everyone from the same locality, including children has the same right to join and enjoy the celebration. To say it in other words, all inhabitants of the hamlet or parish are served equally from the same food and drink. I personally observed two **zikirs**. I noticed that the food and drink are different from that of **kismi.** Here, it is only bread (**himbasha**), **siwa** and **bukulti** (sprout of bean soaked in water) that one visitor is served. As observed, in this festivity women are not allowed to be with men. Accordingly, in the festivity I observed, they entered into one room of the house and they were entertained there alone, while the men sat in the compound of the house in a temporary pavilion. During that time, whereas the elderly sat in wooden chair type materials, children sat either at the middle or at the back and side of the elderly, on the floor covered with fresh leaves. This was told to me by informants that it is done to reflect respect to the elderly.

In the **zikir** I observed, I also noticed that the elderly and clergy stand up and forward their blessings (see plate 11) before individuals who happened to join the festivity started to leave the pavilion. In the blessing occasion everyone has to stand up, and while the owners and relatives gather at the gate, the whole guests stand up from where they sat at every location in the temporary pavilion. Then while the elderly and clergy who are invited bless and wish the family to meet everything good in the world and to be in paradise after life, the owners welcome the blessing by pledging to do the same thing by the next year on the will of God, meanwhile, wishing the invited to enjoy their stay, and also reminding them that food

and drink are there to be eaten and drunk, respectively. As observed, I can tell that most of the invited individuals repeat the drink rather than the food which were presented to them. According to informants, generally in **zikir** the household preparing festivity is visited by any members of the other household from the hamlet or parish, including husband and wife as well as their children and any one present in their homestead in that time if he/she wishes.

Generally, as to the study I have got to know that **zikir** or **siwabeal** strengthens the social ties between the inhabitants of the parish or hamlet. Even though I could not calculate quantitatively the exact amount they spend (because as explained earlier they told about their expenses in general terms like in number of pots in the case of **siwa**), I can guess that the households spend a lot. This is so especially given the fact that the households have to prepare enough amount of food and drink annually for all inhabitants of a parish/hamlet with little care for their number.

3.2.3. Mahber (Group Festivity)

Mahber is another annually celebrated festivity. **Mahber** is a group of 12 or 16 individuals' affair. According to informants, they are made to be 12 taking the example of Jesus Christ and His disciples; they become sixteen when they want to respect some of the hidden religious days or else the additional holidays.

According to significant number of group participants, **mahber** works on certain rules and regulations as regards the number and gender of members and the type of food and drink to be presented. Although there can be **mahbers** which entertain both the husband and the wife, often times males prefer to have their own **mahbers** irrespective of their wives. Here, informants raised the managerial role that women play at the household and the possible disturbance of the household in their absence by the time they leave the household for **mahber**, as reason for not allowing women, including their wives to be with them in **mahber**. Furthermore, **mahber** for women is also not allowed in relation to the fact that the members are at distance and women may not be suitable with it. However, this does not mean that no **mahber** is present for women and thus **mahber** is also possible to be set by females only. In this case the 21st day of each of the months or the Sundays and Saturdays (monthly) are the most preferred days for women's gatherings in a **mahber** (all the mentioned dates are in Ethiopian Calendar).

From my knowledge as an insider, and from what was told to me by participants, membership to a **mahber** is granted based on the criteria that the member is kind and has excellent conduct as can be explained by his ability to live in harmony with others, and has stable conduct either in bad times or in good fortunes. This is considered because members in a **mahber** are required any time to live in a harmony being treated as equals to one another as Bauer (1977) indicated in his study in Enderta Tigray. Besides, members are expected to live in harmony because no one is allowed to have hatred with other member. In this regard, participants told that to ascertain agreement among members; the members of a **mahber** are formed, more often than not, from peoples coming from different localities which are in long distance from one another. When asked why they form **mahber** with individuals from far areas, group participants said that they do not form a **mahber** with neighbors because they fear that they may have some hatred and that may endanger the very existence of **mahber**. They add that if they form **mahber** with members that come from remote areas, they will not have something to disagree. Thus, that means they will meet one another after a longing for a month or so, happily. Generally, they say that they celebrate the festivity happily, as it is of course expected from the very nature of the **mahber** festivity and from God.

To tell from my knowledge of the culture as an insider, members of the **mahber** do respect and trust one another very much. Unlike in the other festivities, in **mahber** it is mainly the members that can come and enjoy the festivity though very near relatives like brothers, sisters or very friendly and very near neighbors may also be invited. According to informants, to celebrate their **mahber,** the members make their way to the household preparing the **mahber**, at the eve of the festivity, and they sleep there till they return the next day. Having arrived at the eve, the whole night the **mahber** members discuss a number of issues like family affairs, agricultural condition (like sowing time, crop type and so on) and some burning issues in their surroundings.

Participants in all the focus groups discussions I held tell that poor individuals and rich individuals can possibly be members in a **mahber**. And when this happens, the rich ones are seen to support their poor members either in the form of sharing them what the poor wants in group, or else individually in other ways like, for example, letting the poor to prepare their festivity during the harvesting season (when they are supposed to have enough produce). More often than not, they do this while letting their festivity to be celebrated in the rainy season when most household run out of food in their store.

As observed and according to what informants told, as far as **mahber** rules and regulations are concerned, the most preferred and mandatory food and drink in a **mahber** are bread and **siwa**. However, informants said if one member wishes to prepare more food and drink like **enjera** with stew even slaughtering a sheep (when it is not during the fasting time), he can do so though it cannot or is not expected to be reciprocated.

In addition to what is explained above, according to participants it helps to note that entrance to **mahber** as a member can also be guaranteed on generational ties, and with that **mahber** can strengthen intergenerational familial ties. This is for the **mahber** passes from father to son like any property.

Generally, according to significant group participants and informants, I can say that **mahber** has socio-cultural and religious values in terms of strengthening inter generational familial ties or else in strengthening the link in between families of different localities. Such a link could serve them in time of emergency, like invasion and appearance of contagious diseases. In **mahber** the members come from far areas as far as 20 Kms and above, and that could be good with regards to sharing information in relation to the aforementioned factors and others. In **mahber**, though I can notice that the members help each other economically, the fact that it is annually celebrated (in which each member has to celebrate it in either of the 12 months in a year) may minimize the households' income consistently.

3.2.4. Merea (Marriage/ Wedding)

Merea (marriage/wedding) is other occasional festivity over where peasants spent a lot and/or want to spend a lot. According to informants, **merea** is one of the festivities which the peasants give much emphasis. It is done not only to help ones son/daughter establishes a family but also because one wants him/her and/or himself and the family in general to be respected for having prepared such a festivity. Just like the **teskar** (to be discussed later) and any other of the annual festivities indicated above, **merea** is guided by the principle of **wodihawabo** (lit., brother of a father). Informants told that according to the principle of the **wodihawabo**, someone does prepare **merea** not only for himself and his family but for the sake of the locals. The more the **merea** is extravagant in terms of number of invitation, in terms of the amount of food and drink prepared as well as the quality of the food and drink; the more respected will be the owner. According to informants Gebremariam Zeray and Gabreselasie Yekuno, food and drink are of quality, when the **enjera** is from white **taf** and when the **siwa** is prepared from pure finger millet only.

According to my knowledge as an insider, **merea** in Tigray is extravagant especially for the family of the bride. It is extravagant because besides to covering expenditure of the festivity, they are required to pay a dowry. In Tigray, bride's family needs to pay a dowry to the groom's family. The payment is often times in kind and in cash. Accordingly, the dowry may be made in the form of cattle, crop and other offerings or simply in the form of money. Here, as explained above, the responsible families do offerings being guided by the principle of **wodihawabo**. According to the principle, the more the dowry is the more respected the father, the family and his newlywed daughter and even the receiving family will be. Due to this, **merea** in general and **merea** of the bride's family in particular are very extravagant.

Generally, according to informants, **merea** is an occasion where the locals help each other. The success of the **merea**, except in terms of covering the expenses for the festivity and dowry, is the responsibility of not only the immediate responsible family but also the responsibility of the locals. This is so in relation to the peasants' identification of themselves territorially as (Foster & Diaz, 1967) noted. To wind up this section, the Tigreans say do something when you have a number of cows and again do something when you have good produce, in the locals language, **lahmin entitibezheka intay giberelu iklin intibezheka intay giberelu**. So, as the above proverb reflects the Tigrean peasants participate in **merea** when they think they have enough produce or enough capital. In this regard, they never think of accumulating their produce or capital to use them any other time. They rather are happy when they have such a produce to spend it in festivities which they give more value. Here the principle is nothing but the principle of **wodihawabo** as explained later in the following discussion too.

3.2.5. Teskar (Ceremony in Remembrance of the Deceased)

A ceremony which is done for the remembrance of the deceased member of a family or for a relative is **teskar** (ceremonial remembrance). According to informants, the original **teskar** was expected to be undertaken in the 40th day of the day of death of the deceased. It is part and parcel of the rites of passage of a human in relation to the culture and religion of the Tigrean Christians. It is part and parcel of what the society calls food of the deceased (**qeleb miwit**). This food of the deceased according to informants starts from the very day of the funeral ceremony. Here in the time of the funeral ceremony a kind of alms in the form of **enjera** is given to the clergy for their service. Then in the third, seventh, twelfth days, offerings are made to the church officials either in the form of money or in kind in the form of

alms. More often than not, the money payment is common in the twelfth day. Then the clergy will perform religiously expected activity on the cemetery of the deceased in the 30th day of his/her death. With this it is believed that the gates into heaven will be opened. In the 40th day of the death of the deceased the **teskar** celebration is done. As explained above, this **teskar** celebration originally demands relatives to slaughter and sacrifice a **magula** (ram) sheep in the church and also prepare one **gembo** (pot) of siwa, and summon the clergy to be served for their duties (since the death of the person). Here, though the main ceremony the **teskar**, is done on the 40th day, the offering will however, continue in the 80th day, half year and one year and then after, annually.

From what I observed and from what participants ascertained, unlike the original and valid (from the churches point of view) requirement, the peasants are seen to make their **teskars** very wide. That is slaughtering three to five oxen and preparing six and above **zingrirs** (large pots) or as nowadays barrels of **siwa**. Why do they do this? This is discussed in the following discussion about decision- making.

3.3. Decision-Making in Distribution and the Principle of the Wodihawabo

As raised above, why do the peasants do participate in all the above festivities? The answer is that the peasants do all, not because they do not know that they are expending more, but because of the guiding principle of the **wodihawabo**. In the peasant community insult, gossip and ostracism are considered as serious abasements. A peasant wants to have respect not only by being strong producer but by spending what others have spent in their life. To say it in other words, a peasant to have dignity need not only to be strong producer but also he needs to be one who shares what he has with others. According to participants, this is applied, by the principle of the **wodihawabo**.

Participants told that everyone in one locality whether he is a relative or not, or a neighbor or not, is their **wodi hawabo**. As a **wodihawabo** they want him to be friendly with them and above all to show them respect (**kibri**). They can only have this respect by doing a number of activities in that one is that they are required to prepare a number of festivities including but not limited to **kismi**, **zikir**, **mahber**, **merea** and **teskar**. This is as a matter of fact in addition to being strong producers. According to what participants in all the focus groups discussion I had ascertained, out of all these festivities, **merea** and **teskar** are given too much emphasis. If one peasant happens to have had ones in his life or as the case may be, wide and excellent **merea** or **teskar**, he will be among the respected ones. Otherwise, he will

not be treated equally with those who happened to prepare the festivities or the ceremony aforementioned, especially **merea** and **teskar**, at least ones in their life time.

Participants told that if for example, one peasant fails to give in marriage his son or daughter, or he fails to remember his deceased relative, especially father or mother and any nearest relative by preparing **teskar**; he will be insulted directly or else he will be backbitten. The insult is very offensive and if that peasant under consideration is once insulted by a **wodihawabo**, by hook or by crook, or in the locals' language, **damichun dakutun ilu,** he should respond and return his dignity by doing what the one insulting tells him, like by preparing **teskar** and celebrating **merea**. Here, they told if possible and if the peasant has, he can do both **merea** and **teskar** from his riches. But if the peasant is poor, he must do all what is required from him at any cost on his side. In this regard, he can even migrate to somewhere, remain there as a laborer and return home to prepare what is required from him, that is, from what he has accumulated as a day laborer even. If this is not possible, he has either to borrow money even from usurers or else he needs to sell what he has, to prepare what the locals expect from him, the **merea** or the **teskar** mainly, and any of the other festivities to some extent. Here, the participants raised that nothing but the principle of **wodihawabo** is seen to guide every of the activities of the peasants in a locality or parish or hamlet.

So generally, once a peasant is successful in preparing the festivities in a level that his **wodihawabo** requires him and if he can even in a better way, he will join the respected personalities category, if not, he will not. This is all the result of nothing, but the principle of **wodihawabo**. A principle which guides not only how the peasants distribute what they produce but also what they should do to produce. A case which is pivotal in Economic Anthropology, especially in relation to the substantivists thinking that the economy is embedded within the social life of societies (Polanyi[1958], 1968; Dalton, 1967 and Nash,1967).

CHAPTER IV

TRADTIONAL MECHANISMS OF PRODUCTION

In this part of the paper three major issues namely: agricultural cycle, division of labor and labor organization are dealt with under the broad topic, traditional mechanisms of production. In the agricultural cycle, the seasons as recognized by the peasants are discussed in line with all the activities the peasants undertake in these agricultural seasons. In the division of labour, how the Tigreans divide their labor is discussed as a major point. As regards the labor organization, traditional labor organization institutions are assessed side by side with their contribution to the agricultural practices and other activities, in comparison with findings of other researchers in other parts of Ethiopia.

4.1. Agricultural Cycles

The peasants in the research sites recognize four seasons in a year. Out of these four, where as they are very busy as to their agricultural activities in three seasons; they use the fourth season for rest and enjoyment in relation to their famous festivities like wedding.

The seasons are **kiremti** (rainy season), **hagay** (dry season), **tsidya** (rainy season/plowing and sowing season), and **kewei** (light showers, harvesting season). To indicate the calendar of these seasons, table 3 is presented here below.

TABLE 3

Seasons of the Year

Seasons	Months
Kiremti (Rainy season)	**Sene- Nahase** June – August
Kewei (Harvest season)	**Meskerem – Hidar** September - November
Hagay (Dry season)	**Tahsas - Lekatit** December- February
Tsidya (Plowing season)	**Megabit –Gunbet** March -May

Source: field work 2011

Although the above calendar indicating one way of division of the agricultural seasons is commonly practiced especially in relation to the influence from the church and from government, informants and participants told that they do have their own optional division of the year into six seasons based on the type of agricultural activities and other related activities they perform. Accordingly, a division of the type below is also recognized by the peasants in the research sites. Table 4 shows the optional calendar dividing the year in to six seasons or parts.

TABLE 4

Optional Calendar

Season	Months	Activities Performed	Greeting
Hagay Dry season	February –April	leisure time	**Kemey hagikum**? (How was the dry season?)
Azmera/Tsidya Plowing season	May- July	plowing and sowing **azmera** crops	**Kemey tsedikum**? (How was the plowing season?)
Kiremti Rainy season	August- September	sowing and weeding (**taf**, grain, beans and nigerseed)	**Kemey kerimkum** (How was the rainy season?)
Tsibhat Early harvest season	September (half)-October	collection of the dried grass and eating fresh harvest like maize, and time of sowing chick- pea	**Kemey tsebihkum**? (How was the early harvest season?)
Kewei Harvest season	November-December	harvesting and threshing as well as carrying and transporting harvest and fodder	**Kemey kewiekum**? (How was the harvest season?)
Tiri Wedding season	January	wedding time	**Kemey terikum**? (How was January?)

Source: field work 2011

So having shown the two possible ways of dividing the agricultural season, it will be better to see what the peasants perform in the specific seasons in the calendar. Here, the

peasants' activities especially in relation to the first wide calendar (the calendar that divides the year in to four equal seasons) are presented in the next discussion below.

4.1.1. Mahres (Plowing)

The time of plowing lies in **tsidya** that is from, March- May. Even if it cannot be claimed that all the plowing is done on this time depending on the availability of rainfall, crop type, soil type and the fact that the farmland remained fallow or not, in the last year; the peasants are busy plowing their land at this season. Accordingly, it is in this season that peasants need extra labor from each other and that the indigenous labour parties come into being. These labor parties are discussed later in this chapter.

According to informants, the peasants allocate different intensities and types of plowing to their crops and lands. These intensities and types of plowing depend on both the quality of the land and the crop type to be sown. Asmelash (2006) noted that intensities of plowing vary based on crop type. Whereas some crops need to be sown after the land over where they will be sown is plowed for five times and above (as it deserves), some others could be sown in a land which needs to be plowed either once or twice. Whatever the case, here it is necessary to note that these ways of plowing may differ depending on the capacity and willingness of the peasant to plow his land.

According to informants, more often than not, fertile lands need to be plowed more than four times and it is in such like lands that the crops which should be sown after five and above times of plowing are sown. Table 5 shows crops and the number of plowing they require for best production.

TABLE 5

Plowing Frequency

Crops	Number of Plowing
Taf, finger millet, maize, fenugreek, cumin and sunflower	four and above
Grains (barley, wheat and **hanfets**)	three- four times
Bean, chick-pea, sorghum	two times
Lentil, linseed, pea, red sorghum, nigerseed	one time

Source: field work 2011

According to participants, in land where it was left as a fallow for two to three years or as is the case nowadays for some months in a year, there will be one to seven numbers of plowings. These plowings on a fallow land always start in August and continue once again for second and six times from September through October, January, June and May to July. The types of plowing in these successive periods mentioned above are called **mitsigae** (plowing to leave fallow), **micyam** (plowing for second time), **misilas** (plowing for third time), **mirbae** (plowing for fourth time), **mihmash** (plowing for fifth time), **mirwah** (plowing for six time) and finally **mizrae** (plowing while sowing), respectively. In contrary wise to this, if the land was not fallow, that is, if the land is **qerim** (land previously sown and where crop residues are present) the time, intensity and the naming of plowing will differ. In this regard, unlike in fallow land the plowing will not have fixed time and thus it will start when the rain starts to fall. Here, participants agreed that if the rain starts to fall in January, the first plow will be in January and then the plowing will continue till July. In the same way, if the rain starts either in March, April or May, then the first plow will start from each and will continue till July. Plows in **qerim** are therefore listed differently and they are **gerfi** (slight plowing), **aymi** (plowing for second time), **teslas** (plowing for third time), **mirbae** (plowing for fourth time), **mihmash** (plowing for fifth time) and **mizrae** (plowing while sowing), respectively.

According to informants, when plowing is on **qerim** land, the second plowing takes place three days after the first; two months later the land will be plowed once for third time; then it is repeated for the fourth time after the other two months and finally starting from the fifth plow in May, crops like finger millet can be sown. Saying so, informants further told that in whatever types of plows, some crops especially crops like bean, linseed, chick-pea, nigerseed need to be sown if possible only in the first plow, if not in the second plow. Here, they told that these crops become even worse if sown after and above the second plow.

On the other side, informants indicated that there are crops which need to be plowed several times to give sufficient production. In this regard, significant number of group participants underlined that unless the peasant cannot have the necessary capacity like labor force, oxen, and willingness to plow the land, and unless the peasant fears that the time[14] for plowing is passing and rushes to plow his land once; a peasant cannot sow crops like finger

[14] Participants indicated that plowing one land even once at the right time, that is, before the time for plowing passed is better than plowing several times after the right time had passed. Here, they raised fear of failure of production as their main reason. In this regard, it is common to hear them saying in their local language **hade seneya ztenekeles shewate sene ayitkeln** (lit., one who is uprooted in one June will never be planted even after seven Junes).

millet, maize, **taf** before he plows his land six to seven times. To express that it is better to plow one land in better way several times, even up to seven times rather than to plow only for once each of your seven farmlands, they say in their local language, **kabya shewate girats hanti grat shewate shae mihras** (lit., rather than having seven farmlands, plowing your single land seven times is better).

4.1.2. Zerei (Sowing)

This is one of the major activities in the agricultural seasons when the peasants are very busy. Sowing is undertaken in the time from March to July and even during the harvest season. According to informants, this activity varies as per the characteristics of the crop type, the fertility of the soil and the amount of the existing rainfall. In connection to this, informants told and participants agreed that they sow their crops considering the above factors to avert risk of failure in their production, to enhance their production and consumption needs and to safeguard their socio-cultural necessities as well as to respond to their political, ecological and environmental realities.

Generally speaking, the peasants in the research sites do recognize two types of farmlands in relation to their soil fertility and suitability for agriculture. In this regard, they notice farmlands namely the **duka** (land with very thick and fertile soil, capable of holding water) and **merakik** (land with very thin and infertile soil). Apart from knowing and categorizing these two farmlands with different soils, they do also have deep knowledge about the characteristics of their crops in relation to rainfall and manure requirements, as well as with regards to their crops relation to the types of farmlands indicated above, namely **duka** and **merakik**. Furthermore, they have also knowledge about the specific time when each crop needs to be sown. . Thus, taking in to account the above notes, the following discussion will be about the type of crops and when and why they are sown at the provided season (agricultural calendar).

To begin with, informants indicated that crops like finger millet, white **taf**, maize, red sorghum, sorghum and beans do require large amount of rainfall. By and large, they told that these crops need to be sown in **duka** and well fertilized farmland. In connection to this, informants told that they call these crops as **nay azmera ziraeti** (crops that are sown when the rain starts well early in May or even before, and continues up until October).

In contrary wise, informants told that if the land is **merakik** (thin and infertile); crops like barely and its varieties except **birguda**[15], wheat, nigerseed(when sown alone, though rarely), linseed, **hanfets**, red **taf**, lentil, pea, chick- pea can be sown. Here, they added that it is better for all crops, if the land's fertility is kept with **dukei** (manure).

According to informants, those crops which are sown in the **merakik** are crops which do not need large amount of rainfall in their early period of growth, and crops which grow well when the rain starts late like in June. As a result, they said, such types of crops are crops that are drought resistant and emergency crops (for their fast growth). Here, informants indicated that these crops grow fast and can be harvested earlier, even earlier than those crops which happened to be sown earlier even those like the **nay azmera** crops.

When we see the time that the peasants sow each and every of their crops we find that the crops are sown in different times of the year and in different times of the agricultural season. Table 6 indicates the type of crops and the time they are sown.

TABLE 6

Crops and Time of Sowing

Crop	Time each is sown
Taf	end of June/ early July
Sorghum, red sorghum, maize, sunflower and finger millet	April – May
Barley except the variety called **saesae**	mid of June – 4 /6 July
Wheat, **hanfets**, bean and pea	1- 15 July
Chick- pea and **saesae**	September
Nigerseed and linseed	mid of June/ end of July /
Cumin and fenugreek	end of June/ July

Source: field work 2011

As has been discussed several times, the peasants take ecological, economical and socio- cultural factors into consideration while sowing their crops. In their sowing time, the peasants exhaustively use the Saints days as their points of references to their agricultural activities. According to informants, the sowing of crops is done not after each peasant decides individually, but after each peasant exhaustively talks about it with neighbors. Here, informants made it clear that every peasant household is free to sow whatever it likes in whenever time it feels is right.

[15] **Birguda** is a local variety of barley which is sown in fertile soil (**duka**) unlike the other varieties of barley (see table 1).

4.1.3. Tschayay (Weeding)

Having plowed and sown their crops, the peasants will again be busy weeding their farmlands. Weeds are big deal for peasants, especially when speaking about peasants and their production practices. Weeds are among the most serious challenges that the peasants encounter in their production practices. Thus, in order to deal with these pressing challenges of weeds besides working hard on their lands individually and at family level, the peasants do employ working parties like **lifinti**, **wofera**, **rifudot** and **misyot** as well as **mahtsi (** which will be discussed later deeply); to secure extra labor if in case they cannot cope up with the problems alone. According to informants, weeding takes place during the rainy season.

Informants told and group discussants ascertained that, during weeding, individuals from the age of seven and above, both females and males can take part. Traditionally, weeding is thought as specialization of females because it is culturally believed to be the easiest of all agricultural activities. According to informants, weeding includes plowing the newly sown and already germinating crops; as well as picking up the weeds in the middle of crops, by hand. According to my life experience, the weeding in the form of plowing is called **gussiya** (plowing the already germinated crops). **Gussiya** is believed to help the crops to grow fast and to have strong base (root) on one hand, and to dismantle the nearby weeds easily, on the other hand. Informants told that except for some crops like bean, pea and chick-pea in that from cultural perspective do not necessarily need weeding; all other crops should be weeded for better production and so as to avert risk.

According to participants, the months of July and August are the perfect months for weeding and no weeding is advisable after these two months and even before; except for those crops that are already in sprout starting from May and June, especially the **nay azmera** crops. In this regard, participants raised failure in relation to early stoppage of rain, wind attack and increased viability of destruction by leg if crops are weeded when they are already ready to harvest; as major causes for not wedding crops after July and August. Generally, weeding, according to my own experience and the information I got from my informants, is one of the major agricultural activities when the utmost cooperation in terms of labor is reflected by peasants.

4.1.4. Atsid (Harvesting)

This agricultural activity is conducted during the **kewei** (harvesting) season. According to informants, although some crops like chick- pea[16] can remain till January, all of the other crops are harvested in the months from October to December. According to participants, harvesting is not an easy task and accordingly it requires to be performed only by the adult members of a household, and in case of work arrangements, by adult members of other households. Nowadays both males and females are taking part in the harvesting process, equally, in the past, harvesting remained to be the responsibility of males. In this regard, informants indicated that in the past time, females were only responsible for picking bundles of the harvested crops following their male partners in the field, and putting the bundles in the form of small wisp in a way they can be ready and easy to be collected by males later in the harvest time. This action of the females in the field is called **gulbibti** (collecting cut bundles in the field).

Generally, according to group participants and informants, harvesting is one of the agricultural activities which require intensive human labor of adult members of the responsible household and/or extra human labor from other reciprocating families or other sources including through hiring labour.

4.1.5. Zibtanmizrawin (Threshing and winnowing)

The threshing occasion which involves also winnowing of the crops is one among those agricultural activities which requires not only human labor and animal labor of the owner but also the same of the outsider. These agricultural activities are performed some time at the end of the harvest season. According to my personal observation and my informants account, when in the threshing floor, group of oxen (may also include cows and even donkeys, nowadays) are accompanied by group of men. Here, while the animals are required to move in circular motion in anti- clock wise direction with their mouth fastened by a piece of string from grass[17] or may be piece of cloth, the group of human laborers have different responsibilities which they perform interchangeably.

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[16] Chick-pea is sown in September in a land where other crops like maize were sown. In this case, chick-pea is sown immediately after the former crops are harvested. This is done because culturally it is believed that chick-pea does not need rain but only humidity which can be secured from last year's rainy season.

[17] Their mouth are fastened so as to prevent them from eating the stalks of the crops which are threshed by them and in order to make them busy by not trying to eat the stalks they thresh.

As observed and according to informants, the group of males in the threshing floor do perform such like activities as driving and guiding the animals with the **shamoda** (a special purpose stick); winnowing the threshed crops either with a **mesae** (fork like implement) or with the help of basketries like **sefei** (sieve like basket) and **mihe** (sieve with large orifices); separating the chaffs from the seeds with a **meshabeb** or **mechalo**[18] and then putting the seeds into mobile reservoirs like **loqota** (skin bag). Finally, the skin bag filled with crops will be taken home either by man power or on pack animals, like donkeys. According to my observation, while in the threshing floor the peasants will finally be left with chaff of the threshed crops on the one hand, and **gurdi** (trash from threshed grain that has seeds that are not separated from their husk), on the other hand.

Apart from the two above, there is the pure seed which is collected immediately after the threshing is accomplished. This carefully separated accumulation of pure seed is called **gemri** and it is traditionally covered with culturally important local leaves like the **malita**, **alke** and **kermed**. Informants told that these three leaves are allowed into the threshing floor to protect the mythical **zarti**[19] from taking some part of the produce. Here, according to my observation, while filling the crops into the mobile reservoirs, the peasants first bless the crop (if a priest is around with a cross, if not with a nearby metal materials like scythes and bill-hook; these two are must to be around in a threshing floor) and then, they fill their crops in to the mobile reservoirs saying **igzio habena** (lit., God, give us please). When asked why the say **igzio habena**? Informants told that they say **igzio habena** to increase harvest on the will and grace of God when they mention Him by His name.

As observed, the threshing floor is circular in shape, and it is well daubed and smeared so that it appears smooth. According to my informants, even though more often than not, the peasants prefer to locate their threshing floor at the reasonably suitable and nearer place to their homestead, some crops like **taf** and finger millet are preferred to be threshed in the area where they were originally sown. These two crops are not preferred to be threshed somewhat

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[18] Both are wooden agricultural implements which are discussed later under the sub topic agricultural implements, in chapter 5. They are made from the branches of **Kulio** (self growing ever green bush and charlock, respectively).

[19] **Zarti** as to Tigrean mythology refers to those human beings who are very beautiful and who live hidden from us. The mythology narrates that these hidden human creatures went back in their history of presence to the time of the biblical Adam and Eve. As to the mythology, it was after Eve hidden her beautiful children to God when He had come to visit them that they remained hidden to humanity receiving other naming like **zarti** or as they are also called **dekihidirtna**. Therefore, it is to protect these hidden creatures that are believed to take part in a hidden way in a threshing floor, that is, to share some from the harvest that the leaves mentioned above are made be in the floor.

far from the land they were originally sown, because culturally it is believed that these crops will be productive with blessing if they are threshed where they were originally sown, and because their slippery stalks could result in decrease of production if in case they fall while they are carried to the threshing floor and hence there is need to prevent this from happening.

The threshing floor is prepared following different successive processes. According to informants, first the area which is selected for setting the threshing floor is plowed. Then after, the plowed land is made to be walked over by group of animals. With this the soil will be loosened and be so fine. After this, water will be poured over the softened and fine soil, to make it muddy. Then, once again group of animals will walk over it and with that it will be left to dry. Then after, the floor is ready for the threshing to take place after it is swept and smeared[20] carefully with dung and mud. At this stage, informant Wores Abrha indicated that crops like bean can be threshed given that they are large in size and hence they will not have problem to separate them from possible crystals. The informant added that they begin threshing with bean to help to remove any remaining crystals and to dismantle irregularities, meanwhile, making the floor comfortable for threshing finger millet and taf[21] later on. Finally, as indicated above, passing through the whole processes discussed so far, the threshing floor will be ready to serve for most of the other remaining crops except nigerseed, linseed and chatlock (for these crops are threshed by hand in a homemade leather product called **maesi)**.

Informants told and participants ascertained that all crops are not threshed in the same time. Here they further noted that crops are threshed in different time depending on the type of the crop, on whether the crop is dry enough to be threshed and on whether the owners are ready enough and have the capacity to thresh their crops on time.

According to informants, if for good produce to be collected, crops must be threshed from October to February. In this regard, whereas crops like bean, **taf**, barley, wheat, and **hanfets** are threshed first; finger millet can be threshed later than all other crops in that it may stay till early February. In connection to this, informant Gabreigziabiher Tekle noted that if a peasant is found threshing a crop in February, obviously finger millet must be that crop. According to him, the reason why finger millet is threshed last is because culturally it is believed that finger millet will become easier to thresh the more it stays after harvest, and the

[20] The smearing process can be done by both females and males. Dung and mud are necessary for the smearing of the threshing floor.

[21] **Taff** and finger millet are small in size and hence require to be threshed in a threshing floor which is very clean and where crystals are less probable to be available. If not they may become out of use because they become hard to separate from crystals and other wastes like sand given their small size.

more it becomes drier and drier. I personally have witnessed finger millet to be the last crop in the threshing when I visited one of the localities, Adi-Senay during my field work. Plate 12 shows my participation as researcher participant in a threshing of the crop type finger millet (see plate 12).

In the past in relation to the Tigrean ideology (Bauer, 1977) that the produce will not have grace if females take part in threshing, threshing was thought to be the main responsibility of males. In this regard, informants told that daubing the threshing floor in its last stage; bringing food and drink to the threshing floor and helping the males in collecting and taking the crops to home when they are threshed without entering in to the threshing floor, remained the only main responsibilities of women. But nowadays, informants said that with a change in ideology and due to intense approval and encouragement from the government; females who happened to head households have begun taking part in threshing. Whatever the case, however, generally it cannot in whatever reason said that the Tigrean ideology as explained by Bauer has already begun disappearing totally because even today females that take part in threshing are considered to break the norms of the society and are treated less, accordingly. The table below, table 7 is included to indicate the time when the listed crops are threshed.

TABLE 7

Time of Threshing for Each Crop

Crop Types	The Time of Threshing by Month
Finger millet	December/ January/ February
Bean	October
Wheat	end of October- Mid November
Taf	end of October- Mid November
Hanfets	November/ December
Barley	September (after the finding of the true cross
Nigerseed	October/ November/ December
Linseed	October
Red sorghum	Mid November
Chick-pea	January
Pea	October
Lentil	end of October
Sunflower	September
Charlock	September
Maize	October
Cumin	end of October
Sorghum	October
Fenugreek	Early December

Source: field work 2011

Generally group participants agreed on the case that even though the amount and size of the crop to be threshed determines the limit, threshing is a very tiresome process and can take days to weeks. It even some times requires the peasants to sleep in their threshing floor to perform their threshing; in this case with help of the moon light. In connection to this, informants told that threshing that is done for long period of time is nowadays diminishing because both the production capacity and the size of their land are decreasing, meanwhile, causing the amount of their produce to decrease.

4.1.6. Tswra (Carrying and Transportation)

In my stay in the field I could observe that though it overlapped with harvesting and threshing, **tswra** (carrying and transporting) is an important event in the peasant agricultural calendar. According to my knowledge as an insider, **tswra** is aimed at a number of activities which include: collecting all the harvested crops into the area where the threshing floor is situated; taking the remaining chaff or stalks as fodder from the remnant of the threshed crops and also the dried wild grass which is collected from nearby areas to home. In connection to this, informants indicated that this specific activity under consideration is a very tiresome activity that requires intense care and most of the time extra labor. Plate 13 shows a man who is involved in **tswra** (see plate 13).

According to my observation, the crops and their chaff (after they are threshed) as well as the dry grasses after they are cut and collected, are all accumulated and put independent to each other in different parts near a household. Here, the wisps are kept independent from each other because during harvesting time, it will be easy to separate each and every previously accumulated crops to carry them in to a threshing floor somewhere else, and because the chaffs from the threshed crops and the dry grasses have different and specific purposes which differ based on the specific periods of the year (this is discussed deeply in chapter six).

Informants and participants told that the wisps are generally constructed in a way which could resist even the stronger winds and rains which are accompanied by wild winds, as well as destruction due to careless handling by human when serving their animals. In this regard informant Wores Abreha (Interview, On February 21, 2011) said that the wisps are well designed in a spherical shape on which the upper top can serve as a roof to the bottom if in case the rain is to shower. The informant added that of all the chaffs, the fodder named **kancha** (collected from stalks of maize, sorghum and red sorghum), **bukbuk** (chaff of grains and legumes) and **durqa** (dry grass) are respectively very sensitive to rainfall unlike **haser** (chaff of **taf**).

According to informants, the construction of the wisp does have a number of steps to follow. First the bundle of the cut crops during harvest need to be collected by the group of women in a process called **gulbibti** (collecting cut bundles), and then the bundles are put together in the form of small wisps called **kimito**. Then the crops remain in groups of **kimito** till they are dry and ready enough to be made into a larger wisp which by then called **kulsas**. Informants told that **kulsas** for the crops which are not threshed is prepared by the time needs arrive to thresh them within two-three days. In the case of chaff, they said that they prepare **kulsas** when they schedule them to be served some time later, as is often the case. According to participants, while the **gulbibti** is the responsibility of females; the construction of **kimito** and **kulsas** either at the threshing floor or at home, and carrying all of the crops with their stalk before the threshing and the chaff after the crops are threshed are totally the responsibilities of the males.

4.2. Division of Labor

According to group discussants, division of labor in Tigray is based on sex and age, with some undeniable labour occupation in relation to specialization in which both sexes participate. As regards the division of labor based on sex, I would show that it has resulted in women to be overloaded. According to female informants, women in the peasant society in Tigray have had to wake up early when the cock crows (to use their timing) at the mid- night around 7 O'clock. Since then they have had to remain performing all the chores in the household till they sleep around 5 O'clock in the night of the next day. In connection to this, elderly female informants told that they had to work for around 20 to 21 hours a day; especially when there were no grinding mills in their surrounding and when they used to grind[22] crops in their homemade grinding stones, often in the night time.

According to female informants, as part of their responsibility, women in Tigray have to cook, bake, pound[23] and grind, churn milk, prepare **siwa**, most of the time at the night time. At day time they have to fetch water (early in the morning); spine[24], clean house and wash clothes, boil coffee(after it has become tradition of the society later in their history[25]),

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[22] Women informants told that they used to grind in group in reciprocal arrangements.

[23] There are some crops which cannot be taken in to grind mills for cultural reasons. These crops include linseed, nigerseed, and cumin. Cumin is actually pounded in any wide and flat stone at home. The other two are pounded with a mortar.

[24] Spinning is diminishing as important chore in the peasant household due to the imported materials for clothing. In the past it was one of the main responsibilities of women reflecting shrewdness in womanhood.

[25] Shack (1974) has indicated this in his book entitled The Central Ethiopians, Amhara, Tigrina and Related Peoples.

look for grains and march with their husbands to the fields (to help them in weeding, to support them in plowing through itching and crushing lumps of the of the soil and picking dismantled weeds and grasses in processes called **mimhas** and **mibiraw** (itching) and also to help them in harvesting either as nowadays harvesting by themselves or else as in the past collecting cut bundles of the stalk of the crops in the process called **gulbibti**. Besides, informants told that women have to care for their children, decorate their households through embroidery with different colored materials, in this case, more often using red, white and black soils which they collect from their surroundings. According to them, these special purpose soils are called **berek** (white soil), **keyih-meret** (red soil) and **longi** (black soil), respectively. These soils need to be mixed with dung and ash fort better result.

Yared (1995) in his study in Wogda, Northern Shewa and Alemtsehay (2002) in his study in Saese Tsaeda Imba, Tigray have written that they found women to have key managerial role at household level.

In the same manner, in my study sites in Adi-Senay and Adi-Amhara, I have found that the women have managerial role over the crops in their household. In connection to this, informants in both the research sites told that women need to be capable to economically use the cereals from year to year for house consumption; for selling in the market (if needs arise) and for any social and cultural values that can be secured with the crops. Here, they noticed that economic distribution that ultimately result in preventing household from hunger, especially during certain times like the transition period from the rainy season to September, reflects their expertise and shrewdness.

In relation to this it is told in the legend of the society that in the past influential men used to qualify a number of females as regards their household managerial knowledge before they asked them for marriage. The legend below reflects how much household managerial role had remained to be very much associated with females (women). The legend that is about one influential man was told to me in one focus groups discussion that I held in Adi-Senay. The legend is read as follows:

> One day there was an influential man of a village. He needed a woman to marry. He ranks the managerial role of his future wife as a priority issue for his selection of one among others. He summoned and questioned a number of females that were presented to him, saying **kisad werhi man eya?** (lit., when lies the neck of the months in a year or when is the transition period in a year?" All, except one responded wrong answers. But one was capable and knowledgeable enough to know the time. She replied, **kisad werhi meskerem eyu**, meaning the neck of months is September. Specifically, end of August and early September. She added, 'September is the neck of months because it is in this month that one peasant household finishes all

> crops in store from last year's harvest, and for it is in this time that one begins possibly to collect new harvests. Moreover, she said, 'If one woman needs to prevent her family from hunger, she needs to be very careful the whole year and especially at the rainy season and above all at the neck of months, September.' Having heard her response, the influential man finally is said to have opted for her as his prospective wife and that he married her later.

So, as the legend above does reflect, household managerial skill especially in relation to the skill of women during the transition period is not only accepted as simple domain of females in the division of labor, but it is also understood to be the main domain of females. A case which I think is very important given that as Barker (1989: 61) noted "in period before harvest, many peasant farming families are short of food, having used their stored grains and having spent their meager cash reserve," and thus, it requires managerial skill.

As has been indicated earlier, the division of labor based on sex and age, has caused women in Adi-Senay and Adi-Amhara in Tigray to be overloaded. To substantiate more over the issue, it helps to look at the legend below. The legend reflects how much women in Tigray remained to be overloaded to the extent that they sometimes even could not tolerate household chores and hence, have to look for other alternatives which they think are better. The legend was narrated to me in one informal discussion I had with females and also in the focus groups discussions I had with participants. The legend goes as follows:

> Once upon a time, there happened to be a newlywed Tigrean woman. She was trying to cope up with the daily requirements of her newly set family as a head next to her husband. But even though the woman had been trying her level best, she was not able to perform all what was culturally required from her as a wife. One day in November (where the day time is culturally believed to be short), the woman was hesitant about her possible accomplishment of that day's chores before her husband could return home. At this very time, she was visited by a beggar woman. All a sudden the owner of the house welcomed the beggar and started asking and begging the beggar to perform all the chores of the house till she (the owner) begs in place of the beggar, somewhere else. Then the beggar surprised by the case, agreed and handed over her bag. The owner woman of the house happily accepted the bag of the beggar and left the house leaving behind the beggar. That is, preferring to leave the household rather than carrying the intolerable responsibilities of a woman as a respected wife of a husband and having a homestead. Here, while leaving her household, she is said to say **way maelti hidar abeu inhelki iza hadar** (oh! Day of November, I would not like to live anymore as a householder!).

According to the two sources I mentioned above, this woman is said to have never returned back to her household since that time. So, as the legend does reflect the women in Tigray are

overloaded where the intensity of their labor reaches its peak at the time of the harvesting season when they have to work day and night. That is, because days are shorter in this time and they cannot accomplish their chores at day and they have to use the night time also. In this regard, my finding in Tigray goes in harmony with what Girmaye (1993) found in his study area in Bench. Girmaye found out that the division of labor based on sex results in women in Bench to be overloaded. I have also found the same thing in Tigray.

With regard to men, informants told that their main responsibilities are leading the house as heads, plowing, weeding, threshing, collecting the threshed cereals and carrying the chaff. Besides, men are responsible to construct house, to prepare and control the provision of fodder and other pastures to their animals and also to prepare the special purpose mead (alcoholic drink from honey) in time of marriage and **teskar** as well as clearing new lands for farming purpose[28].

Concerning the division of labor based on age, informants told that children starting from the age of seven and sometimes even before (that is, in the time they start toddling) begin to have some roles to play. According to informant Gabreselasie Yekuno, male children start with attending sheep and goats first, and continue doing the same while growing up with cattle and donkeys. Moreover, he said that they fetch firewood and accompany their father at the time of plowing, weeding, harvesting and threshing. In connection to this, the informant noted that they first start carrying some parts of the ox- drawn plow and then they replace their fathers totally. Generally, male children perform what they will perform as a father, later in their life (Interview, on March 8, 2011).

On the other hand, according to female informants, female children start helping their mother with cleaning house, fetching water, caring for minors, grinding, spinning and finally baking and preparing stew as well as the alcoholic drink (**siwa**), respectively based on their age from childhood to adulthood. Besides, informants told that girls may attend animals and collect firewood if no boy is there in their households.

According to informants Mantegbosh Adhanom and Abrhet Hawerya the females are made to do all the above chores so that they become well prepared for their future life as a wife and because they want to train them for that purpose. According to them, ability to perform all the listed chores results in girls to be married (especially in the past time). The quote below from informant Abebet reflects this nearest fact above: "We tell them to spin, to

[28] Nowadays due to government policy, clearing land results in heavy punishment by law. Accordingly, men do hardly participate in it as their fathers used to in the past.

weave basket so that they will marry someone and be proud of their expertise in household chores as a married woman" (Interview, on January 27, 2011).

Generally my finding in Tigray as regards the responsibility of children as per their age resembles to what Yared (1995) found out in his study in Wogda, Northern Shewa. According to Yared plowing at any type of landscape in the range from suitable plain to farms in steep-sloped areas for boys, and baking **enjera** for girls, are the two final activities children learn how to perform as their fathers and mothers in their age ranges from childhood to adult hood, that is, as males and females, respectively.

Concerning the elderly, informants indicated that mostly they will be left to mind house at the absence of the other members. Besides, as elderly their main activity is to act as mediators in time of disagreement and they may even have the role of figurehead in a household. In connection to elderly women, Kiros (1995) has written their involvement in important issues was less visible in his study area. I have also on my part failed to find out any visible involvement and role of the elderly women rather than seeing them cared.

Therefore generally to wind up the discussion, division of labor among the peasants in Tigray is based on age and sex, and it has resulted in women to be overloaded. According to participants, the division is strict in that either of the sexes does not perform any work out of its domain. Besides, due to the strictness of the division, both sexes are not allowed to touch the equipments which are culturally believed to be the belongings[27] of the other sex. Moreover, due to the strictness of the division based on sex in the research sites of Adi-Senay and Adi- Amhara, it is not possible for men to visit the kitchen, let alone to work what the women do. Accordingly, a man is culturally forbidden from visiting a kitchen. If he dares to do that let alone to work what the females do, he will culturally be defamed and that a very shameful and offensive name will be attached to him as a nickname, that is, **itonay** (lit., man of the kitchen).

4.3. Labor Organization

It is not all year round that members of one household have to burden their labor requirements alone. At some time they need extra labor or help (Diaz, 1967; Barker, 1989)

[27] According to participants, equipments in the household which are related to production like the parts of the ox-drawn plow and other implements such as sickle, bill-hock and so on are considered the belongings of the men. On the other hand, house equipments like dish, sieve, pot and several others are deemed to be properties of women, and accordingly men are not even allowed to touch them let alone to perform household chores with them.

especially, during plowing, weeding, harvesting, threshing and transporting of fodder or stalk of those crops holding seed.

A number of studies in Ethiopia (Donham, 1978; McCann, 1987; Gebre, 1993; Girmaye, 1993; Ayalew 1995; Yared, 1995 and Daniel (2002) have all shown that work parties in their study areas are pivotal in organizing labor. Under the same token, according to participants it has been discussed that Tigrean peasants in Adi-Senay and Adi-Amhara have institutions through which they satisfy their need for extra labor. According to informants, these institutions through which extra labor is secured are namely: **lifinti**, **wofera**, **mahtsi**, **rifudot** and **miyot**.

4.3.1. Lifinti (Balanced Help)

It is one of the institutions through which the Tigrean peasants organize their labor. **Lifinti** is a labor organization that works under the principle of balanced reciprocity and which originally is said to have to take age and sex in to account. In connection to this, informants told that originally in **lifinti**, it has been only those who are equivalent to each other in terms of age and sex that take part and can exchange labor. In this regard they noted, for example, that the arrangement relate woman with woman, man with man and children with children.

According to informants, though from its very nature **lifinti** requires age and sex to be recognized and considered; this rule of thumb has been breached on certain occasions. For example, when one supports others even if he knows for sure that they will not reciprocate on equal basis.

Generally, today as far as the **lifinti** arrangement is concerned we have four different types of its kind. There may be ox to ox **lifinti**, ox to labor **lifinti**, labor to both ox and labor **lifinti** and labor to labor **lifinti** (Asmelash, 2006).

According to informants and group participants, the first type of **lifinti** appears when one exchanges and balances his ox with the ox which is owned by the other reciprocating individuals. In this regard, the agreement will be for him to use their ox/oxen for a number of days he wants and for them to use his ox/oxen for equal number of days as the reciprocating one has done with their ox/oxen.

The other type reveals itself when one exchanges and balances his labor and one of his oxen to one ox of the reciprocating persons. In this regard, he needs to give his ox and his labor for one day to the reciprocating individuals, and he will have to use their ox for two consecutive days. Here, informants told that he will have to use in the way explained because it is supposed that he has given them labor besides to his ox, when they gave him only one ox.

In the same way, informants and participants told that the other type of **lifinti** is the one that appears when one individual exchanges and balances his labor for two oxen of the other reciprocating individuals. Here, the arrangement will require the laborer to help the reciprocating individuals for two days, and on his part he will have the right to use their oxen in his field only for one day. This is because they have given him two oxen while he gave them only his labor. The same has also been witnessed by Asmelash (2006) in his study area in Tsiyet.

Besides, there is other arrangement of **lifinti** that works based on pure labor exchange only. According to informants and group participants, here in this type of **lifinti** reciprocity can exist either at individual level or else at family level. In this regard, unless either family really needs to help the other and breach accordingly the real rules and regulations of **lifinti**, that is equal and balanced help; age and sex are considered. Asmelash (2006) has also the same finding in his study area, Tsiyet. In this last type of **lifinti** under consideration, if one goes to help others alone, they will come alone to his field. But if he goes, for example, accompanied by his family (wife and two of his children), they will have to join him in the same way he joined them. In connection to this, informants told that it is to reflect the balanced help they need that reciprocating sides are heard saying let us allow our woman and children equate to each other. However, as I explained earlier sometimes the original working rules and regulations of **lifinti** are breached and hence individuals of different sex can enter in to **lifinti** arrangement. In this regard, informants raised the possibility that a woman can enter in to **lifinti** arrangement with a man on the ground that she will help him in weeding if he helps her in what she needs like in house construction (which she can hardly perform by herself).

Generally speaking, according to informants and group participants, **lifinti** in general, and the type that involves ones labor in particular, are not limited to plowing, but to any other activities including weeding, harvesting, carrying and transporting (fodder and crop with its stalk) and even house construction, fencing as well as masonry. This labor organization is

similar to what McCann (1987) calls **makanajo** in Shewa and **mallafagn** in much of northern Wollo, and to what Yared (1995) calls **wenfel**, **makanajo** and **siso**, respectively in his study area in Wogda, northern Shewa.

4.3.2. Wofera (Marching in Group)

According to information I got from participants and informants, I would say this institution of work arrangement is very complex type of labor organization which is practiced by the peasants of Tigray. In **wofera** the most determinant factor is the number of the participants. Here, if the number of participants out of the concerned family exceeds six, then the organized labor is most probable to be called **wofera**. Informants and participants told that **wofera** may exist on the ground of **lifinti** arrangements, by hiring labor or simply by the labor organization that result from begging of others for help. Accordingly, **wofera** is complex in its nature and due to that, from those involved in **wofera** some may require reciprocity while some others require their wage and some more require nothing but blessing and thanks from the elderly and from those sick individuals to whom they extend their help, respectively.

According to informants, **wofera** is common to be arranged in clearing of land (as in the past for no land is now allowed to be cleared), plowing, weeding, harvesting and threshing as well as in **tewra**. Besides, it may also be extended towards house construction and fencing, as well as activities in marriage and other festivities. In **wofera** as per the type of the arrangement; for example, when the **wofera** is based on **lifinti** and **rifudot** and **misyot** (which are explained later), the owner has the responsibility of providing the participants with food and drink as explained by Azmelash (2006). Generally **wofera** resembles to **Wod** in Ari (Gebre, 1993), **hailla** in Arbore (Ayalew, 1995) and **debo** in Wogda, northern Shewa (Yared, 1995).

4.3.3. Rifudot and Misyot (Temporary Stay)

These are very limited types of labor organization that work on the principle of generalized reciprocity. According to informants, in these two related types of work arrangements, the participants that take part may be relatives and neighbors and they are organized willingly when they are begged to take part in the undertaking either by an elderly or sick man or woman who cannot perform all his/her activities by himself or herself. In this regard, whereas the **rifudot** is a labor organization that is undertaken early in the morning before those participants who are willing to help leave to their own fields; the **misyot** is

conducted in the late afternoon and may continue in the night with the help of the moon's light, that is, after those to be involved arrive in the field accomplishing their own. From these two, whereas the **rifudot** is most common in weeding, the **misyot** is commonly practiced in harvesting. According to informants and participants, in this type of work arrangement, it is must for the owner to build the moral of the workers through preparing food and drink. In this regard, **enjera** and **siwa** are the most preferred food and drink that are served in these aforementioned types of labor organizations which are under consideration.

Informants and the group participants in the focus groups discussions I conducted told that the **rifudot** and **misyot** work arrangements may lead to **wofera** if number of laborers happened to be more, mostly greater than or equal to six participants. Generally, these much related two types of labor organizations that are discussed above do resemble to some extent with what Gebre (1993) found in Ari, the **aldi**.

4.3.4. Mahtsi (Religious Observance)

This is other institution through which labor is organized in relation to the celebration and consideration of Saints days. Some religious days are more observed than others for being efficacious and miraculous. In connection to this, there are significant days in which peasants never undertake their daily activities. So, according to informants and participants, **mahtsi** is an occasion in which the peasants support those households in need of help during a day when they do not work any on their own field due to religious observance of a specific day. This help during the religious day may be in the form of sharing labor and/or in the form of letting them to use oxen ox (en) during plowing and threshing as Asmelash (2006) noted. In **mahtsi** because it is the household in need of help that asks help from others, the supporters do take part in the help considering that whatever they perform (in these days which should have been respected, otherwise) will be sin to be rested not on them but over the one who summoned and begged them. Finally, it helps to indicate that there is no **mahtsi** for **tswra** and harvesting from all the other agricultural activities. This is because these two activities are performed by all peasants during religious holidays including Sundays and for the peasants accordingly cannot go to help others while doing their own.

CHAPTER V

CRAFT PRODUCTION AND AGRICULTURAL IMPLEMENTS

5.1. Craft Production

According to Foster (1967:6), "In most peasant societies significant numbers of people earn their living from non agricultural occupations." Although these non agricultural activities are numerous and various in types in that it is difficult to limit them in to one category; craft production is, however, one of the common and familiar forms of the non agricultural fields of production.

Barker (1989, p. 61) noted, "Certainly in Africa most peasant farmers produce large part of the food they consume, as well as the fuel, housing and furniture they use [emphasis added].

So, taking a note from the above two assertions, in this next part of the paper craft production is discussed as a major subtopic side by side to its major subdivisions like basketry, pottery, tannery, wood working and metal working.

5.1.1. Basketry

From my knowledge as an insider, I could understand that the peasants in Adi-Senay and Adi-Amhara do involve themselves in production of economically and socio-culturally important basketries. According to informants, basketry products are produced from such like materials as **laka** (leaf of the doom palm tree), **idni** (stalk of red sorghum and sorghum) **righe** (couch grass) and **taftafo** (**taf** like grass). The basketry products are those that are functional at daily bases and those which are very functional during certain agricultural activities (they are discussed together with the agricultural implements).

According to informants, weaving baskets is one of the main responsibilities of women as far as the traditional division of labor based on sex is concerned. Accordingly, women are culturally expected to produce a number of baskets of different size and use as part and parcel of their preparation for marriage (see plate 14). This was especially mandatory in the past because females have to grow and marry someone.

5.1. 2. Leather Products

According to my observation, the peasants in Adi-Senay and Adi-Amhara have several important craft products that they produce from the skin and hide of their animals. In connection to this, informants told that they use the skin and hide of their animals like goats, sheep and cattle to produce economically and culturally valuable leather products.

According to informants, production of leather products is one of the responsibilities of men as far as the traditional division of labor is concerned. In connection to this, to tell from what I know as an insider, whereas some leather products like **agoza** (mat), **maesi** (bed cover) are very functional at daily bases, the other leather products such as **miran** (short strap leather product), **mesian** (long strap leather product) and **loqota** (mobile reservoir) become functional mainly during certain agricultural activities; though it does not mean they are not totally used at daily base.

Speaking about the production process of **miran** and **mesian**, informants told that these two and other tanned products are prepared after the skin or the hide is changed in to **felqua** (tanned but not used leather product). To prepare **felqua** they need to perform a number of activities. Firstly, the peasants smearing the inner part of a hide with dough[28] need to stretch the fresh hide under direct sunlight. Secondly, when dry the hide needs to be put in a special purpose pot called **gewzi** (flat mouthed clay jug). When in the **gewzi**, the hide is mixed with important traditional elements serving as tannin such as: animals' urine, **fireingule** (ball shaped fruit of sorrel plant), charlock, barley and linseed for seven successive days. Within these seven days, the hide loses its hair and becomes ready for use either as it is or after it is tore into harness like pieces. So, when a hide reaches this stage, it is called **felqua**. Here, as observed it helps to indicate that because **felqua** is very dry in its first appearance out of the **gewzi** (pot), it needs to be softened by hand in a third and final tiresome stage of the leather preparation process. Leather production needs no specialization and all peasants do undertake it, though difference in the quality of the leather product is more likely to occur.

5.1. 3. Wood Craft Products

According to my observation and pertaining to my life experience, significant numbers of the crafts in a peasant household are made from woods. Informants told that they produce their woodworks from different plant trees such as **akui** (**cardia abyssinica**), **memona**

[28] It is done to prevent flies from approaching and causing it to smell bad

(**acacia albida**), **geba** (a thorny tree that has small edible fruits) and several other local self growing trees.

According to informants, tools from woods, which are economically and socio-culturally significant, are often prepared by men. Nowadays, the value of this production field is diminishing due to that people start to utilize imported finished plastic and metal products as well as woodworks by themselves. In connection to this, informant Teklegiorgis Abedom told that he used to support his family producing a number of woodworks including beds and chairs. He said that his woodworks were very preferred by the locals for their quality and hence that they were very supportive in his family to the extent that he could cover all his expenses for consumer goods through them and without having to sell crops (Interview, on March 6, 2011).

5.1. 4. Pottery

Pottery is other important field of craft production which is practiced by the peasants of Tigray. According to informants and the informal discussions I had with different groups of people, in terms of the traditional division of labor, pottery is the responsibility of women.

In this regard, these women who are involved in pottery production have to pass through a number of processes to produce quality clay product. Firstly, they have to collect (always from far areas) especial types of soil called **lema** (very fine clay soil) and **hutsa** (sand). The **lema** soil is commonly found in **sewhi** (green grazing lands) and this fact always makes the producers to disagree with locals who do not want their grazing lands to be dug.

According to informants, to prepare their clay products, the women have to be busy at least for a week. In this regard, always the potters collect their soils on Mondays; soak the **lema** soil and filter the sand soil on Tuesdays; then starting from Wednesdays, they begin preparing their clay products in that they taste them baking in fire in the night of Fridays, to sell them in the market on Saturdays or to use them for themselves. The potters in Tigray produce clay products of different size that range from the smallest **jebena** (coffee pot) and **mezerya** (jug like tool that uses for baking), to the largest pots which are called **zingrir** (large pot) and **gemi** (crock), that can contain 260 and above liters of water (See plate 15 for varieties of pots).

Generally, peasants participate in pottery production to secure their economic and socio-cultural necessities. As a matter of fact, according to informants, pottery in Tigray was

used to be dominated by special groups of people called the **Kayla**. The informants told that these people have totally disappeared nowadays.

5.1.5. Metal Work Products

Peasants in Tigray also produce metallic equipments. According to informants, metallic products are produced by special group of people called **hagodti** (people that melt iron). Unlike in the present, these groups of people were discriminated and marginalized groups because they were believed to be evil-eyed. The most common metallic products that are functional in the research sites out of the domain of agriculture include **kara** (knife), **modeeba** (hammer), **moqulobatsin** (metallic plate serving as griddle) and **sensel** (chain). There are others also but these are all discussed later in the following major subtopic, that is, agricultural implements.

Generally, peasants benefit economically and socio-culturally by involving themselves in different fields of craft production as have been discussed so far. The next discussion is about agricultural implements which are more or less attached to the preceding discussion about craft production.

5.2. Agricultural Implements

Tools are among the key elements of production in peasant societies. They are essential because "especially in densely populated, purely agrarian countries without a strong industrial background most of the work in agriculture is performed with hand tools and light animal-drawn equipment" (Hopfen & Bieuslak, 1953, foreword). Moreover, implements are essential because, according to what the same authors noted in their book entitled **small agricultural implements** "small implements prove to be the appropriate equipment in all those regions where production is obtained from small single plots of arable land on which crops can be increased only by striving for a greater productivity, primarily per unit of surface and secondly, per man (Hopfen & Bieuslak, 1953, foreword). Under the same token, the peasants in the research sites, Adi-Senay and Adi- Amhara have produced and possessed significant number of agricultural implements. According to informants, the implements have remained to be of capital importance for the peasants in their production practices, and they are different in type so far as the specific agricultural purpose they are made for requires them to be.

According to my knowledge as insider and according to my observation during the fieldwork, agricultural implements are not all equally functional the whole year round, but some become very functional to perform some agricultural activities at some times. In the following section, the agricultural implements which are used by the peasants in Adi-Senay and Adi-Ambara are presented. They are discussed under certain specific categories for the sake of convenience and clarity.

5.2.1. Agricultural Implements for Plowing

Apart from man and animal labor, agriculture, especially its part plowing, requires other crucial tools like the plowshare. Implements like the plowshare are also commonly called soil-working implements. According to Hopfen and Biesalk (1953: 12), "soil- working implements are used to help those natural processes which bring about the most favourable soil conditions for the germination of seeds and the growth of plants, in other words, good tilth." The authors further noted, "Such tools are used to break and turn the soil to control soil moisture, temperature, and air circulation, weeds and pests, and to bury vegetation and other matter for adding fertility to the soil (Hopfen & Bielsak, 1953, p. 12). According to informants, the ox-drawn plow of the peasants in Tigray does need to have certain parts in which each is very essential for the very usage of the ox-drawn plow for plowing purpose. The materials that we found in the ox-drawn plow are called **mesarea** (equipments of the ox-drawn plow). While parts of the **mesarea** are 12 in number; during plowing time, a rope like material called **chiguraf**, which helps to guide and drive the pair of oxen, is also counted as the number thirteen among the important parts of the **mesarea.** Table 8 indicates important parts of the **mesarea** with the exception of the **chiguraf.** These important parts of the **mesarea** are:

TABLE 8

Important Implements of the Ox-Drawn Plow

Name	Meaning and Function
Mahresha	plowshare for plowing
Dugri	two shallow and spatula pieces of wood in to which the plow is fitted
Irfi	plow handle into which a plowshare is attached
Qitrti	a kind of bolt that may be wood or metal that attaches **dugri** and **newit**(the beam of plow) and also **arut** and **newit**
Kerfes	two kind of ring metals through which the plowshare passes and which attaches it with the **dugri**
Newit	a long beam of plow into which yoke is attached or that attaches **irfi**, **arut** and **dugri**
Arut	the yoke
Qeraqiro	a crack formed from two sticks which are set on the oxen's neck
Miran qeraqiro	strap that attaches the two sticks on the neck of the oxen to fasten them within the two sticks
Miran qedem	a short strap that attaches the **arut (yoke)** and the **newit (**long beam of a plow)
Miran dibar	a strap that attaches the plowshare, the **dugri** and the long beam of the plow
Shankorofia/Serrat	pieces of leather that are put on the neck of the oxen to serve as cushion to their neck when they carry the yoke

Source: Field work, 2011

These all instruments of the ox-drawn plow are presented pictorially as used by Shack (1974) when he studied and depicted the Amhara plow implements, but with some additions and arrangements by myself (See figure 1).

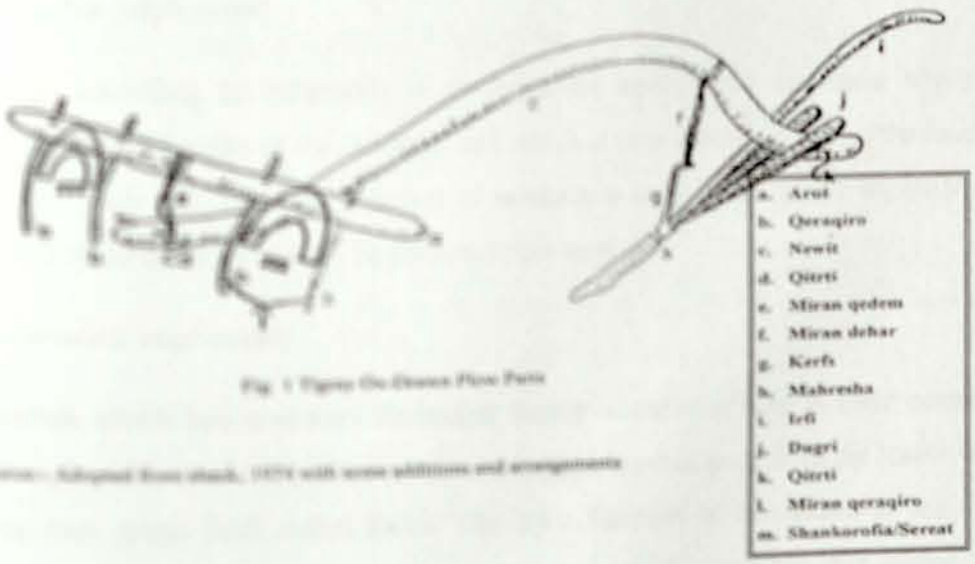

Fig. 1 Ogiso Ox-Drawn Plow Parts

Source:- Adopted from shack, 1974 with some additions and arrangements

Plowing being a major agricultural activity that needs too much attention and effort on the part of the peasants, it does not only need the instruments of the ox-drawn plow as explained above, but it also requires other essential supplementary materials. According to informants, the other supplementary instruments are **chikuaro** (hoe) to dig out and dismantle unnecessary grasses and bushes; **gezemo** (bill-hock), **misar** (hatchet) and **fas** (ax) to cut unnecessary bushes and other trees in a farmland; **zaba** (harrow) that is used to loosen the soil much either pounding the lumps of the soil or by itching the ground more and more, following the plowshare during plowing.

5.2.2. Agricultural Implements for Harvesting, Winnowing and Threshing

Other groups of agricultural activities that require intense use of agricultural implements are harvesting, threshing and winnowing.

Informants mentioned that the main agricultural implement during the time of harvest is the **maesid** (sickle). Following the harvest, there needs time to carry the stalk of the cereals to a threshing floor which is located in a specific location. The informants say, at this time implements like **miran** (short leather strap), **mesian** (long leather strap) and **maesi** (tanned hide that resembles mat) are all necessary. Whereas the **miran** and **mesian** serve like a rope to stack the stalk to be carried, the **maesi** serves to hold the stacked stalks together.

Being an insider I know that during the time of winnowing and then threshing, other important implements prove functional. According to informants, the implements which are commonly used during winnowing and threshing, in a threshing floor, are the following:

Mechalo (wooden implement)

Mechalo according to informants is an important agricultural implement which is prepared from the dried stalks of the charlock, and which is very functional during the time of winnowing (see plate 16). The main function of **mechalo** is to help to separate the chaffs of the crops being threshed from the- to- be collected pure seed.

Meshabeb (wooden implement)

Meshabeb which becomes very functional during winnowing time is other essential agricultural implement. According to informants, this implement is made from the branch of a self growing ever green bush called **kulis**. The main function of **meshabeb** is just like **mechalo** (they differ only in that, whereas **meshabeb** is used somewhat later during the

threshing, **mechabe** is used earlier) and it serves to separate the stalk from the seed to- be - collected. As observed, the peasants use **meshabeb** by moving it in circular motion anti-clock wise, following the legs of the animals being driven in the threshing floor.

Mesae (frock like wooden implement)

This is a frock like (Shack, 1974) about ½ to 1 m long wooden agricultural implement that serves to pick the cereals being threshed up, and throw them so that the wind separates the chaff from the pure seed. According to informants, this wooden implement is produced from important self growing plants like olive tree, **kulio** (ever green bush), **lihay** (kind of mimosa tree) and **gebe** (a thorny tree that has small edible fruits). Generally, **mesae** becomes very functional during both threshing and winnowing periods, and it is a must for a peasant to own at least one **mesae**. Plate 17 shows a peasant using **mesae** (see plate 17).

Sefei and Mike (basketries)

Both are two basketries which are very essential implements in the time of winnowing and threshing. According to informants and my personal observation during the field work, they serve to separate the stalk (which is hardly separated by the other two, **meshabeb** or **mechabe**) from the pure seed, while in the threshing floor and outside of the threshing floor when at the household. In connection to this, I have observed them applying the netted implement **mike** in the threshing floor mainly when the crop is near to be collected. Plate 18 shows how **sefei** is used during winnowing and threshing time (see plate 18).

Gorah (scythes)

According to Hopfen and Bienalk (1953: 11) "all hand tools, except scythes and sickles can be operated with either the right or left hand." Under the same token, according to my life experience and my observation, **gorah** is a special purpose sickle which is large in size from the normal sickle that is used during harvesting and that is operated only by one of the hands without alternating them, unlike any of the other implements. According to informants and group participants, **gorah** is mainly used during the time **taf** is threshed, to cut the long stalks of the crop. When in the threshing floor even if it is sickle like implement that one is observing and seeing; no one is allowed to name it **macsid** (sickle) for it is forbidden in relation to the Tigrean cultural ideology that works under the belief that mentioning it sickle in the threshing floor will minimize harvest.

5.2.3. Agricultural Implements for Traditional Measurement of Crops

The peasants of Tigray have had developed their own traditional means of measuring their crops. The following tables 9 and 10 indicate the instruments and units of measurement for crops, respectively.

TABLE 9

Traditional Implements of Measurement for Crops

Measurement Type (see plate 19)	Function
1. **Shahane**/cane	bushel that serves to measure crops and it is less than one Kg in size.
2. **Mishe*** • **mishe** four, • **mishe** five and • **mishe wuray**	wooden bushel that measures four to six **shahanes**, relatively three to four Kgs in weight.
3. **Guagaid**** • **guagid miero,** • **guagid inqea**	bucket like basketry product that helps to measure crops, weighs around four Kgs in weight.
4. **Inqib**	basketry that serves to measure crop , it can weigh around 15 Kgs.
5. **Kefer** *** • **kefer** 40, • **kefer** 50 and • **kefer** 60	largest basketry that helps to measure crop, it can weigh 26- 40 Kgs depending on the varieties which are listed.

Source: field work 2011

* According to informants one **mishe** may be four, five and six **shahanes**. From this the most common is **mishe** of five **shahanes**.

. According to informants **guagid has different varieties and the calculation may differ as to these varieties. Whereas a **guagid** is five **shahane** in measure; **guagid inkea** and **guagid miero** are five and 10 **shahanes**, respectively.

***. Moreover, according to informants just like the other equipments the **kefer** has also different types that are of different sizes. These types differ in size from **kefer** of 40 **shahanes** to **kefer** of 60 **shahanes**. The **kefer** that measures 40 **shahanes** is common.

TABLE 10

Traditional Units of Measurement for Crops Vis-a-Vis the Unit Kilogram

Type	Unit in **Shahane**	Unit in kilogram*
Sidho	1	<1
Kafalo	2	1.3
Inqra	5	3
• **Inqra kafalo**	6	4
Micru	10	5
Saleste micho	15	10
Kaebo	20	13
• **Kaebo inqra**	25	16.6
• **Kaebo micru**	30	20
Nifqi	40	26.6
• **Nifqi inqra**	45	30
• **Nifqi micru**	50	33
Mashra	60	40
• **Mashra inqra**	65	43
Gebeta	70	46.6
• **Gebeta micru**	75	50
• **Gebeta kaebo**	80	53
• **Gebeta nifqi**	85	56.6
Fiqiti	140	93
Yakit	280	186.6
Entelam	560	373
Kaebi****	1120	746.6

Source: field work, 2011

*. In the calculation one and half **shahane** of crop is used to represent one kilogram of crop in weight. If **shahane** is not around, **micho** can serve as a measure to calculate the amount. In this later case one **micho** of crop will represent three kilograms of the same in weight. Generally it needs to take in to consideration here that all the calculations are approximations.

. After one reaches **kaebi in the counting, he will restart counting once again from the least unit in the list, that is, **kafalo** till he reaches again **kaebi**. Then after, the counting will be one **kaebi**, two **kaebi** and so on.

5.2.4. Agricultural Implements for Storage and Transportation Purposes

Peasants have their own way of storing their crops in a traditional way using traditional implements. Under the same token, according to information from informants, the peasants in Tigray have since long developed their own traditional implements where to store their crops. These implements are both mobile and fixed in type.

Qufo

According to information from group participants and as per my personal observation of the objects, the largest of all reservoirs for crops is **qofo** (granary). According to informants, **qufo** is prepared by women and it is made from a special quality mud which is collected from the termites' hill and which is mixed with dung and water. To prepare one **qofo**, it can take up to a week.

According to information from my group participants, **qofo** has different sizes and it can be the size of **entelam**, two **entelam**, **yahit** and five **gebeta** (all the traditional measures discussed above). Nowadays due to shortage of harvest, it is only the smallest **qofo** that has remained in use and others have come out of use.

Kudo

Another fixed reservoir next to **qufo** and which is prepared in the same manner like **qufo** is **kudo**. According to informants, the main function of **kudo** is to store small amount of crops that are left after storing enough amount in the **qofo** as well as to use it as store for bees as a bee-hive.

Loqeta

Loqeta is a leather product which is made from the skin of a goat. According to my observation, it is a mobile reservoir which serves to store and to transport crops to and out of the peasant household. When in use, this material is put over the back of a donkey and is fastened by another rope like leather product called **mesian**. According to informants, one **mesian** is around twelve meters in length.

CHAPTER VI

CHALLENGES AND TRADITIONAL MECHANISMS TO COPE WITH THE CHALLENGES

According to Diaz (1967: 56) "Peasants live in a social world in which they are economically and politically disadvantaged. They have neither sufficient capital nor power to make an impression on the urban society." Besides, peasants are disadvantaged given the fact that they are socio-culturally dominated, and given the uncertain environmental and ecological realities they live in.

As a matter of fact, the production practices of peasants is by far more for personal consumption, which is subsistence production, than for cash income generation; although it does not mean they never produce to sale their extra produce in order to cover their expenses for consumer goods. As Fasil (1993: 25) noted "The problem faced by subsistence producers are many and involve climatic, pedogenic and biological conditions. The common manifestations of these are drought, excessive rain, hail storm, flood, soil erosion, threat of wild animals, crop diseases, pests, etc." By and large, Fasil (1993:25) wrote that "during any production season, a number of these factors could occur and cause partial or total damage to crops." I think this is one case which makes the subsistence production of the peasants more uncertain.

The problems which the peasants face in relation to physical environment next to the social, economic and political problems are prone to variation in type and in intensity even within limited distance in terms of geography (Fasil, 1993).

The northern part of Ethiopia, in which Tigray is found is as to Aspen (1994), "impoverished, over-populated, and ecologically strained." Moreover, as to McCann (1987, p. 78) " the rainfall shadow effect created by mountain systems west of the Tekeze valley and the general pattern of desiccation evident in Africa's Sahelian latitudes appear to have lowered productivity and fostered periodic drought crises in the northeast far more consistently than in other areas of the country."

Thus, as the above literatures do reflect it demands to note that how it is possible for the peasants in Tigray to cope with the challenges (natural and man-made) and undertake their production practices. The discussion below is about the challenges the peasants face and the traditional mechanisms they employ to cope up with those problems.

6.1. Challenges to Fields of Production

The production practices of the peasants in Tigray are common in such like fields as crop production, animal husbandry, poultry, apiculture and craft production. Under the same token, the challenges that are faced and the mechanisms employed by the peasants are those that are faced in these various fields of production. Accordingly, the problems (be it natural or man-made) as faced in each production fields are presented below, one after the other.

6.1. 1. Challenges in Crop Production

To begin with, pertaining to the information I got from my participants in the focus groups discussions I held and with its cross checking by the in-depth interview I had with my informants, natural problems like rainfall (shortage or excessive), soil infertility and erosion, shortage of farmland in relation to the natural dramatic population explosion and government's failure to distribute land or to initiate rehabilitation programmes, destruction by pests, rodents and birds attack, plant diseases as well as weeds disaster are the most pressing challenges that the peasants in Adi- Senay and Adi- Ambara face in their crop production practices.

To illustrate, each of the natural problems in relation to crop and fixed plant cultivation, let me begin first with problems related to rain.

As a matter of fact, the farming system of the majority peasants in Tigray is dependent on the natural rain in the rainy season (**kiremti**). According to my large number of group participants' understanding or emic perspective, if the said rain is out of its normal and natural occurring, then they will face problems. According to them, a rain is not normal when it is very light or it does not rain during the whole of the rainy season; when it rains very intensely accompanied by wild wind and hailstorms; when it starts early during the rainy season, for example, in April/ May and ends early, in June; when it starts early and ends very late, for example, if it stays raining till the end of December. Saying so, finally they added, a normal rain starts in May and ends in October.

What are the problems faced in relation to rain abnormality? Informants told that the problems in relation to rainfall normality or not are many and various in type which include the following.

In the first place, if there occur shortage of rainfall in relation to light raining or not raining at all during the rainy season, significant number of crops, if not all, may not be sown, and significant others may disappear even after they are sown. Besides, as explained above, if the rain is intense and accompanied by **awlonifas** (whirlwind) and hailstones then unexpected flash of water resulting in flooding and runoff may occur. Given the fact that the landscape in Tigray, especially in the research sites is full of mountains and cliff hills, the runoff is as such intense that can flood newly sown and even those crops which are ready to harvest, as well as that can cause intense erosion of soil in that the latter may lead to lessening of soil fertility and even shortage of fertile farmland. Moreover, in relation to early starting and ending as well as early starting and late ending rain, informants and participants ascertained that, they face numerous and various problems. Firstly, if the rain ends very early after starting early, it means that the newly grown seeds will disappear totally. Secondly, if the rain starts early and ends late, crops which are already reap by then, in this case crops like maize, sorghum (a type **safiday**), red-sorghum, grains and legumes do become prone to pests attack in relation to humidity and may even fall down and spoil. In connection to the latter challenge, informants and participants underlined that it is only finger millet that can resist and even grow well if such a thing, that is, late ending rain happens.

In addition to the so far discussed problems, shortage of land and lack of soil fertility are other major challenges that the peasants encounter in their production practices. Here informants told that whereas dramatic population increase, soil erosion and government failure to initiate new land distribution and even rehabilitation programs, can be raised in relation to shortage of land; they listed soil erosion, lack of fallow period to farm lands and even governments failure to provide them fertilizers with reasonably fair prices, as major causes resulting in soil infertility.

The other interrelated challenges are problems in relation to pests, rodents and birds. With regards to problems in relation to pests and rodents attack; first it helps to note that those problems prove challenging both when the crops are at their fields and when they are at home, stored in granaries.

According to participants, pests attack all crops except **taf**, finger millet, linseed, cumin, chatlock, and nigerseed. According to my life experience as an insider and as to the informal discussion I was having, the reason is believed to stem from the fact that these crops are very

small in size and for the reason that they are naturally cold in terms of temperature unlike the most pest sensitive crops like sorghum (which are culturally believed to be hot crops).

As regards the rodents, group participants and many individual informants in my interview told me that the most destructive are mice, hedgehogs and civet (**zibad**). According to them though the mentioned rodents could attack all crops, they mainly attack crops like maize, sorghum, red- sorghum, grains (wheat, barley and their varieties) and legumes.

Speaking about the birds, the most destructive birds are such like birds as **bekual** (small bird with ash-gray colored feather), **imbala** (very destructive small bird), **beaa** (big beaked bird that lives in water), **wari** (kind of black bird whose feathers has a metallic sheen) and **dime** (small bird that attack in group), as well as **uf-nihbi** (bee's-bird) and **barito** (small dove). In this regard, participants agreed on the fact that the above birds attack mainly crops like sorghum, **taf**, barley, beans, wheat, and maize. Table 11 indicates crops and the type of birds that attack them?

TABLE 11

Crop Type and Birds That Attack Them

Type of Crop	Birds' Name
Sorghum	**bekual**, **dime**, **barito**, and **wari**
Bean, **taf**, and finger millet	**dime**, **beaa**, **uf-nihbi**
Barley, wheat, maize	**bekual**, **dime**

Source: field work, 2011

Similar to the above discussions, plant diseases like **humedya** and frost (**asahayta**) in the case of Adi- Senay and Adi-Adi-Ambara are other natural challenges. **Humedya** as to informants and my group participants is a kind of diseases caused by a matter that comes from the middle of the clouds in the sky. According to informants and participants, **humedya** is most likely to fall and attack plants including crops, when the sky is red in color, and often it falls in the dusk, during the time the sun sets. Even though each and every crop, except sorghum and red-sorghum (which are less likely to be attacked) are prone to attack by **humedya**, it mainly attacks and burns crops like **taf**, beans and all cereal grains as well as vegetables. According to informal discussions I had with various peoples and from what I observed, **humedya** (though it attacks all the aforementioned plants that are at any stage of

their growth) it mainly attacks crops in the time of their germination. If any crop is attacked by **humedya** it stops growth and becomes useless.

Finally, with regard to problems in crop production, weeds are mentioned to be among the other most serious challenges that the peasants encounter. In this regard, crops like **taf**, finger millet and grains are said to be sensitive to weeds.

6.1. 2. Challenges in Animal Production

As indicated above, the subsistence production of peasants does not only depend on crop production, but it also is dependent on animal husbandry, poultry and apiculture as well as craft production. As regards their animal husbandry, informants raised: shortage of pasturage and grazing lands (that are caused by population increase and government restrictions of free grazing) as well as animal diseases as their most challenging problems.

In terms of the problem in relation to grazing land, the peasants do not seem to be happy with and support the government policy about guided grazing. According to informants, the new phenomenon which has occurred as part and parcel of the guided grazing initiative by the government is what the locals call **felika mikilab** (feeding while at home separately). In expression of their distrust with it, some participants related the case to the spiritual life of hermits and nuns. In this regard, they raised the problem that their animals could not mate each other and thus could not reproduce for the reason that the government policy limits them from sending their animals to graze and mate freely as in the past, in the nearby green grazing lands (**sewhi**). But as to me even if there is need for the government to reconsider allowing grazing, especially during the mating season, September to December to let the animals mate and reproduce, guided grazing is a must to be applied. This is because according to my observation of the area, guided grazing and feeding while at home seem the only alternatives left to safeguard the continuity of plant life, not only in the grazing lands but even in the nearby places. That is because the areas are going barren and barren from time to time.

6.1.3. Challenges in Poultry Production

In their poultry production practice, informants in the research sites raised: lack of enough rooms for their poultry (in relation to shortage of land); food shortage for their poultry because of limited production; birds' disease resulting in death of their poultries in a single blow and also attacks and destructions caused by **silhlohot** (marten) and other animals that feed on birds, as their most pressing challenges.

6.1.4. Challenges in Apiculture

With regard to their involvement in bee hiving, all group participants in all the focus groups discussion that I conducted listed lack of perennial flowering plants as well as destruction caused by insects like termites, especial type of birds called **uf- nihbi** (bees' bird) and other aliens that feed on and likely to disturb bees like lizard and butterfly, as their most challenging natural problems. In connection to this, informants raised the hesitation that they have as regards the type of wood the modern beehives which are distributed by the government are made from. They suspect that the beehives are produced from materials which are least comfortable for bees. Here, they are heard talking about the loss of bees they encounter when they start using the modern beehives.

6.1.5. Challenges in Craft Production

According to informants and my informal discussions' account, the major and pressing challenges of the craft producers include: lack of the necessary trees (in the case of wood craft producers), lack of grazing land covered by grass from where they get the special type of soil for their clay (in the case of potters), discrimination against them and their families (especially on the case of smiths and potters) and also the discouraging shift of focus by buyers to other manufactured equipments rather than the locally produced craft products.

6.2. Traditional Mechanisms to Cope with the Challenges

In the face of the problems (natural and man-made) the peasants do have traditional ways through which they cope with the challenges. In the following discussion, these traditional mechanisms as practiced by the peasants of the research sites are presented. But before proceeding into the depth of the discussion, it helps to note that as to my personal observation and pertaining to the information I got from the in- depth interviews and focus groups discussions I had conducted, the traditional mechanisms that the locals involve generally revolve around developing and sharing knowledge as well as cooperation.

6.2.1. Traditional Mechanism to Challenges in Crop Production

To begin with, developing and sharing knowledge is one of the most important and inclusive mechanism that the peasants in Tigray employ in the face of their problems. In this regard, I have got to know that the peasants have deep and very supportive knowledge. This knowledge they have is reflected in such like occasions as: in relation to what crops to sow

and grow when there is no sufficient rain or no rain at all; what crops to sow and grow when there is sufficient rain; what to sow and grow when the rain starts early and ends late; what to sow and grow when the soil is **merakik** (infertile) and when it is **duka** (fertile).

In this regard, informants indicated that they sow crops like red **taf**, grains (wheat, barley and **baafets**), legumes (chick- pea and pea) and oilseeds (nigerseed and linseed) when there is no sufficient rain and when the soil is not fertile

On the other hand, they indicated that they sow and plant crops like finger millet, white **taf**, sorghum, red sorghum, maize, bean, nigerseed, sunflower and charlock when the rain is sufficient and when the soil is fertile. Here somewhat differently, the informants told me that they sow chick-pea as emergency crop if in case the rain is too sufficient to destroy every crop sown including those which are by then reap and ready to harvest.

As regards soil erosion, significant number of group participants told that they prevent it or at least try to prevent it employing styles of plowing called **zura mihras** (circular plowing), **seyaf mahres** (slanted plowing) and **gadim mahres** (horizontal plowing). Based on their discussion, I could know that they hardly employ **tikul mihras** (vertical plowing). In connection to this, informant Gebreigziabiher Tekle narrated his experience in such a way:

> Thanks to my father I have been trained how to plow. While I am plowing, I use circular, horizontal as well as slanted types of plowing. I do this firstly, to prevent soil erosion on my farmland. Secondly, I do plow in the way explained because I do not want to let water flow into others' farmland in a way that can facilitate erosion, like by plowing vertically. Thirdly, I plow in circular, slanted and horizontal ways so that I let no part of the farmland unplowed given that my land has irregular shape and is, meanwhile, small in size. (Interview, on January 26, 2011)

Hence, as the above experience of the informant does reflect, the peasants most preferably use circular, slanted and horizontal plows in favor of vertical plowing. According to my personal life experience and my observation to the study area, the above ways of plowing are justifiable given that the landscape is mostly mountainous, full of steep sloped areas that can aggravate runoff resulting in soil erosion.

The other problem which the peasants encounter in their crop cultivation is shortage of land and lessening of soil fertility. According to informants and group participants, the most traditional mechanisms in connection to shortage of land and soil infertility are **wahrar mirrae** (mixed-cropping) and **migibat girat** (crop-rotation). In connection to this, informants

and participants told that quality[29] of production, protection of soil erosion, increment of soil fertility and satisfaction of diversified needs are all priority issues to consider during mixed-cropping and crop-rotation.

To begin with, as regards the mixed cropping, I could identify during the fieldwork that the peasants mix significant number of their crops. Table 12 shows types of crops which are sown mixed.

TABLE 12

Crops Sown Mixed and Reasons Behind

Crops	Reasons
Finger millet and red sorghum	to avert risk of failure by any of the two, for better productivity and to increase soil fertility
Nigerseed and **taf** beans	to get two types of harvest, for better productivity and to increase soil fertility
Cumin and **taf**	to get two types of harvest, for better productivity and to increase soil fertility
Chick-pea and lentils	to get two types of harvest, for better productivity and to increase soil fertility
Chickpeck and maize	to get two types of harvest, for better productivity and to increase soil fertility
Sunflower and maize	to get two types of harvest, for better productivity, to increase soil fertility and to serve bees from the flower of the sunflower
Chick- pea and fenugreek	to get two types of harvest, for better productivity and to increase soil fertility
Bean and nigerseed or sunflower	to protect hedgehog, for better productivity and to increase soil fertility
Pea and bean	for better productivity, to increase soil fertility and to avert risk of failure of the pea

Source: field work, 2011

Speaking about mixed cropping, significant informants underlined that the crops to be mixed are those crops which do not have equal length of stalk (**lielentihten**) and which are traditionally believed to support and benefit each another. In connection to this, informant Tsehaye Niwa made the following remark:

[29] According to informants quality refers to the weight and appearance that crops have. They believe that crops of the same measurement may differ in weight due to the difference in quality.

> We mix crops which we think do naturally benefit to each other rather than hurt. For example, we always plant peas with beans. We do this because peas have very tiny stalk and hardly holds fruit if not supported by growing like hysteria over the beans (which have relatively large and strong stalk). Besides, we sow chatlock with maize, because we know that flowering crops benefit the other non-flowering crops. The same is true for the other crops. (Interview, on March 8, 2011)

In order to cope with shortage of land and the related loss of fertility due to repeated and excessive use of the same land for long periods of time, peasants in Adi-Senay and Adi-Amhara employ a traditional method rotating their crops from year to year. In this regard, informants told and group participants in all focus groups discussion agreed that they do not sow and grow similar crops in one farmland from year to year. Besides, when sowing those crops which can be sown repeatedly in one farmland; they reach the extent of rotating the crop by using (though the same) a crop type which was sown and harvested from different land, last time.

In connection to the crops that can be planted repeatedly, informants told that they include crops like **tef**, maize and sorghum. Here, they stressed that in such a case the soil needs to be fertile if possible also fertilized with **dukei** (manure from dung of animals).

From my stay in the field during the field work, I could know that the peasants sow significant number of their crops employing rotation. Table 13 shows crops which can replace each other in rotation.

TABLE 13

Crops* that Replace Each Other in Rotation

Originally used crop	Next used crop
Taf** and maize	beans, finger millet
Hanfets	finger millet
Nigerseed	finger millet or taf (preferably) and any other crop
Linseed	finger millet/ taf, barley, **hanfets**
Sorghum***	**taf**
Red sorghum	**taf****
Finger millet	**Taf**
Maize	white barley, **birguda**, bean, **hanfets** and wheat
Bean, chick-pea and pea	any crop
Lentil	barley, **hanfets**

Source: field work, 2011

*. Crops like cumin, fenugreek and charlock are not included because they are hardly sown alone to replace others.

. **Taf cannot replace maize because if sown replacing maize, it will grow fast at the advantage it gets from the maize which was harvested last time. But later its growth will prove futile and it will totally fail and disappear.

***. **Taf** can replace crops like sorghum and red sorghum only and only if the soil is fertilized with manure.

****. Informants told that those **semera** crops (crops which need fertile soil and sufficient rain relatively for long periods of time) cannot at any situation replace each other. If sown they may not grow and if they do their harvest will be very small.

As part of their locally shared and developed knowledge, informants stated that they employ a number of traditional mechanisms that range from sprinkling holy water[30] to applying traditionally supportive traditional techniques to protect their crops from pests, rodents, termites and birds attack.

To begin with, with regard to pests, participants ascertained first that crops like **taf**, finger millet, nigerseed, linseed are not prone to destruction caused by pests. They then went on to tell that pests attack their crops when in the field and when they are stored in their granaries.

According to information I got from my informants during most of the in-depth interview sessions, locals remain to traditionally prevent those crops which are viable to attack by pest through smearing and daubing them by ash which is prepared from the specifically collected and burnt fecal of sheep and goats. Moreover, peasants in Adi-Senay and Adi-Arkuaro also protect pests by putting those crops sensitive to pests attack (like sorghum) in the middle of those crops which are not attacked by pests; in this case crops like sorghum are put and stored mixed with **taf** and finger millet. They do that because they believe **taf** and finger millet are cold and can reduce the temperature of the granary which could possibly cause the sorghum to be attacked by pests, otherwise.

Similarly, because rodents are also serious problems that the peasants in Adi- Senay and Adi- Arkuaro face, they have devised traditional mechanisms to cope with the problems caused by rodents. They raise dogs to scare and hunt rodents like civet, marten and hedgehog as well as they use other mechanism as discussed later. According to informants, and as it was also ascertained by participants in all focus groups discussions I conducted, the peasants protect the rodent called hedgehog from attacking their beans, through encircling the beans by either sunflower or nigerseed. In connection to this, informant Meles Gabreyesus said, "We sow nigerseed encircling our beans, to protect hedgehog. We know that hedgehog hates the smell of nigerseed, and we know also that hedgehog cannot see the beans if encircled by

[30] They sprinkle their fields with different holy water of different saints. For example, informants specifically mentioned that the holy water of saint Teklehaimanot is very efficacious to protect mice. In this regard, they feel proud and happy to tell that no mice are seen in land where the holy water of saint Teklehaimanot is sprinkled. As a matter of fact, it is not only to protect pests and rodents that peasants sprinkle their lands with holy water but also they sprinkle their lands with holy water to prevent very destructive hailstones. Generally, this action of the peasants is the result of the patron-client relationship that they have with saints; a issue which I discussed in the distribution systems on chapter three.

nigerseed. So, that is why we sow our beans encircling them with nigerseed to protect the hedgehog from wrecking the beans (Interview, on February 6, 2011).

Under the same token, to prevent their crops from other rodents like mice, the locals in the research sites use traditional mechanisms. In this regard to prevent the mice, informants stated that they use a traditional trapping method called **misqat** (stoning). Informant Meles Gebreyesus and Abebat Woldearegay stated the case in such a way: "We attach crop into a string of grass. We then tie a flat stone with the grass holding the crop, in a slanted way. In this case by the time the mouse eats the crop attached to the grass, it unintentionally cuts the grass and causes the flat stone to fall over it. In such a way we can stone 20-30 mice a night" (Interview, on February 6, 2011). Here, I could feel the fact that the grass and the stone are natural could cause the mice to be not alert and be stoned accordingly. And as to me that must be the case why they trap and kill relatively many mice employing such simple method which is aforementioned.

Concerning the termites, other serious natural problems of peasants in relation to their crop cultivation and bee-hiving, informants told me that they prevent them by looking for the king of the termites in its hill and then killing it. Here, the informants tell that they dig out the king of the termites more often in June[31], by digging 50-100 cm deep into the ground. Here, after they dig deep and pull out the king of the termites, they either use the king to feed their sick oxen[32] or else they throw it into water.

As far as birds are concerned, according to informants, and from what I know as an insider, peasants use traditional mechanisms like **wonchif** (sling) and **mentig** (bow). In this regard, for the sake of the success of using the above methods (here, more often children are responsible) they construct special towers in the middle of their fields (see plate 20). Besides, they have to look and search for some birds while in their holes. In this case, informants told that the months May and June are preferred because it is the in these months that the birds start living in holes to run from shower of the rain that already starts during that time. Generally, according to the study I could know that birds are very destructive causing a lot of

[31] Informants believe that termites could easily be identified by digging during the rainy season when they reproduce more and when the ground is easy for the peasants to dig.
[32] Informants believe that the king of the termites has medicinal value. Here, they said if the king is given together with grass or **enjera** to an ox which is sick, especially an ox whose heart is sick, then the ox will be from that time onwards healthy and will start to grow fast and become fat shortly later.

destruction not only to the crops of peasants but also to their bees (because there are special birds called bee- birds that feed on bees).

In similar way to the above methods, according to some participants in the focus group discussions I held, to prevent the **humedya**, a plant disease that burn crops and which was discussed above in the challenges part, they told that they use smoke from **kubo** (dried dung) to disperse it when it is up in the sky. But this opinion was not as such accepted by significant number of other elderly group participants in that they stressed that smoke does not protect **humedya**, but it does prevent rather **asahayta** (frost).

Finally, with regard to weed disaster, informants indicated that besides working hard on their lands individually and at family level, they employ working parties like **lifinti**, **wofera**, **rifudot** and **mieyot** as well as **mahtsi** (which are discussed in chapter four); to secure extra labor if in case they cannot cope with the problems alone.

6.2.2. Traditional Mechanisms to Challenges in Animal Production

As regards the challenges they face in their participation in animal production, informants told that they use their shared and developed knowledge to cure some of the diseases that attack their animals. Here, whereas they noticed that they cure significant number of diseases of their animals, they meanwhile, also recognized that there are some diseases which they could not cure. In this regard, I could know that they never cure diseases like **gulkay** (rinder pest). I can see them being very angry and frightened when they speak about this particular disease and the destruction it cause.

Apart from this, because animal disease is not the only problem that locals in Adi-Senay and Adi- Arnbaes face, informants mentioned, other mechanisms like cooperation and development and sharing of knowledge as coping strategies against their problems in relation to shortage of pasturage and grazing land.

6.2.2.1. Systematic Distribution of Fodders

Due to that peasants produce diversified crops; they have diversified types of fodder which they get as crop leftovers. They get the fodders for their animals not only from their crop leftovers but also from wild grasses they collect from their surroundings; in this regard grasses like **tsheg** (couch grass) are very instrumental.

Informants told and significant group participants ascertained that in order to cope with the fodder requirements for their animals peasants distribute the fodders they have systematically and considering ecological, economical and security factors.

To illustrate, given the diversified fodders they prepare and have, ecologically they take into consideration which of their fodder be used first, that is, before the time the rain starts to fall and thus cause destruction to the fodders; and which of the stalks will have moisture that can resist the hard heats of the dry season. Similarly, they take into account security and ecological factors when they provide them with fodders. In connection to this, informants and group participants indicated that they feed their cattle considering: firstly, which of the pasture will enable the animals to survive and secondly, considering which of the pasture (fodder) will be favourable to them when served in the successive seasons from the harvest season through the dry season to the rainy season. In this regard, they told that if one needs his/her cattle to survive, he/she must feed them firstly during the harvest season **kancha** (stalk which is collected from sorghum, red sorghum, maize); secondly, in the dry season **bukbuk** (chaff which is collected from the leftovers of finger millet, grains and legumes[33]); thirdly, in the late dry season **dorqa** (haystack as collected from dry grasses like **tehag**) and fourthly, in the early and late of the rainy season **haser** (chaff of **taf**, that is collected from leftovers of **taf**). Here it helps to note that **haser** need to be served only when it starts to rain and when animals start grazing fresh grasses. Otherwise informants said the animals; especially the cattle will die if they are given **haser**, for example, at the dry season.

The peasants as explained above consider also economic factors in that they systematically distribute their fodder in small and only in small amount the whole year round. In connection to this, to avoid risk of shortage they knowingly start providing fodder as of November, when the fresh grasses that have grown in the rain of the rainy season starts to dry. Table 14 shows the probable time that each fodder is provided to animals (cattle).

[33] Legumes are culturally most preferably given to donkeys and if there are mules.

TABLE 14

Fodder Type and Seasons [14]

Type	Seasons
Qancha (stalk of sorghum, maize and red-sorghum)	November- December
Baqbaq (chaff of bean, millet, pea, chick-pea and nigerseed)	January- April
Durga (haystack)	May – June
Hasar (chaff of **taf**)	July – August

Source: Field work, 2011

6.2.2.2. Cooperation with Lowlanders

McCann (1987: 70) noted, "Highland low-land relations are a case in point because virtually every area of high land Ethiopia from Oromo Wallaga to Tigray has maintained a complex economic and political relationship with an adjacent lowland zone." Besides, according to Conzions as quoted in McCann (1987:70), "Cooperation between ecological zones [has] also [been] practiced. Highland farmers, for example, loaned female livestock to lowlanders for grazing during the rains, the owner and care taker would then divide offspring equally."

In harmony with the above assertions, as their last resort, the peasants in Adi-Senay and Adi-Arshavo send their animals to lowland areas in West Tigray, especially during the rainy season. In this case, informants told, and participants ascertained that they have two options, either to live and settle there in the lowland area the whole of the rainy season till the harvest season or else they have to return leaving their animals (cattle) there in the lowland with the lowlanders.

To illustrate, in their stay in the lowland areas in West Tigray, they have the right to settle in one place which is not occupied by settlers, that is, clearing the area. In connection to this, informants told that they may plow the land and harvest whatever grain they think is favourable and whatever they like. After they harvested and collected whatever crop they produced, it is must for them to provide 1/4[th] of their produce to the locals which are supposed

[14] There may be a change in the time when each fodder is provided depending on the quantity accumulated vis-à-vis the number of animals they have. In normal cases informants told that they provide their animals with fodder types 1-4 successively in a year.

owners of the land. Here, the locals do not only get 1/4th of the new comers produce but also they get their infertile black soil fertilized with the manures of the animals of the settlers and also the leftovers of their crops. Accordingly, we can see that their cooperation is based on mutual benefit.

On the other hand, if the newcomers do not want to settle and produce there, they can do so by leaving their animals with the lowlanders. Here, the locals can ask either for payment in cash like 20 Ethiopian Birr per one head of cattle in a month or else in kind like one calf for any number of new births in the period. So, linkage with lowlanders is one mechanism through which the peasants cope with their problems in relation to shortage of pasture. Finally, informants told that nowadays such relations they have had with the lowlanders is facing problem, in relation to occupation of the areas by individuals and by big projects (governmental or non-governmental) for cash crop production, in this case sesame production.

6.2.3. Traditional Mechanisms to Challenges in Poultry Production

According to female informant Abebet Woldearegay, to cope with the animal disease, better to call here bird's disease, they use the medicinal crop cumin together with lemon to cure their poultries. Besides, while informants told that they have no solutions to problems in relation to land, I have observed them feeding their poultries alternatively with **nifay** (floor residues) and small amount of crops like maize, sorghum to cope with their food problems in relation to this field of production. Moreover, with regard to the destruction caused by rodents such as **silkkebet** (marten) and **micku** (fatten cat) informants told that they use their dogs besides to their careful attendance of their poultries.

6.2.4. Traditional Mechanisms to Challenges in Apiculture Production

Significant number of participants in my focus groups discussions agreed on the case that they hardly cope with the most pressing challenges they face in their apiculture, namely destruction due to bees' birds and lack of perennial flowering plants. However, on the other side, they raised that they cope with the other challenge in relation to insects through distributing **komokichi** (ash) on the suspected ways of entries of the insects like ants to prevent them from entering; and also through careful attendance of the situation of the bees at daily base. In this case they told that if the bees encounter any alien in their bee-hive, they give different buzz and disturbing sound. At this time, group participants underlined the

necessity that the owner has to check and get rid of the problem shortly while; otherwise the owner will have no other option than losing his bees.

Somewhat differently to what I discussed above about the bees' birds, some informants and some participants in the focus groups discussions I had, indicated that they try to hunt the specific birds sometime around May and June, when the said birds start to live in their burrows and holes. In this regard, they could reveal that they sometimes succeed in minimizing the number of the birds.

6.2.5. Traditional Mechanisms to Challenges in Craft Production

Finally, unfortunately I could not find out any traditional mechanisms that are used by peasants who also practice craft production. In this regard, informants told me that they have no other better alternative than quitting their jobs and fulfilling their requirements with other equipments. I suspect that this thing may be one reason why the informants prefer to be involved in agricultural activities as their main stay than the non-agricultural activities which I think are less secured if in case they encounter problems.

CHAPTER VII

SUMMARY AND CONCLUSION

According to Ferraro (2004) Peasants always account for the majority. More often than not, peasants are not only the majority in terms of number, but they are also the major producers, especially in the technologically less developed countries. What they produce covers not only their personal needs but also the personal consumption and socio-cultural needs of other groups of people like urban dwellers and government employees as well as their governments by themselves.

Peasants, though they constitute for the majority in terms of number and they are the major producers, especially in the technologically less developed countries, they live and produce, however, under uncertain situations where they are disadvantaged. This holds water in relation to the fact that peasants (as significant number of scholars underlined it) are disadvantaged groups from economic, political, cultural, social as well as ecological and environmental conditions. The paradox, of course, lies here. How come peasants the majority in number and the major producers happen to be the disadvantaged groups? One major reason for this reality is because their little culture as Redfield (1953) preferred to say is swallowed by the major and dominant cultures of the more powerful (economically and politically) urban dwellers and their government apparatuses.

The Tigrean peasants with whom this paper has dealt are not in different to this trend about peasants which is aforementioned. Hence, though they constitute the majority in terms of number and they are the major producers of not only what they consume but what the other groups like traders, government employees and urban or city dwellers also consume and use for socio-cultural purposes; they are, however, disadvantaged. Generally therefore, this study was conducted in light of the above facts about peasants, in general and the Tigrean peasants, in particular. Accordingly, it has come up with the following major summary and conclusions about the production practices and challenges of the peasants of Tigray.

7.1. SUMMARY

The peasants in Tigray, Adi-Senay and Adi-Ambara are involved in different fields of production which are both agricultural and non-agricultural like: crop cultivation, animal husbandry, poultry, apiculture, and of course, craft production. To illustrate, firstly, as crop producers they produce much diversified crops that help them to satisfy their diversified

needs. The major crops include **taf** (**eragrostis tef**), finger mille, wheat, barley, **hanfets**, maize, sorghum, red-sorghum, legumes, oilseeds and other crops like cumin and fenugreek. Secondly, in their animal husbandry, the peasants produce animals like cattle, goats, sheep and donkeys. Under the same token, thirdly and fourthly, whereas they produce bees and hens in their apiculture and poultry, respectively; fifthly, they produce craft products such as basketry, leather products, pottery, woodworks and metal products.

To be involved in the aforementioned production practices, as agriculturalists in this case, they have to devise their own traditional production mechanisms. Dividing the year in to four or six seasons and performing activities accordingly; setting labor divisions and organizing and sharing labor are some of the mechanisms they involve. In this regard, the peasants in the research sites recognize two types of agricultural calendars. The broad and the common one which categorizes the year in to four major and equal seasons, and the other narrow which divides the year in to six variable seasons. As to the finding of this paper, especially in relation to the broad division, whereas they are busy in three of the seasons, they use the fourth season, relatively very small part of its portion for entertainment.

As regards the division of labor as mechanism of production based on age and sex, it was found out that it sets activities which can be performed by adult males and females, children of both sexes and the elderly, in categories. In this regard, whereas men perform such like activities related to production as plowing, weeding, harvesting, threshing and winnowing as well as transporting (crops and chaffs), constructing fences and houses; women are involved in activities like baking, cooking, house cleaning and embroidering, grinding and spinning (nowadays diminishing due to introduction of grind mills and machine sown clothes), caring children, managing household (especially distribution of crops) and also escorting their men partners (in this case husbands) in important agricultural activities like weeding, harvesting and transporting (in this case the threshed crops and not fodder/chaff). Besides, it was found out that the children and elderly have their own contribution in the household production practices, though relatively to a lesser extent.

With regard to the other mechanisms of production, that is, traditional organization of labor, it was found out that the peasants need extra labor besides their active involvement in their production practices by their own. In this regard, in order to satisfy their need for extra labor they use traditional institutions like **lifneti**, **wofera**, **mahtsi** as well as **rifudot** and **mirya**.

The other important thing that this study considered was the different challenges that the peasants face in their production. These challenges are both natural and man-made. The most common natural problems are shortage of land, soil infertility and soil erosion, problem in relation to rain, plant and animal diseases and destruction of production by pests, rodents and birds attack, shortage of pasture and grazing land, lack of inputs on the side of craft producers, for example, lack of wood. According to this paper, the man-made problems are those which stem from government policies and those resulting from simple disagreement in between locals; like disagreement between potters and those locals who do not want their grazing land (from where the potters collect their clay soil) to be touched and dug. Generally, in the face of these natural and man-made problems, the peasants employ developing and sharing knowledge as well as cooperation among one another and with outsiders like the lowlanders in different parts of the region, as their major traditional copping mechanisms.

7.2. CONCLUSION

So coming to the concluding remarks, generally as to this study, it was found out that whereas the peasants witnessed that their decisions and involvement in the so far discussed production fields are guided by economic, socio-cultural, ecological and environmental factors, they said that socio-cultural, economic, ecological and environmental realities determine their decisions and involvement in their distribution systems. Here, the fact that the principle of the **wodihawabo** prevails and dominates the other aspects of life like economical factors, in the case of their distribution systems reflects that socio-cultural issues are prioritized to economical issues, as far as the distribution systems of the peasants in Tigray and the dominance of the same by the guiding principle of the **wodihawabo** are concerned.

As indicated above, division of the year in to specific seasons and performing essential activities accordingly is one of the traditional mechanisms of production as practiced by the peasants in Adi-Sumay and Adi-Amhara. In this regard, as to the finding of this paper, it can be concluded that the peasants' production practices are more labor intensive making them busy for more than ½ of the seasons in a year.

With regard to division of labor, based on its finding, the paper concludes that the division of labor in Tigray, that is, based on sex and age has resulted in women to be overloaded in that they are obliged culturally to perform several of their chores both in the household and out of the household, while their men partners perform only those activities

which are limited to be conducted out of the household. Besides, the study has also revealed that children and elderly take the other extreme in terms of labor intensity.

Speaking about the traditional labor organizations, that is, the other mechanism of production, it can be concluded that they are as such instrumental in that they help the peasants to avoid risks of failure of production (like those resulting from failure to plow, weed and harvest on time depending on the ecological and environmental realities) on one hand, and in enhancing production by doing the vice-versa, on the other hand.

Based on the findings of the paper, it can be concluded that peasants in Adi-Senay and Adi-Anduro do practice craft production as their major non-agricultural activity. Here, whereas, important fields of craft production like basketry and pottery were found to be domains of females; tannery, wood and metal workings were proved to be the domains of males.

Furthermore, as to this paper it was found out that the peasants in Adi-Senay and Adi-Anduro undertake their production in the face of both natural and man-made problems through employing traditional mechanisms that revolve around sharing and developing local knowledge as well as cooperation among one another and also with lowlanders in other parts of Tigray, in this case, West Tigray.

Finally it helps to indicate that the cooperation between the highlanders like the peasants of Adi-Senay and Adi-Anduro and the lowlanders in West Tigray can be a point of focus for future anthropological studies considering it as a major problem to tackle. Besides, the opportunities of production of the areas (especially in relation to irrigation practices) where the study was conducted (which this paper does not include for time and finance related problems) can also be other point of interest that need investigation both from anthropologists and other scholars from other fields of study. Moreover, according to the findings of the study, I can understand that the peasants of the two research sites and the nearby localities claim that they have been deceived by government officials to let their fertile farmlands be included in to a micro dam in their surrounding, namely Midmar Micro Dam. In this regard, it was told to me that due to the dam a number of households were displaced and several others are waiting the same in relation to the supposed expansion plan of the project. Hence, this issue of displacement and related challenges of the peasants can be a point of interest, especially to those who want to work on development anthropology.

REFERENCES

Alemtsehay, A. (2002). Household Structure and Coping Strategies Under Food Stress: In Saesi Tsaeda Emba Woreda Tigray Regional State. MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Asmelash, W. (2006). **The Effects of Land Reform on Peasant Social Organization: A Study of Village Level Dynamics in Central Tigray, 1974-1994**. MA Thesis School of Graduate Studies: Addis Ababa University. (Published)

Aspen, H. (1994). "Crisis and the Management of Knowledge- A Tentative Approach to the Crisis of the Ethiopian Peasantry". In: Bahru Zewde (eds.) (1994). **Proceedings of the Eleventh International Conference of Ethiopian Studies**, Vol. 2, pp.9-28.

Atteh, Oluwayemi D. (1992). **Indigenous Local Knowledge as Key to Local Level Development: Possibilities, Constraints and Planning Issues in the Context of Africa**. The Netherlands: Iowa State University Research Foundation.

Ayalew, G. (1995). **The Arbore of Southern Ethiopia: A Study of Inter-Ethnic Relations Social Organization and Production Practices**. MA Thesis School of Graduate Studies: Addis Ababa University. (Published)

Barker, J. (1989). **Rural Communities Under Stress**. New York: Cambridge University Press.

Barlett, P. (ed.) (1980). **Agricultural Decision Making: Anthropological Contributions to Rural Development**. Orlando *et al.*: Academic Press, Inc.

Bauer, Dan F. (1975). "For Want of an Ox, Land, Capital and Social Stratification in Tigre." In: Marcus, Harold G. (ed.) (1973). **Proceedings of the First United States Conference of Ethiopian Studies**, Vol.1, pp. 235-248.

Bauer, Dan F. (1977). **Household and Society in Ethiopia: An Economic and Social Analysis of Tigray Social Principles and Household Organization** (2nd ed.). Michigan: Michigan University.

Berhanu, B. (1995). Production Practices in Wolaita of South-West Ethiopia: The Case of Damotta-Woyde. MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Bruce, John W. (1976). Land Reform Planning and Indigenous Communal Tenures: A Case Study of the Tenure Chiguru-Gowsen in Tigray, Ethiopia. Ph.D. Dissertation. Madison: University of Wisconsin. (Unpublished)

Bruce, John W., Holbun, A. and Desmalegn, R. (1994). **After the Derg: An Assessment of Rural Land Tenure Issues in Ethiopia**. Madison *et al.*: University of Wisconsin.

Bryman, A. (2004). **Social Research Methods** (2nd ed.). Oxford: Oxford University Press.

Cancian, F. (1989). "Economic Behaviour in Peasant Communities". In: Platner, S. (ed.). 1989: **Economic Anthropology**. Stanford: Stanford University Press.

Central Statistical Agency (CSA), (2007). **The 2007 Population and Housing Census of Ethiopia: Statistical Report for Tigray Region**. Addis Ababa.

Central Statistical Agency (CSA), (2007). **The 2007 Population and Housing Census of Ethiopia: Statistical Report for Country Level**. Addis Ababa.

Central Statistical Office (CSO). 1966. **Survey Report on Adwa**. Addis Ababa.

Crane, J. G. and Angrosino, M. V. (1984). **Field Projects in Anthropology: A Student Handbook** (2nd ed.) Illinois: Waveland Press, Inc.

Dagne, S. (2004). Production Practices, Constraints and Local Responses: The Case of Gedeo, South Ethiopia. MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Dalton, G. (ed.). (1967).**Tribal and Peasant Economies: Readings in Economic Anthropology**. New York: The Natural History Press.

Daniel, T. (2002). Household Livelihood Strategies in South Wollo. MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Dunham, D. (1978). **Production in Mallu Community, South western Ethiopia**. Ph.D. Dissertation: Stanford University.

Fasil, G.K. (1993).**The Subsistence Crisis in Africa: The Case of Ethiopia**. Addis Ababa: OSSEA.

Federal Urban Planning Institute. (2008). **Report on Plan of Adwa Town**. Addis Ababa.

Ferraro, G. (2004). **Cultural Anthropology: An Applied Perspective** *(5th ed.)*. Canada *et al*.: Thomson and Wads Worth.

Gelbe, Y. (1993). **An Exploratory Study of Production Practices among the Ari: South Western Ethiopia**. MA Thesis School of Graduate Studies: Addis Abba University. (Published)

Girmaye, K. (1993). Production Practices among the Bench of South-Western Ethiopia. MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Grenier, L. (1997). **Working with Indigenous Knowledge: A Guide for Researchers**. Ottawa *et al*.: International Development Research Centre.

Hopfen, J. and Barwalk, E. (1953). **Small Farm Implements**. Rome: Food and Agricultural Organization of the United Nations.

Kiros, G. (1995). Gender and Rural Production in Tigray (1974-1994). MA Thesis School of Graduate Studies: Addis Ababa University. (Unpublished)

Leclair, Edward E. and Schneider, Harold K. (eds.). (1968). **Economic Anthropology: Readings in Theory and Analysis**. New York *et al*.: Holt, Rinehart and Winston, Inc.

Mc Cann. (1987). **From Poverty to Famine in Northeast Ethiopia: A Rural History 1900-1935**. Philadelphia: University of Pennsylvania Press.

Morgan, David, L. (1997). **Focus Groups as Qualitative Research: Qualitative Research Methods Series,** Vol. 16(2nd ed.). California *et al.*: Sage Publications, Inc.

Pankhurst, A. (2002). "Research on Ethiopia Societies and Cultures During the Second Half of the Twentieth Century." In: **Journal of Ethiopian Studies**, Vol. XXXV, No.2, pp.1-60.

Potter Jack M. Diaz, May N. and Foster George M. (eds.). (1967). **Peasant Society: A Reader**. Boston: Brown and Company.

Reminick, Ronald A. (1973). **The Manze Amhara of Ethiopia: A Study of Authority, Masculinity and Society**. Ph.D. Dissertation. Chicago: University Chicago.

Schneider, H. K. (1974). **Economic Man: The Anthropology of Economics**. New York *et al.*: The Free Press.

Shack, William A. (1974). **The Central Ethiopians Amhara, Tigrigna and Related Peoples**. London: International African Institute.

Shanin, T. (1990). **Defining Peasants: Essays Concerning Rural Societies, Expolary Economies, and Learning from the in the Contemporary World**. Cambridge *et al.*: Basil Blackwell.

Spradley, James P. (1980). **Participant Observation**. Forth Worth *et al.*: Holt, Rinehart and Winston, Inc.

Webb, P. and Von Braun, J. (1994). **Famine and Food Security in Ethiopia: Lessons for Africa**. Chichester *et al.*: John Wiley and Sons.

Wilk, R. (1996). **Economies and Cultures: Foundations of Economic Anthropology**. Colorado *et al.*: West view Press.

Yared, A. (1995). Households Economic Status Seasonality and Food Strategies in Ethiopia: The Case of Wogda, Northern Shewa. Ph.D. Dissertation. Boston: Boston University. (Unpublished)

APPENDIX

PLATES

Plate I: Informant from Adi-Amharu

Plate II: Informant from Adi-Serray

Plate III: Group Participants in Focus Group Discussion

Plate IV: Children Carrying Wood

Plate V: The Traditional Stew **Hilbet** with **Enjera**

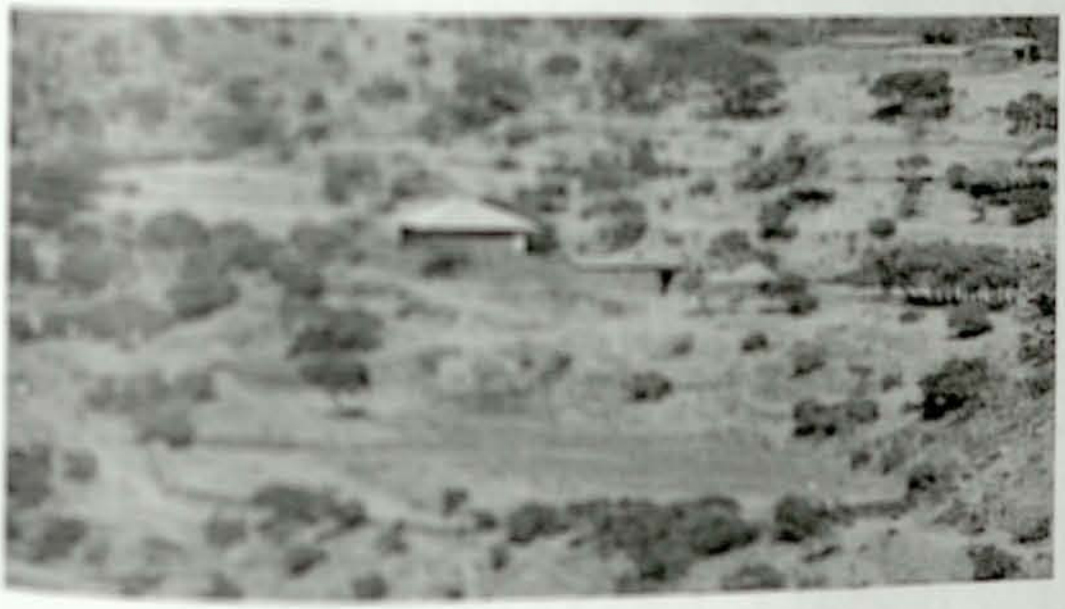

Plate VI: An **Adarash** with Corrugated Iron Roof

Plate VII: An **Adaraak** with Stone and Soil Roof and a **Gebela** in the front underground

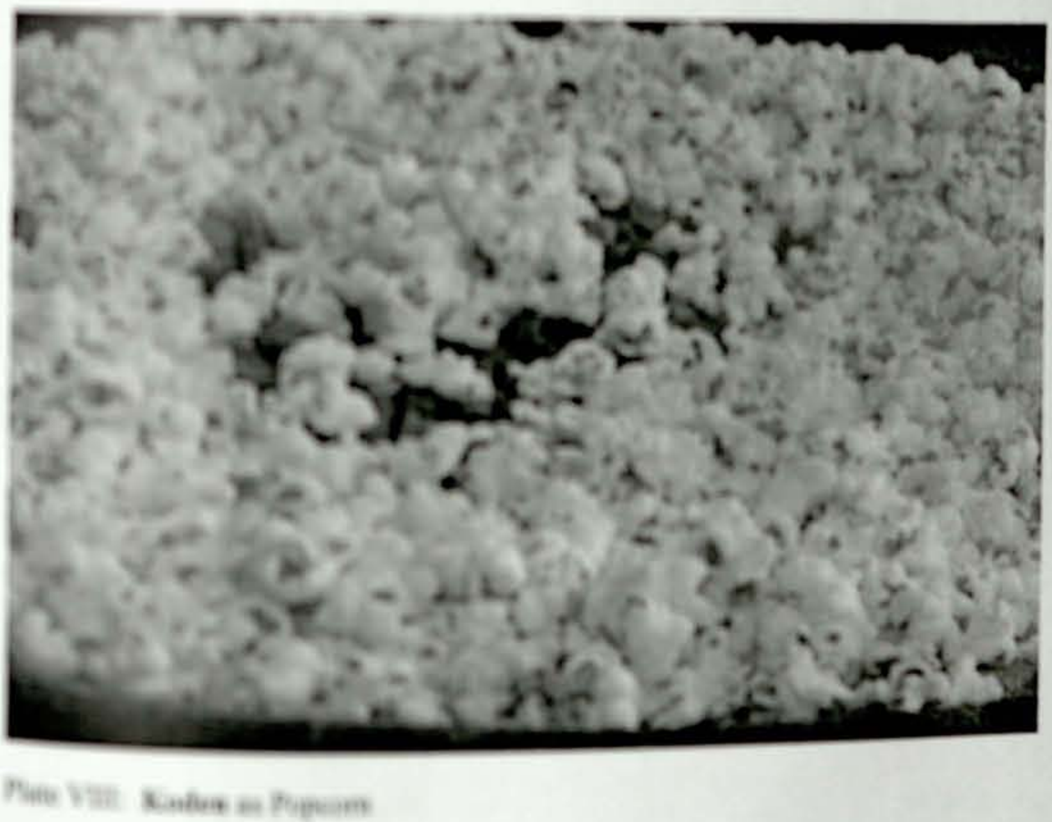

Plate VIII: **Kodon** as Popcorn

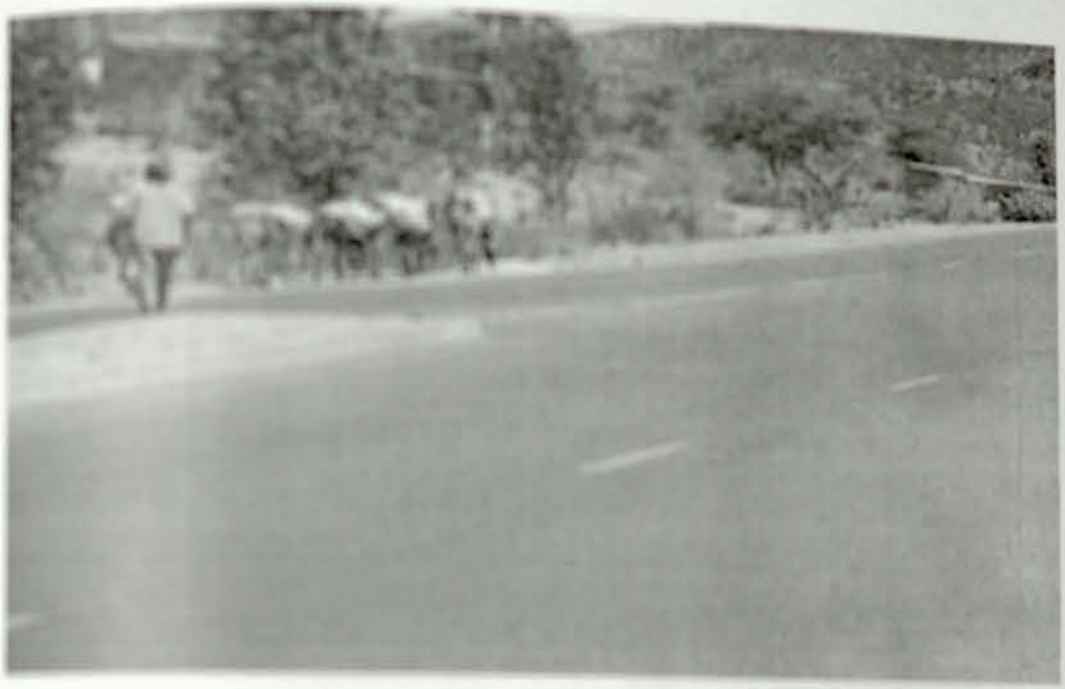

Plate IX: The Role of Donkeys

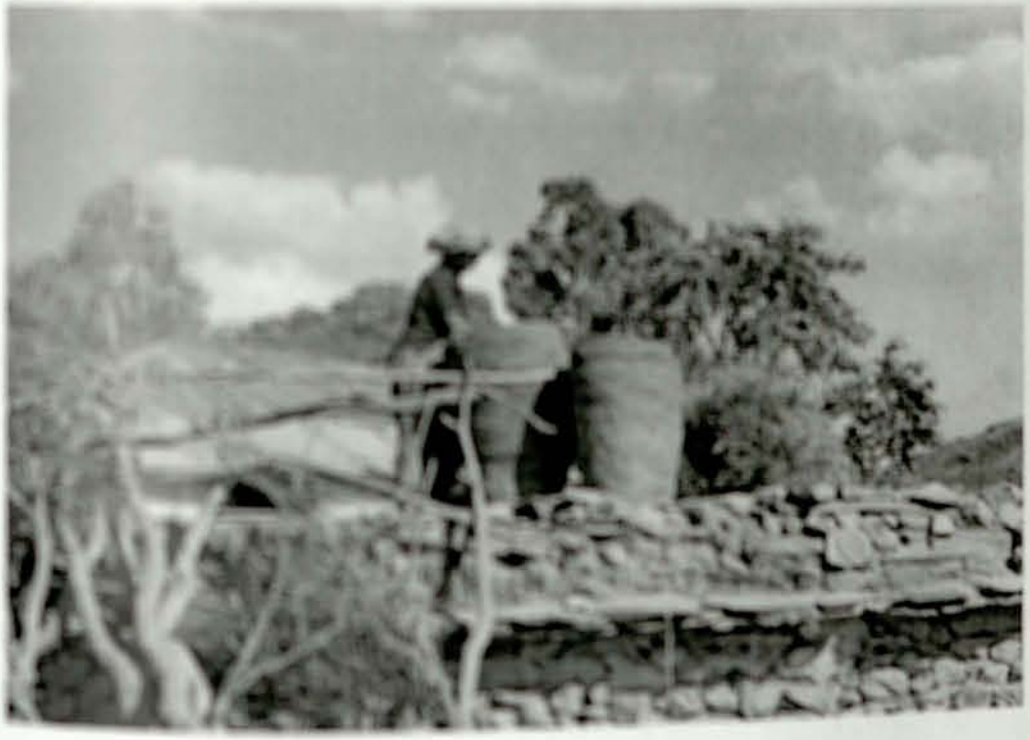

Plate X: Woman Preparing **Kudo**

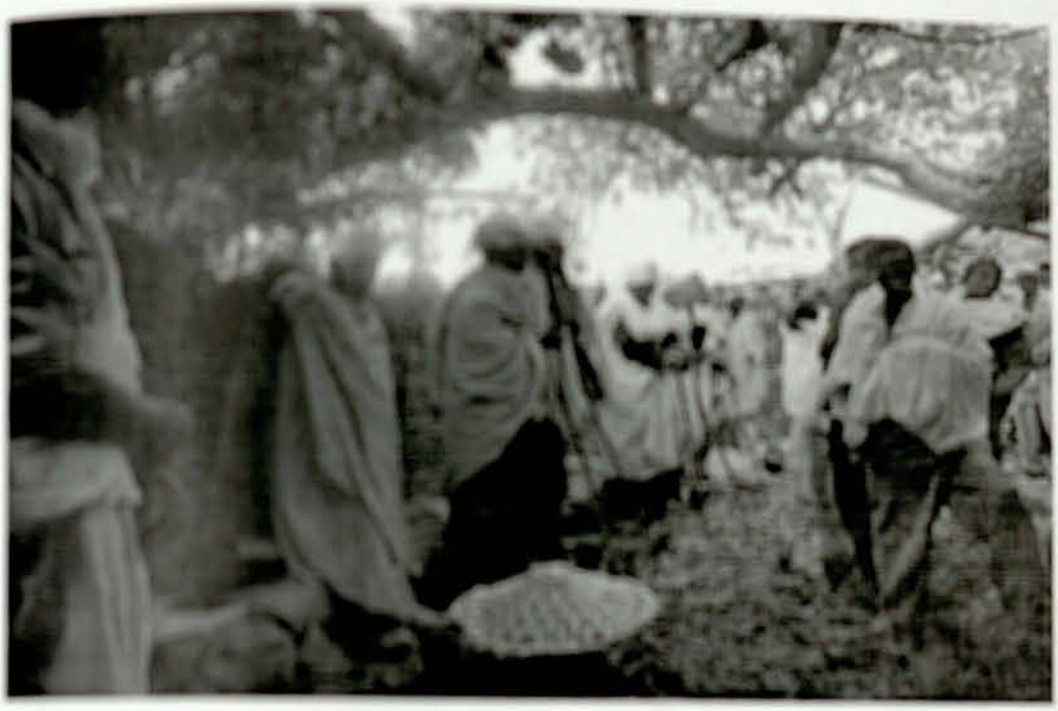

Plate XI: Clergy and Elderly Offering Blessing in a *Zikir* Festivity

Plate XII: Researcher Participating in a Threshing Floor

Plate XIII: A Man Carrying Haystack (**Tsewa**)

Plate XIV: Varieties of Basketries (**Kafse, Sefed, Sahih, Mekomiya, Masob, Mekaliamti**)

Plate XV: Varities of Pot

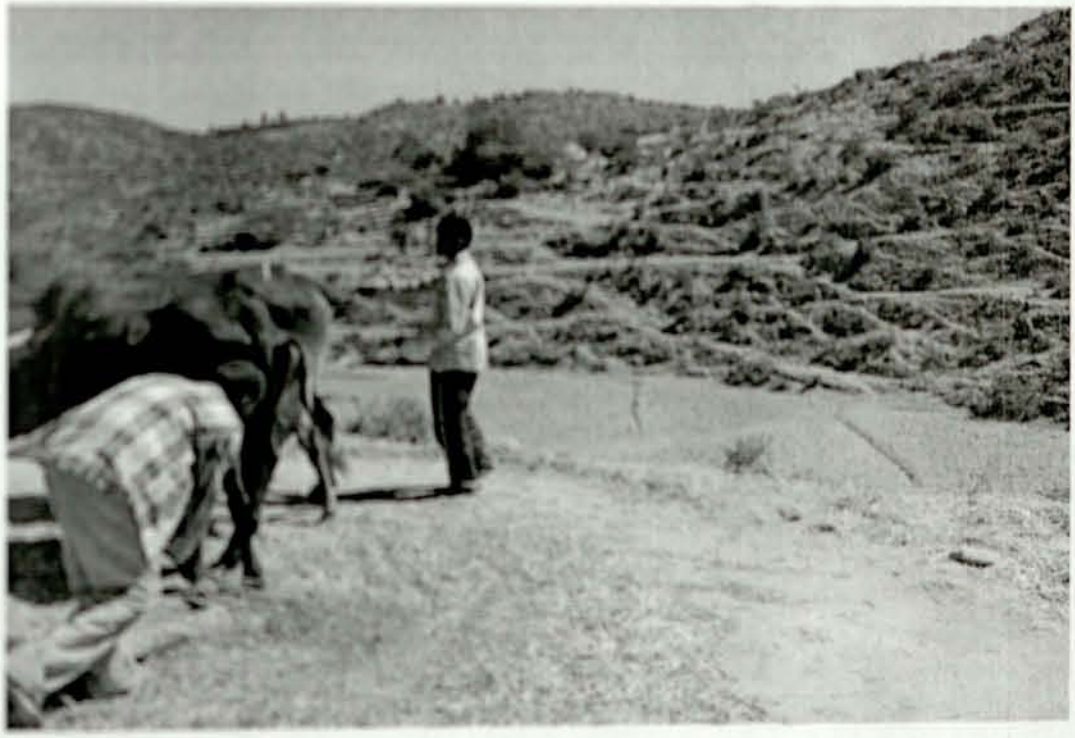

Plate XVI: A Peasant using **Mechalo**

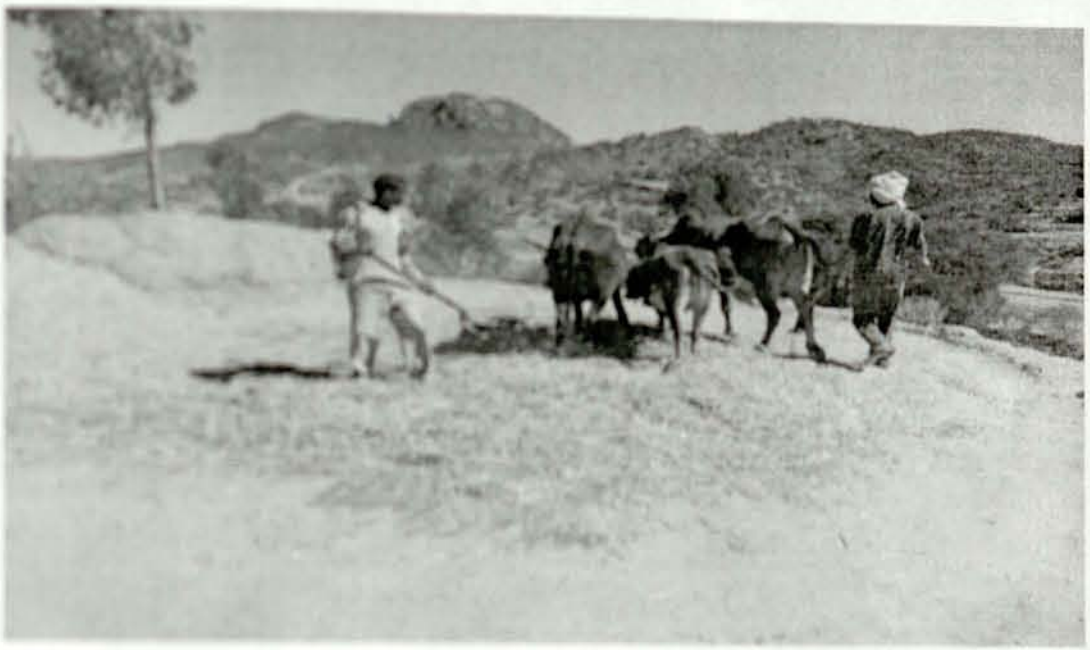

Plate XVII: A Peasant Using **Mesae**

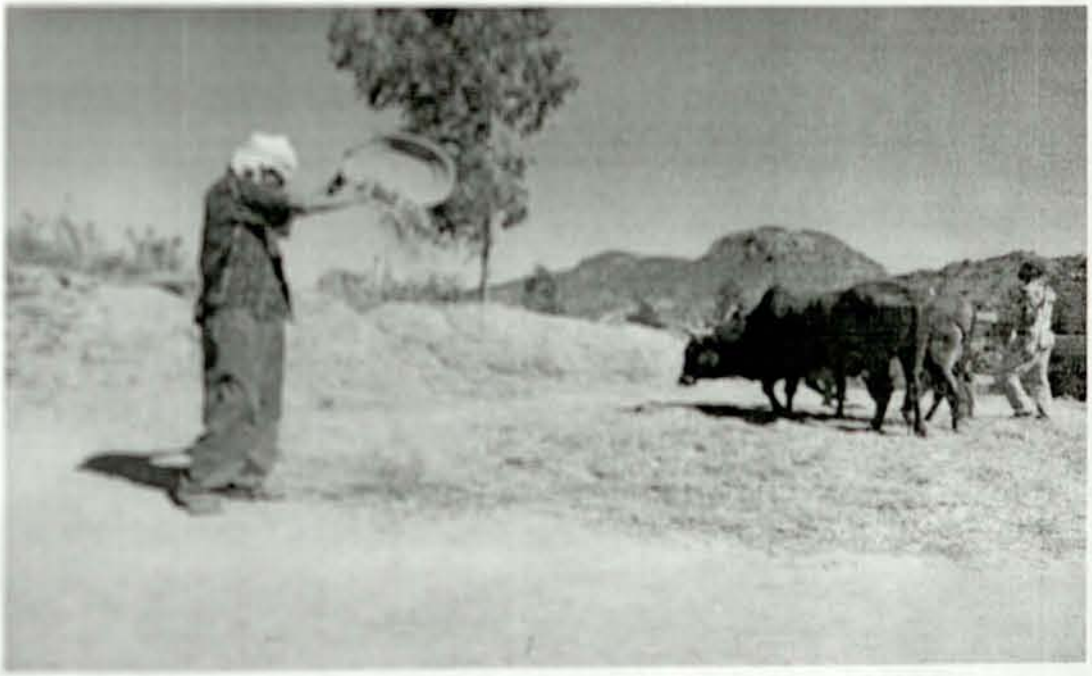

Plate X VIII: A Peasant Using **Sefei**

Plate XIX: Agricultural Implements of Measurement

Plate XX: Tower in a Field to Protect Birds and Rodents

DECLARATION

This thesis is my original work and has not been presented for a degree in any other university and that all sources of information used for the thesis have been fully acknowledged.

Name: Zelalem Meressa

Signature: _____

Date: June 19, 2011

This thesis has been submitted for examination with my approval as university advisor.

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