

# **Traditional Oromo Attitudes towards the Environment**

## **An Argument for Environmentally Sound Development**

**Workineh Kelbessa**



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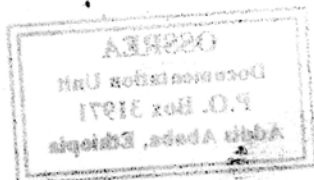
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**ACCRONYMS**

AAU	Addis Ababa University
ATMA	African Traditional Medical Association
BABO	Biiroo Adaa fi Beeksisa Oromiyaa
CBD	Convention on Biological Diversity
CIP	Collective Intellectual Property Rights
COICA	Coordinating Body for the Indigenous People's Organisation of the Amazon Basin
CPGR	Commission on Plant Genetic Resources
DA	Development Agent
EPLD	Environmental Protection and Land Use Department
EPRDF	Ethiopian People's Revolutionary Democratic Front
FAO	Food and Agriculture Organization of the United Nations
FFW	Food For Work
GATT	General Agreement on Tariffs and Trade
IK	Indigenous Knowledge
IPRs	Intellectual Property Rights
IUCN	International Union for the Conservation of Nature
MOA	Ministry of Agriculture
MWR	Ministry of Water Resources
NAMH	Nigerian Association of Medical Herbalists
NGO	Non-Governmental Organisation
OADB	Oromiya Agricultural Development Bureau
OPEDB	Oromiya Planning and Economic Development Bureau
OSSREA	Organisation for Social Science Research in Eastern and Southern Africa
PA	Peasants Association
PRR	Property Rights Regime
RPK	Rural People's Knowledge
TNC	Transnational Corporation
TRIMS	Trade-Related Investment Measures



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TRIPS	Trade-Related Intellectual Property Rights
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UPOV	Union for the Protection of New Varieties of Plant
WCED	World Commission on Environment and Development
WTO	World Trade Organisation

## GLOSSARY

Aaddee	Ms.
Abbaa Bokkuu	Father of Sceptre
Abbaa Caffee	Chairman of the Assembly
Abbaa Seera	Memoriser of the laws and the results of the Assembly's deliberations
Angafa	Senior
Ayyaana	Ceremony; holiday; spirit/divine agent
Aayyoo	Mother
Baddaa	Highland
Balbala	Lineage
Bokkuu	A wooden or metal sceptre, a sign of authority kept by the Abbaa Bokku
Buttaa	The slaughtering of a bull by the members of a new Gadaa set
Dabbo	Agricultural cooperative labour, for example, for harvest or threshing fallow land
Caamsituu	Individuals who can drive rain away
Dalaga	Trance healing ceremonies
Dhibaaayuu	Libations
Dhugaa	Truth, justice
Ekeraa	Ghost
Faguu	Spirit trance
Fugaa	Woodworkers
Gadaa	System of age cycles of the Oromo

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Gadamoojjii	Very old
Gammoojjii	Lowland
Ganama	Morning
Gumaa	Blood feuds
Guulaa	People who have gone through all the rituals of the Gadaa and who have their ruling-period behind them
Hayyuu	Senior Councillor
Hora	Source of mineral water
Humna	Force
Hurufa	Open field
Koticha	Local term for black cotton vertisol
Lammii	Clan
Maallima	Individuals who are supposed to bring rain
Mammaaksa	Proverb
Mirga	Trophy, the right side of the kill
Moora	Peritoneum
Muuda	Anointment
Neft énya	Riflemen, armed retainers, armed settlers
Obboo	Mr.
Qaalluu	A ritual expert
Qeerransa	Leopard
Qoloo	Traditional shirt
Safuu	Mutual relationships in the cosmic order
Tumaa	The beating of law
Uumaa	Creation
Waaqa	God

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# TRADITIONAL OROMO ATTITUDES TOWARDS THE ENVIRONMENT: AN ARGUMENT FOR ENVIRONMENTALLY SOUND DEVELOPMENT

**Abstract:** This paper explores traditional Oromo attitudes towards the environment and their impact on rural development, environmental protection and modern environmental ethics. Its major findings are that environment has always been the fundamental concern of the rural people. The Oromo people possess accumulated practical knowledge of their environment through experience and productive activity. They have developed complex systems of agriculture and intensive soil, water, vegetation and wildlife management that have survived the test of time and the vagaries of environment. They have used various sustainable methods which enable them to secure food, income, employment, and social welfare, diversification of crops and preservation of animals and crops species. Moreover, the Oromo people believe that the natural environment and human beings are linked together in a web of relationships. The samples of Oromo indigenous environmental knowledge indicate that although it has limitations, the dialogue between indigenous and modern knowledge may serve as the basis of constructive borrowing to promote environmentally and socially sound development. The ethics of truly sustainable development may benefit from the wealth of biological and ecological insights and sustainable resource management systems developed by the Oromo people and other cultural groups. Peasants and modern environmental scientists and technicians can learn from one another. The study indicates that the kind of ethic embodied in indigenous beliefs and values does not completely contradict the kind of ethic found in modern beliefs and values. But these kinds of ethic complement each other, and in some instances one is superior to the other. The study suggests that the government and donors should support peasants to pursue environmentally, economically and socially sustainable development. Institutions, which recognize the rights of the local communities to share benefits arising from local knowledge should be established. The principles of intellectual property rights should be revised and include local knowledge entitlements.

## 1. INTRODUCTION

### 1.1 The Setting

The Oromo are a Cushitic people who live in the East African region known as the Horn of Africa. Other Cushitic speaking groups include; Somali, Konso, Afar, Sidama, Kambata, Darassa, Agau, Saho, Beja, Burji, and others.

Abyssinian rulers, court historians, monks and their European supporters contend that the Oromo did not originally belong to Africa. Taye (1955 E.C.), for instance, stated that the Oromo came to Africa from Asia and Madagascar via Mombassa in the fourteenth and sixteenth centuries. Beke also reports that "[i]n the annals of Abyssinia it is recorded that towards the beginning of the sixteenth century that country was invaded

by numerous hordes of a wild and warlike people" (Beke 1848, 3). The evidence at our disposal, however, indicates that this view is misguided and fabricated by Abyssinian rulers and historians to dominate the Oromo people and justify their system. Abyssinia proper included the present regions of Tigray, highland Eritrea, Gonder, Gojjam, Northern Shawa, and part of Wallo.

Many writers have invalidated the thesis that the Oromo came to Ethiopia in the sixteenth century. They argue that the Oromo are the largest group of Cushitic speakers who have inhabited Northeastern and Eastern Africa for as long as recorded history. Moreover, Afaan Oromo is one of the most widely spoken languages in Africa. According to Bates, "[t]he Galla<sup>1</sup> [Oromo] were a very ancient race, the indigenous stock, perhaps, on which most other peoples in this part of Eastern Africa had been grafted" (Bates 1979,7; Braukamper 1986; Mohammed Hassen 1994). Houston also reported that the ancient Cushite Empire of Ethiopia "covered three continents and held unbroken sway for three thousand years" (Houston 1985, 2). She further argues that the ancient Cushite Empire or Old Ethiopian civilization was the foundation of East, Middle East and European civilization. The name Old Ethiopia is different from the modern nation of Ethiopia whose capital is Addis Ababa. The name Old Ethiopia is historically used to designate the inhabitants of certain areas south of Egypt. The Middle and Lower Nile belonged to the ancient Cushitic empire of Old Ethiopia. "In the primitive days Upper Egypt was Wholly Ethiopia" (Houston 1985, 72). Ancient historians and new findings (archeological and linguistic evidence) suggest that the ancient Ethiopians had wielded strong political power as long as about 3000 to 3500 B.C.

Egypt tried to advance towards the South by destroying the capital cities of Old Ethiopia, such as Napata, Meroe, Soba, and Sennar. "In the beginning Egypt was ruled from Ethiopia. Ethiopia was ruined by her wars with Egypt, which she sometimes subdued and sometimes served" (The Encyclopaedia of Biblical Literature, quoted in Houston 1985, 30). History shows that after the disintegration of Meroe, the emigrant Aksumite (Abyssinian) state of the Semitic stock landed in Africa, and had tried to move southwards since the fourth century AD (Bates 1979). They expelled the indigenous Cushite population from their territory downwards to the south. There had been serious confrontations between the Semites and the Cushites. The advance of Islam in the South East through Zeila was also of a paramount importance for the future of the region. The Muslims conquered the Abyssinians around 1525. Ahmed Ibn Ibrahim Al Ghazi (popularly referred to as Gragn Mohammed) was the leader of the entire region until he was killed by a Portuguese expedition. At that time, the Oromo remained neutral and watched this struggle with interest. The death of the Abyssinian Emperor Galawdewos in the hands of Amir Nur of Harar Muslims in Fatagar resulted in the end of Amhara domination in the region. "The sudden and radical transformation in the balance of power quickly brought to an end two centuries of struggle between the Muslims and Christians replacing it by the struggle of both against the Oromo for the next three centuries" (Mohammed Hassen 1994, 24-25).

Various ethnologists, historians and anthropologists have tried to identify different areas where the Oromo developed or differentiated into various communities of people. The exact place is unknown. Some writers agree that before the sixteenth century, the people

According to oral tradition, there were two major groups that descended from the two houses of the Oromo, represented by Borana, the elder and Barentu (Barentuma), the junior respectively. Borana and Barentu involved several clans who dispersed to different parts of the Oromo lands (Mohammed Hassen 1994).

Before the establishment of the modern state of Ethiopia, the Oromo had two types of social organizations, a complicated class system, the *Gadaa* and a moiety-clan-lineage structure (Knutsson 1967, 30).

The *Gadaa* system is a democratic, egalitarian system that has its own leaders who conduct government, political, economical, social, ritual and military affairs of the Oromo society for a non-renewable eight-year term. There are five *Gadaa* grades, each of which serves eight years. If the *Gadaa* officials fail to carry out their activities, the *Gadaa Caffee* (assembly) can replace them by another group from among the same *Gadaa* class. There were three levels of assemblies such as inter-clan, clan and local *Caffees*. All male members of the society who are of age and of *Gadaa* grade are allowed to elect and to be elected. The *Gadaa* leaders are elected on the basis of wisdom, bravery, health and physical fitness.

The *Gadaa* system organizes the Oromo society into groups or sets (about 7-11) that assume different responsibilities in the society every eight years. These *Gadaa* grades are:

- ◆ *Dabballee* (0-8 years)
- ◆ *Foollee* or *Gaammee Xixiqqaa* (8-16 years)
- ◆ *Qondaala* or *Gaammee Gurguddaa* (16-24 years)
- ◆ *Kuusaa* (24-32 years)
- ◆ *Raaba Doorii* (32-40 years)
- ◆ *Gadaa* (40-48 years)
- ◆ *Yuba I* (48-56 years)
- ◆ *Yuba II* (56-64 years)
- ◆ *Yuba III* (64-72 years)
- ◆ *Gadamoojjii* (72-80 years)
- ◆ *Jaarsa* (80 and above years).

The protracted wars among the Oromo, the expansion of trade, the introduction of new beliefs and religions (Islam and Christianity), and the intermittent confrontations between the Oromo and Abyssinians gradually weakened the *Gadaa* system. The *Abbaa Duulaas* (fathers of war) used this opportunity to stay on their post for much longer period than required by the *Gadaa* rules. Some of the *Abbaa Duulaas* usurped the power of *Gadaa* officials and declared themselves "mootii" (kings).

By the first quarter of the nineteenth century, more than nine independent monarchical states emerged in different parts of Oromo lands. The five Gibe states – Limmu, Guuma, Gomma, Geera and Jimma – were clustered together in the areas bounded by the valleys of the Gojab, Gibe and Dhedheessa rivers. Although the political organizations of the kingdoms were influenced by the *Gadaa* system, all of them established a hereditary monarchy with succession in the primogeniture line. The officials of the kingdoms involved a Prime minister (*Abbaa Gurmuu*), a treasurer and minister of foreign affairs (*Abbaa Mizan*), an immigration chief (*Daangoo*) who controlled those entering and leaving the country, an ambassador (*Iammi*), a governor (*Abba Qoroo*), a governor of sub-provinces, (*Abbaa Gandaa*), a tax judge (*Abbaa funyoo* or *Abbaa Buusii*) and a murder judge (*Abbaa Jigaa*). Like *Gadaa* officials, government officials were chosen on the basis of merit and capability.

Jote Tulu of Leeqaa Qellam and the Bakare family of Leeqa Naqamtee, Tufa Odaa of the Gulale Oromo, the Yejju and Wallo Dynasties in the northern part of the Oromo land were influential during this period. However, Abyssinian forces devastated the new emerging Oromo states at the end of the nineteenth century.

The Abyssinians succeeded in their southward expansion, owing to European firearms and their rulers created the modern state of Ethiopia by combining historic Abyssinia and the southern regions of present-day Ethiopia. The Abyssinians established the *naftegna-gabbar* vertical relationships in the Oromo lands. *Naftegna* literally means “rifle holder”. The conquered people and their land belonged to the victorious soldiers or settlers, the Abyssinian royal families, nobility, the Orthodox Church, and the state. The Abyssinians expropriated up to two-thirds of Oromo land. Most of the Oromo people became tenants and were forced to give free service to the settlers and pay tributes in kind, both to the settlers and the state. The people of Abyssinia were free from the *Gabbar* system for they had inalienable rights to acquire their own *rist* that was inheritable. Very few Oromo acquired land through grants from the state.

What is interesting is that Oromo environmental ethics has been influenced and shaped by modern religions, Christianity and Islam. It has also been influenced by Abyssinian and other indigenous peoples environmental knowledge and beliefs, the process of adoption, continual migration, conquest, assimilation, changes in the mode of life (the replacement of nomadic pastoralism by mixed agriculture) and the like. Today the Oromo are found from Rayya in South-eastern Tigray in the north to Borana in the south and from Hararge in the east to Wallaga in the west and beyond, though their territories are not always contiguous. There are contradictory views concerning the location of Oromiya. Under the new Ethiopian government, Oromiya is one of the nine ethnically based regions in Ethiopia ( see map 1). According to the Physical Planning Department of Oromiya Planning and Economic Development Bureau, “[O]romiya extends from 3° 40'N to 10° 35'N and from 34° 05'E to 43° 11'E” (OPEDB 1997, 7). It adds, “[O]romiya is an extensive region of over 353, 690 km<sup>2</sup>” (OPEDB 1997, 96). On the other hand, Tilahun writes, “[t]heir fertile country, Oromiya, located between 2° and 12° N and 34° and 44° East, is 600, 000 square kilometers” (Tilahun 1992, 1). High and rugged mountain ranges, undulating to rolling plateau, panoramic gorges and deep incised river valleys characterize the topography of Oromiya.

Ambo Wereda (district) is found in Western Oromiya (see map 2). It has fifty-six peasants associations and ten urban dwellers associations. On the basis of the 1994 Housing and Population Census, the total number of population of Ambo Wereda in 1998 will be 195, 917.

## **1.2 Research Sites**

The study was conducted in four research sites, i.e., Uko Korke, Gabisa Boji, Birbirsa Dogoma and Imala Dawe Ajo Peasants Associations. These sites were selected on the basis of their current level of development, production systems, cultural practices, environmental protection and the presence of knowledgeable elders. The selection was made in consultation with elders and other knowledgeable peasants who have detailed information about the four sites.

Uko Korke is located in the Southeastern part of Ambo and covers 1600 hectares. During the Derg regime, it was divided into two independent peasants associations. There are two major rivers in Uko Korke, namely, Korke and Kure. On the basis of the 1994 Population and Housing Census, the estimated population for this site in 1998 is about 2,817, of which 1,422 are males and 1,395 are females.

Gabisa Boji is located in Southwestern part of Ambo, and covers 1600 hectares. There are three major rivers in Gabisa Boji--Boojjii Xinnaa (small Boji), Boojjii Guddaa (big Boji) and Dhummuugaa. This site had about 2,184 people, of which 1,079 are males and 1,105 are females in 1998.

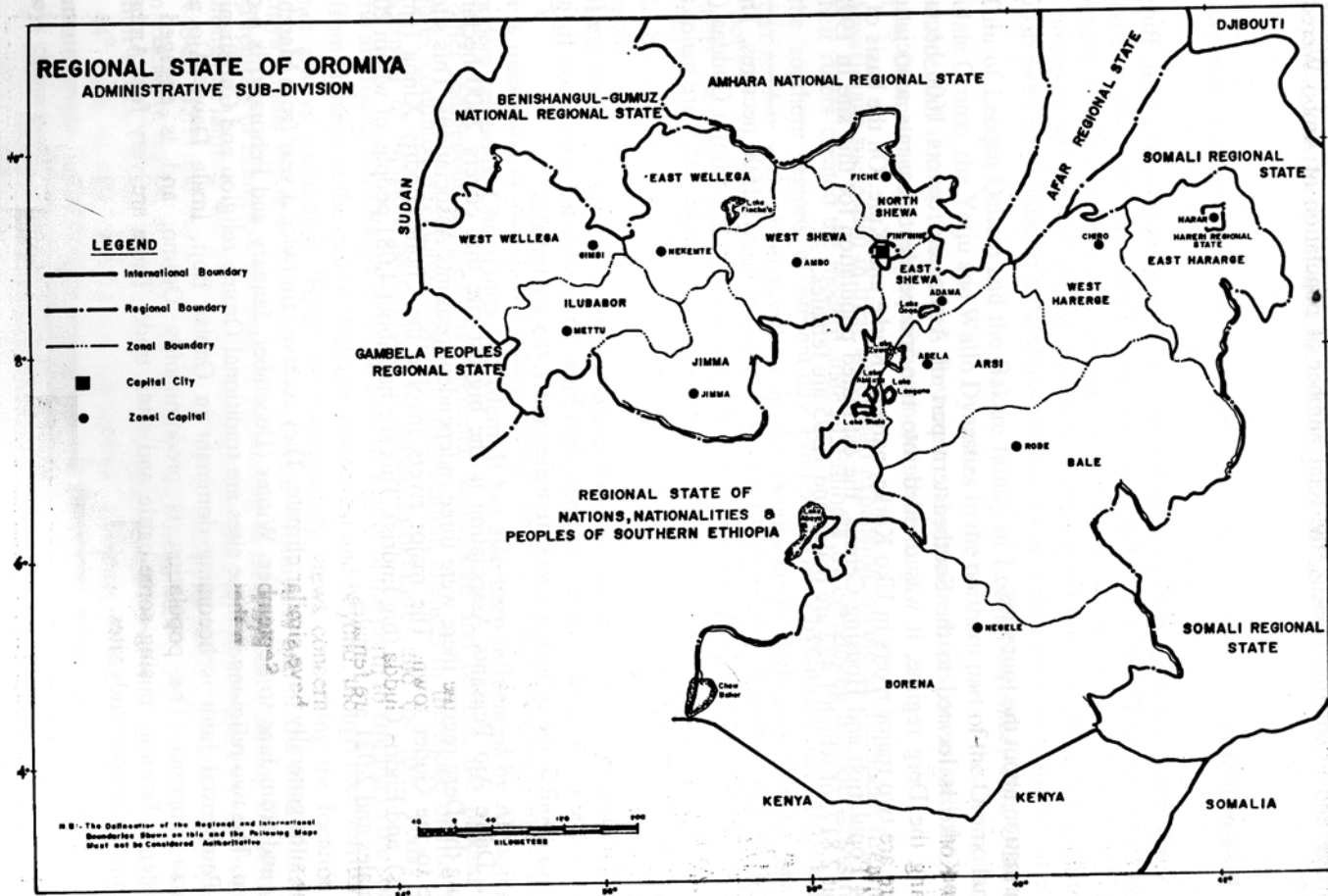
Birbirsa Dogoma is found in Western Ambo and covers 1600 hectares. There are four rivers, namely, the Endris, Biitee, Diimtuu and Fitte. The estimated population for this site was about 3,588 of which 1,803 are males and 1,785 are females.

Imala Dawe Ajo Peasants Association is the biggest site that covers 2400 hectares. During the Derg regime there were three independent peasants Associations. This site is close to the Guder town. The major rivers involve the Cholle, Endris Xinna (small Endris), and Endris Gudda (big Endris). This site had about 4,081 people, of whom 2060 are males and 2,021 are females.

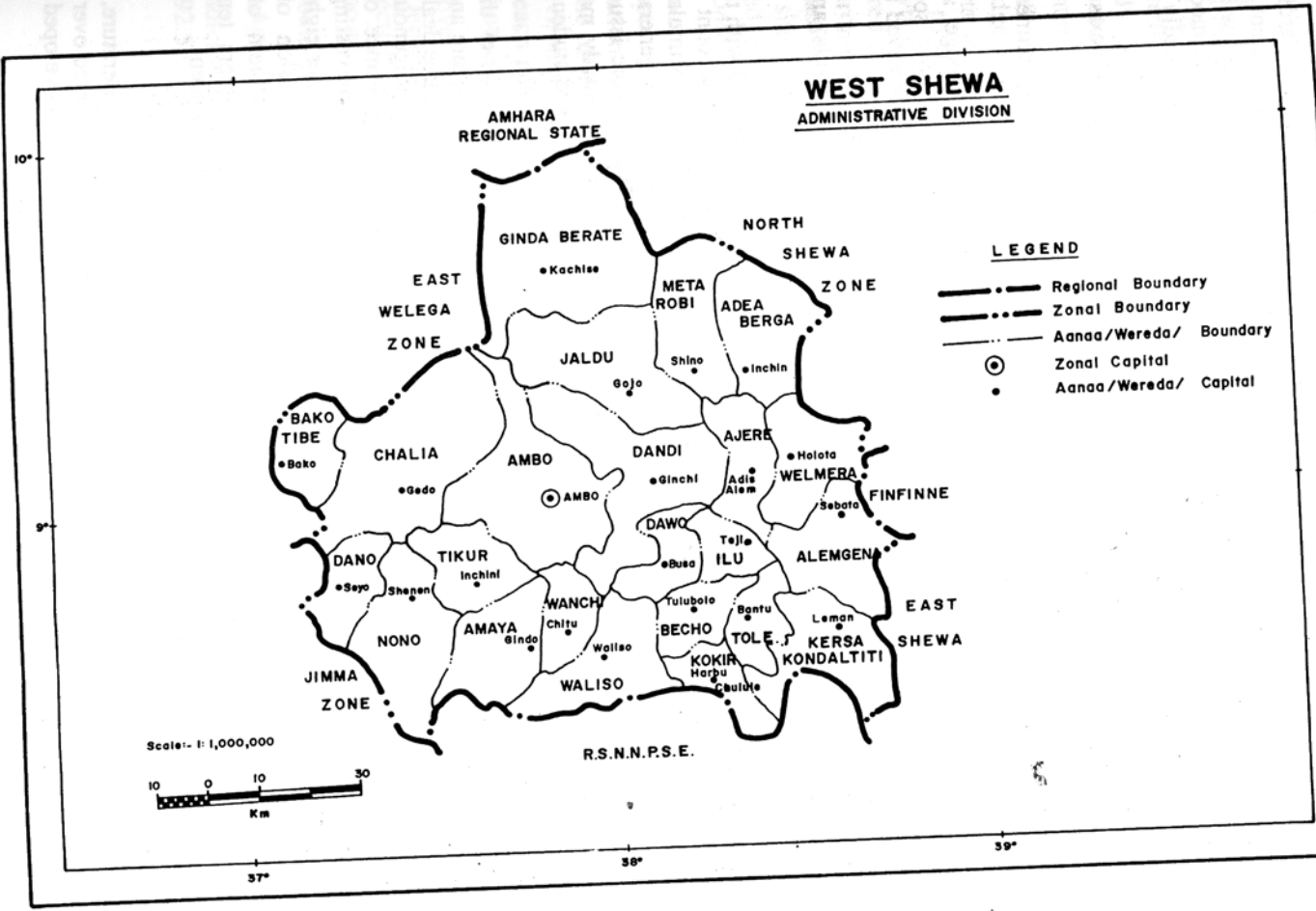
These sites generally have similar climate. They receive rain twice a year from March to May, and from June to September. Winter (December, January and February) is a dry season. The two religions in these sites are traditional Oromo religion and Christianity. The Pentecostal faith is becoming dominant in Gabisa Boji, Imala Dawe Ajo and Birbirsa Dogoma. The population is predominantly Oromo, and is engaged in subsistence farming, raising some cattle and retail trade. There are very few Amhara peasants in the four study sites.



Map 1. Regional State of Oromiya: Administrative Sub-division



Map 2. West Shewa Administrative Division



### 1.3 Scope and Limitations of the Study

The general objective of this study is to explore traditional Oromo attitudes towards the environment and their bearings on environmental protection, rural development and modern<sup>2</sup> environmental knowledge<sup>3</sup> and modern environmental ethics. Attempts will be made to indicate the possibility of bridging the gap between indigenous and modern environmental knowledge. In order to attain this principal objective specifically the study aims to:

- ◆ explore how peasants perceive their environment and manage to coexist in harmony with nature;
- ◆ assess the integrity, sophistication and worth of indigenous environmental knowledge and its implications for rural development;
- ◆ show the relationship between indigenous environmental knowledge and sustainable development. Attempts will be made to examine how some development theorists and modern environmental ethicists have conceived the concept of sustainable development<sup>4</sup>;
- ◆ examine the possibility of applying intellectual property rights to peasants; and
- ◆ examine the relationship between power and indigenous knowledge.

This study is not intended to be comprehensive. It is neither directly concerned with the details of modern environmental ethics, nor does it claim to present the full account of Oromo traditional attitudes towards the environment. Instead, its aim is to stimulate rather than to instruct, to open up rather than to close options in order to generate debates and discussions on the issue. It intends to identify and discuss the core issues that have bearings on environment and development. It is hoped that this study may serve as a catalyst in the thinking and discussions of interested researchers and students of Oromo Environmental ethics.

Chapter one deals with the nature of the study sites, the scope and limitations of the study, methods of the study and literature review. Chapter two discusses the nature and the impact of Oromo traditional religion on the natural environment. Chapter three deals with vegetation and the Oromo society. Chapter four is concerned with indigenous Oromo wildlife management. Chapter five discusses the nature and significance of indigenous agricultural knowledge. Chapter six discusses indigenous water harvesting system in Ambo. Chapter seven focuses on Oromo visions of the future. Chapter eight looks into the relationship between power, knowledge and the transmission of indigenous environmental knowledge. Chapter nine is devoted to the problem of intellectual property rights and indigenous environmental knowledge. Chapters ten concerns indigenous environmental knowledge and ecologically sound development.

### 1.4 Methods of the Study

This study relies on some available relevant documents, including oral literature, questionnaires, interviews and personal observation. Oral information was gathered over a nine-month period. I have used both descriptive and analytical approaches developed

by recent philosophical, anthropological and other multi-disciplinary works. Both qualitative and quantitative methods of researches are employed.

After an initial trial period, I decided to focus on in-depth interviews with elders, religious leaders, and knowledgeable persons. I have realized that a questionnaire could not give me the opportunity to raise further questions and to understand the ways in which traditions have been transmitted. The informants directed me to fresh sources: In this study, peasants' thoughts, perceptions, values, religious and philosophical attitudes towards the environment were obtained by a combination of formal discussions and in-depth interviews with the above-mentioned resource persons on the basis of purposive sampling (interview guide). At the end of the interviews, thirty elders and knowledgeable persons were interviewed. The majority of my interviewees were men. Attempts were made to involve women but with little success. Some women were not willing to fully participate in interviews because of cultural factors. This practice is unknown in the study areas. Moreover, focus group discussion involved informal yet structured discussion in which four to twelve participants talked about different aspects of environmental knowledge. Finally, a total of ten such group discussions (fifty nine informants) were held at the four sites. The number of interviewees is not uniform in all study sites. In some sites, few elders were interviewed due to the absence of knowledgeable elders. I have also observed peasants' agricultural practices and religious ceremonies.

Moreover, information relating to the size of the family, the age and sex composition of the population, the marital status of the household heads, levels of education, types of occupation, yearly income and people's life style is gathered through a questionnaire with the objective of obtaining some baseline demographic data that may have a bearing on environmental protection and development. Forty household heads were selected from each peasant association on the basis of purposive sampling. Finally, one hundred sixty household heads completed the questionnaire.

Moreover, ten extension workers, four experts from Environmental Protection and Land Use Department of Oromiya Agricultural Development Bureau and seven other Oromo intellectuals were interviewed about the significance and limitations of traditional Oromo attitudes towards the environment.

## **1.5 Socio-Demographic Characteristics of the Sample Population**

### ***1.5.1 Age, Sex Composition and Household Size***

As indicated earlier, a total of 160 households were covered in this study. Table 1 shows that 92.5 % of the respondents were males and 7.5 % were females.

by recent philosophical, anthropological and other multi-disciplinary works. Both qualitative and quantitative methods of researches are employed.

After an initial trial period, I decided to focus on in-depth interviews with elders, religious leaders, and knowledgeable persons. I have realized that a questionnaire could not give me the opportunity to raise further questions and to understand the ways in which traditions have been transmitted. The informants directed me to fresh sources: In this study, peasants' thoughts, perceptions, values, religious and philosophical attitudes towards the environment were obtained by a combination of formal discussions and in-depth interviews with the above-mentioned resource persons on the basis of purposive sampling (interview guide). At the end of the interviews, thirty elders and knowledgeable persons were interviewed. The majority of my interviewees were men. Attempts were made to involve women but with little success. Some women were not willing to fully participate in interviews because of cultural factors. This practice is unknown in the study areas. Moreover, focus group discussion involved informal yet structured discussion in which four to twelve participants talked about different aspects of environmental knowledge. Finally, a total of ten such group discussions (fifty nine informants) were held at the four sites. The number of interviewees is not uniform in all study sites. In some sites, few elders were interviewed due to the absence of knowledgeable elders. I have also observed peasants' agricultural practices and religious ceremonies.

Moreover, information relating to the size of the family, the age and sex composition of the population, the marital status of the household heads, levels of education, types of occupation, yearly income and people's life style is gathered through a questionnaire with the objective of obtaining some baseline demographic data that may have a bearing on environmental protection and development. Forty household heads were selected from each peasant association on the basis of purposive sampling. Finally, one hundred sixty household heads completed the questionnaire.

Moreover, ten extension workers, four experts from Environmental Protection and Land Use Department of Oromiya Agricultural Development Bureau and seven other Oromo intellectuals were interviewed about the significance and limitations of traditional Oromo attitudes towards the environment.

## **1.5 Socio-Demographic Characteristics of the Sample Population**

### ***1.5.1 Age, Sex Composition and Household Size***

As indicated earlier, a total of 160 households were covered in this study. Table 1 shows that 92.5 % of the respondents were males and 7.5 % were females.

Table 1. Sex distribution of respondents by community

Community	Sex of respondent	
	Male	Female
Imala Dawe Ajo	40 (100%)	---
Birbirsa Dogoma	35 (87.5%)	5 (12.5%)
Gabisa Boji	35 (87.5%)	5 (12.5%)
Uko Korke	38 (95.0%)	2 (5.0%)
Total	148 (92.5%)	12 (7.5%)

There are an average of 7.61 persons in each household or 1217 persons in the 160 households covered in this study (table 2).

Table 2. Average household size of respondents by community

Community	Average household size
Imala Dawe Ajo	9.20
Birbirsa Dogoma	7.53
Gabisa Boji	6.65
Uko Korke	7.05
Total	7.61

The age composition of the respondents showed that 40.63 % of the respondents were between 41-60 years old (table 3).

Table 3. Age distribution of respondents by community

Community	Age of respondent			
	<30	30-40	41-60	60+
Imala Dawe Ajo	5 (12.5%)	2 (5.0%)	14 (35.0%)	19 (47.5%)
Birbirsa Dogoma	5 (12.5%)	8 (20.0%)	22 (55.0%)	5 (12.5%)
Gabisa Boji	9 (22.5%)	10 (25%)	15 (37.5%)	6 (15.0%)
Uko Korke	6 (15.0%)	7 (17.5%)	14 (35.0%)	13 (32.5%)
Total	25 (15.6%)	27 (16.88%)	65 (40.63%)	43 (26.88%)

The large majority (90.63%) of the total household heads are married, followed by those who are widowed (8.13%) and those who are divorced (table 4).

Table 4. Distribution of marital status by community

Community	Marital status		
	Married	Divorced	Widowed
Imala Dawe Ajo	38 (95.0%)	---	2 (5.0%)
Birbirsu Dogoma	36 (90%)	1 (2.5%)	3 (7.5%)
Gabisa Boji	33 (82.5%)	1 (2.5%)	6 (15%)
Uko Korke	38 (95.0%)	---	2 (5.0%)
Total	145 (90.63%)	2 (1.25%)	13 (8.13%)

### 1.5.2 Education, Occupation, and Income Condition

Of the one hundred sixty respondents, 50% are illiterate while the remaining 50% are literate (table 5). The question of whether or not education per se can influence people's environmental consciousness is a complex issue and no attempt has been made to establish causal relationships between education and environmental protection. In some cases, educated peasants degrade the land. In other instances, illiterate peasants are more environmental friendly.

Table 5. Educational level of respondents by community

Community	Educational level			
	Illiterate	1-6	7-8	9-12
Imala Dawe Ajo	17 (42.5%)	14 (35.0%)	5 (12.5%)	4 (10.0%)
Birbirsu Dogoma	25 (62.5%)	7 (17.5%)	3 (7.5%)	5 (12.5%)
Gabisa Boji	15 (37.5%)	11 (27.5%)	6 (15.0%)	8 (20.0%)
Uko Korke	23 (57.5%)	7 (17.5%)	4 (10%)	6 (15.0%)
Total	80 (50.0%)	39 (24.38%)	18 (11.25%)	23 (14.38%)

In response to the question about occupation, the majority (84.38%) gave farming and cattle raising as their major occupations. 15% stated that farming is one of the main means of livelihood. Only 0.63% mentioned trade as their occupation (table 6).

In response to the question whether they produced the same amount of crops during the last five years, 1.9% said that they produced the same amount of crops, and two respondents in Imala Dawe Ajo declined to respond to the question. 96.9% of the total respondents answered the question in the negative (table 7). The main reasons given by the latter group in the four study sites are similar. These involve climatic change, shortage of organic and chemical fertilizers, anti-crop pests and insects, soil erosion, shortage of draught animals and the like.

Table 6. Occupations of household heads by site

Community	Farming	Farming and cattle rearing	Trade
Imala Dawe Ajo	10 (25.0%)	29 (72.5%)	1 (2.5%)
Birbirsa Dogoma	6 (15.0%)	34 (85.0%)	---
Gabisa Boji	8 (20.0%)	32 (80.0%)	---
Uko Korke	---	40 (100%)	---
Total	24 (15.0%)	135 (84.38%)	1 (0.63%)

Table 7. Percentage of distribution of respondents who produced the same amount of crops during the last five years, by community

Community	Peasants who produced the same amount of crops	Peasants who did not produce the same amount of crops	No answer
Imala Dawe Ajo	2 (5.0%)	36 (90.0%)	2 (5%)
Birbirsa Dogoma	1 (2.5%)	39 (97.5%)	---
Gabisa Boji	---	40 (100.0%)	---
Uko Korke	---	40 (100.0%)	---
Total	3(1.9%)	155 (96.9%)	2 (1.3%)

## 1.6 Literature Review

Until recently, traditional systems of land management and indigenous knowledge of the environment have not been given sufficient attention among scholars, policy makers and other government agencies. Indigenous knowledge has been viewed as primitive, unscientific, irrational, unsystematic, imprecise, and pre-logical. It is looked at as being part of a romantic past, the major obstacle to development, superficial and often plain wrong ( Pletsch 1981, 565-90; Chambers 1989, 76; Curtin 1995, 63, for a full discussion of these issues).

It is worth noting that Darwin's theory of evolution influenced social scientists in the mid-nineteenth century. In fact, research on evolution in the cultural and social fields has been largely influenced by the philosophical and sociological writings of Auguste Comte and Herbert Spencer (Masolo 1994, 53). At that time social scientists assumed that all extant human societies could be classified into ideal types from the simplest type that was labeled primitive or savage to an intermediate type labeled barbarian to the most sophisticated or the civilized. This theory is called Social Darwinism. Social Darwinism assumes that civilizations have evolved in a uniformly accessional manner, from the simple to the more complex. In light of this assumption, Levy-Bruhl (1949) identified the "primitive" peoples as "prelogical" or "mystical" although he later



changed this negative attitude towards “primitive” peoples. Comparing the mental capacity of the adult “Savage” with that of the European child, Spencer argues that both are unable to distinguish between “useless and useful facts” or concentrate on the abstract or complex. He further states that “discriminations easy to us are impossible to those who have but few words, all concrete in their meanings, and only rude prepositional forms in which to combine these words. By such undeveloped grammatical structures, only the simplest thoughts can be rightly conveyed. We learn that among the lowest men, inadequate words indefinitely combined are also imperfectly pronounced” (Spencer 1877, 706). In the same way, colonial anthropologists and other European writers reduced indigenous knowledge to folktale or superstitions. They argued that Western<sup>5</sup> civilization is superior to indigenous farming practices (Adams 1990, 171). In the 1940s, modernization theorists advanced the same view. They advocated that the injection of capital, transfer of capital and cultural transformation would enable developing countries to be free from the yoke of traditionalism. Many writers have continued to label non-western people as savages. Garrett, for instance, writes, “[n]o matter how low (in a socioeconomic sense) an American white may be, his ancestors built the civilizations of Europe; and no matter how high (again in a socioeconomic sense) a Negro may be his ancestors were (and his kinsmen still are) savages in an African jungle” (Garrett 1962, 982).

Europeans destroyed local craft traditions and people’s knowledge of nature in many non-European countries (Harding 1997, 63-64). Developing countries were forced to export natural resources like timber, oil and other minerals, and export crops in order to pay for the import of modern technology and inputs. The disparity between developed and developing countries has hampered the attempt to build technology on the basis of indigenous practices and values (Medani Mohamed Ahmed 1994). The indigenous belief systems have been destroyed by the introduction of a money economy with its capitalist mode of production, the introduction of religions like Christianity and Islam, and by the introduction of state control of natural resources (Omari 1990, 172). Omari underlines that Western value systems have had negative effects on traditional African land ethics. Being influenced by the new values, people now use natural resources as objects for exploitation and profit making (Omari 1990). The young people have been alienated from their culture through the influences of missionaries, modern schooling and the mass media. As Johannes, for instance, noted “most biologists have not been trained to seek knowledge through direct interaction with ‘laymen’; they are trained to go first to books then directly to nature for their answers” (Johannes 1989, 5). Some Western trained individuals have tried to promote scientific knowledge by eroding the accumulated knowledge of the local people. “Development then entails disseminating this modern, scientific, and sophisticated knowledge to inform and uplift the rural masses. Knowledge flows in one direction only--downwards--from those who are strong, educated and enlightened, towards those who are weak, ignorant and in darkness” (Chambers 1989, 76).

Similarly, in Ethiopia, the conventional literature identifies peasants as ignorant of the process of environmental degradation, and responsible agents of environmental destruction. According to Kebede and Hurni, “[i]n many circumstances real

participation by farmers is not feasible because of their obvious lack of knowledge about the processes of degradation and about the means used by outsiders to intervene positively" (Kebede and Hurni 1992, 6-7). Government officials also viewed peasants as the victim and the cause of environmental disaster (Dessalegn 1998). Peasants were condemned for failing to reduce family size, clearing forest for cultivation and collecting firewood for cooking.

However, "[i]ndeed, a significant player in the degradation process, one which is frequently and conveniently ignored, was the government itself" (Dessalegn 1997, 4). The land tenure system during the imperial era discouraged peasants to make long-term investments on the land. When they improved the quality of the land and raised the yield of their harvest, the landlords increased tenancy rents (Cohen 1987). The law did not clearly recognize security of tree tenure. Peasants had no legal protection against arbitrary and sudden eviction. Moreover, during the imperial era the government owned all "unutilized" land, land that had no "legal" owners, and forests, lakes and river systems. Some peasants intentionally destroyed forests on this land. According to Dessalegn (1997), deforestation of such forests was a form of protest against forest legislation in the mid 1960s in Wallo. Also, the extensive expansion of large-scale commercial farms negatively affected Afar, Oromo and other peasants during the Third-Year Plan (1968-73) of the Haile Selassie government. Mechanized farming led to tenant insecurity, exploitation, eviction, soil erosion and deforestation (Koehn 1982).

The nationalization of land by the military government in 1975 did not reduce the pace of deforestation. The rural population and the embittered landed classes resented state ownership of all forests and trees. The military government made a series of attempts to alleviate environmental degradation. Its conservation measures involved the construction of physical structures (bunds, terraces, microbasins and checkdams), the planting of trees and the construction of irrigation schemes, villagisation, and settlements (see Stahl 1992; Hoben 1995, 1997; Dessalegn 1998). These measures were mainly introduced through food-for-work program that involved about 800,000 persons in nine regions (Stahl 1992, 286). As Dessalegn noted, "[c]onservation programs in Ethiopia have been donor driven since the last quarter of the 1970s" (Dessalegn 1997, 19). In the first place, USAID initiated food-for-work program. Consequently, World Food Program, the European Community and other donors and NGOs participated in conservation programs in Ethiopia. Food-for-work was used as motivating force in people's participation. But conservation measures were imposed on the rural poor and had minimal effects on their land. The conventional top-down fashion was used to design and implement government policy with little room for adaptation to individual and local conditions. The government designed grand schemes such as state farms, forest plantations and irrigation projects without consulting the rural people. Policy makers hardly recognized the diversity of farming systems and agro-ecologies in the country. Peasants thought that government initiated conservation measures were harmful because of the fact that terracing and the closure of the hillsides reduced farmland and grazing pasture respectively. Terracing and stone bunds became hiding places for rodents, and "[l]evel structures in particular fanya-juu, often caused waterlogging in high rainfall areas" (Dessalegn 1998, 16). Stahl states that "peasants participate in environmental rehabilitation only when food-for-work is arranged. Their relation to the rehabilitation

program is thus that of paid workers (by the participating peasants the program is called 'work-for-food' rather than responsible landowners" (Stahl 1992, 290). For this matter, peasants destroyed the bunds and terraces they built in the hope of obtaining further opportunities for food-for-work.

Governments' misguided environmental policies have been influenced by the views of expatriate environmentalists who failed to unravel the complexities of the environmental problem and its multiple causation. According to Dessalegn, "the picture drawn by the expatriate environmentalists is simplistic and misleading, and has had disastrous policy implications" (1998, 3). The failure to understand the time tested knowledge of the rural people and the real causes of environmental degradation led the government to formulate rigid and authoritarian conservation policy.

Likewise, governments in other "Third World" countries have become a hindrance to the development of indigenous environmental knowledge. They regard participatory projects and the technology development research that involves peasants as politically sensitive and dangerous (Thrupp 1989).

It must be stated that the protection of the natural environment was neglected in Western civilization. Although the philosophy of nature is at least as old as the pre-Socratics, the natural environment has not been given due attention until recently in the history of philosophy. The main concern of moral, political and social philosophy has been the social environment rather than the natural environment (Attfield and Belsey 1994, 1). Likewise, anthropologists restricted their study to subjects such as languages, religions, social structures, arts and crafts by ignoring ecological relations between human beings and their environment (Klemm 1985, 239).

All the major theories of morality--whether virtue based, utilitarian or rights--based have not paid due attention to the fact that things other than human beings have a place on our moral thinking in their own right. The majority of Western philosophers have tried to show that humanity has a central place in the universe. For instance, Aristotle advanced the notion of the "ladder of nature", which later became known as the "Great Chain of Being", in which everything has its own place and purpose. According to Aristotle, humankind occupies a special median place within the chain, which ranges from matter, plants and animals below to heavenly bodies, angels, and God above. Although one might argue that this model does not allow a complete rift between the natural and the spiritual orders, and thus may help us to reconstruct an ecologically sound philosophy of nature, Aristotle was an anthropocentric thinker. In *Politics*, Aristotle asserts that "plants exist [for the sake of animals, while] animals exist for the sake of man, the game for use as food, the wild, if not all, at least the greater part of them, for food, and for the provision of clothing and various instruments. Now if nature makes nothing incomplete, and nothing in vain, the inference must be that she has made all animals for the sake of man" (Aristotle, quoted in Odera-Orika and Juma 1994, 117). The Greek tragedian Sophocles (496-406 BC E) and the Roman Stoic Epictetus (55-C. 135 CE) also viewed human being as the greatest of all things (Clarke 1993, 40-41).

The Judo-Christian-Islamic traditions also emphasized the superiority of humans over other living creatures. They regarded the natural world as an instrument for human use

and welfare. The book of Genesis states that human beings are rational creatures and are made in God's image, and possess immortal souls. Accordingly, the steward of creation is human. For Christian theology and Greek cosmology, nature is in no sense sacred. For this reason, "there was no risk of sacrilege in felling a tree, or killing an animal" (Passmore 1995, 132). In the same way, medieval theologians believe that cruelty to animals is not a sin unless it tended to encourage sinful behavior towards other human beings (Clarke 1993, 58).

During Renaissance, humanity was believed to have a special, almost divine, status in the order of things. As Clarke rightly pointed out, "[t]he spirit of human superiority and domination of nature clearly emerged in the Renaissance period with the crumbling of the old Mediaeval Catholic order, the growth of capitalism and the opening up of the globe to European exploration and conquest" (Clarke 1993, 75).

Some rights theorists did not seem to accept the view that the non-human creatures have moral standing. For instance, Thomas Hobbes (1588-1679) and John Locke (1632-1704) argued that humans have certain basic rights in a "state of nature" that does not have the government and civil society. For Locke these rights involve a right to life, liberty and property. Rights theorists emphasize that bearers of rights have a certain moral standing, and need not be viewed as "mere resources".

The place of humanity vis-à-vis nature is further emphasized by modern philosophy. Francis Bacon (1561-1626) gave the ideological justification for this new philosophy at the beginning of the seventeenth century. He proclaims that the new empirical methods of investigation could help humans to have a true understanding of the workings of nature, and thereby to transform it in accordance with their interests. Likewise, Rene Descartes suggests a practical philosophy which aimed at transforming nature through science-based technology. Descartes' dualism stresses that mind and body are self contained and independent. Nature was seen as a dead object, which needs to be subdued and mastered by human beings through science and technology (Scruton 1996). "This is the attitude to nature which has dominated Western science: understanding through laws, transformation through technology" (Passmore 1995, 134). This attitude towards nature undermined the world of spirit, of meaning, and value, and the world characterized by imagination and feeling.

In this connection, the Enlightenment philosophy, which was developed in the eighteenth century, has encouraged humans to feel superior. It argued that humans are so clever that they can control nature through reason, science, and technology. The purpose of this philosophy was not only to contemplate nature but also to exploit it for the purposes of human progress. Accordingly, human beings are advised to develop new confidence to transform themselves and nature. Nature was taken as a great machine rather than as a great organism. This fostered the materialist and determinist philosophical climate, which in turn accelerated the alienation of humans from the natural environment.

The principal thinkers of the Enlightenment "known as the *philosophes* in France, believed that man is potentially rational and largely a product of his circumstances" (Marshall 1995, 214). The enlightenment thinkers thought that they were living in the

"Age of Reason". They subjected everything to the test of reason. Various thinkers, therefore, advanced the notion of "human progress" which was also known as the "perfectibility of man". The doctrine of the original sin was invalidated and human beings were regarded as naturally good though they can be corrupted by society. Education and Enlightenment were expected to promote virtue and thereby eradicate vice.

It is interesting to note that "[t]he intellectual roots of the Enlightenment were in the science of Galileo and Copernicus, the sensationalism of Locke, the empiricism of Bacon and Newton, and the rationalism of Descartes" (Marshall 1995, 216). For instance, in France, the Enlightenment had a distinctly rationalist direction whereas in Britain philosophers such as John Locke, George Berkeley and David Hume thought that experience is the source of knowledge. Both the French and British philosophers were primarily concerned with the human understanding. "Rather than looking at nature, the philosophers wanted to look at the process of looking. By focusing narrowly on the human mind, they bracketed it from the world and deepened the gulf between the subject and the object, the observer and the observed, humanity and nature" (Marshall 1995, 217). Furthermore, the reliance on human reason and universal truth gave little room for other types of thinking and value systems.

The Enlightenment also encountered the reappearance of the doctrine of the Great Chain of Being. Some writers estimated that this doctrine began in Asia with the transmigration of souls up the ladder of existence. Later Plato, Aristotle, and the Neoplatonists developed it. The Enlightenment writers used this doctrine to describe superior and inferior creatures in the world. Others used it to justify social inequality and indifference to suffering (Marshall 1995, 218-20).

In the twentieth century, positivism also theorized about the domination of nature by humans (Clarke 1993). For existentialism nature is indifferent to human concerns. Positivist and existentialism agree that human beings are the source of values. The French existentialist philosopher Jean-Paul Sartre (1905-1980) developed humanistic existentialism, which gives special place to humans in nature. For him, nature has no value except that which we project on to it. He argues that individuals must be free. In fact, many of the adherents of existentialism proclaim that individual human beings are free to choose how they are to live, what they are to value, and what actions they are to perform. Individuals are free to invent their own way of existing (Morton 1996, 117-118).

The other important point is that economic theories have promoted the interests of human beings. "In cost-benefit analysis, 'cost' and 'benefit' refer, ultimately in studies by standard economists, to what harms or helps humans alone" (VanDeVeer and Pierce, 1994a, 26).

In a nutshell, the dominant Western worldview and social paradigm maintained the isolation of humans from nature. To put matters another way, conventional approaches to environmental issues have further aggravated ecological problems. Even more unfortunately, contrary to the expectations of some Western capitalist countries and development theorists, the gap between developed and developing countries "has

widened to the extent that it has become inconceivable that it could ever be closed" (Sachs 1995, 430). As Talbot convincingly stated, "[t]he Third World has become a dumping ground not only for the wastes of developed countries, but also for products considered too hazardous for the domestic market, including pesticides and medicines" (Talbot 1998, 100). The beneficiaries of development are only global middle class in the north and small elites in the South (Sachs 1995, 431). However, the development era led to the irreversible destruction of the regenerative powers of nature and the underdevelopment of hundreds of millions (Goulet 1990, 36).

The failure of development projects and the world environmental crises have called the attention of many scholars and international organizations to reconsider the potentialities of indigenous environmental knowledge. There is a large emerging body of literature that recognizes the role of indigenous environmental knowledge all over the world. For instance, Conklin reports that adults in the Hanunoo tribe in the Philippines identified 450 animal types and 1600 plant types. He adds, "partly as a result of this great interest in plant domestication and detailed knowledge of minute vegetative differences, native categories outnumber by more than 400 types, the taxonomic species into which the same local flora is grouped by systematic botanists" (Conklin 1957). Clarke argues that the Bomagai-Angoiang people in Papua New Guinea are classic shifting cultivators who use "palaeotechnic" rather than "neotechnic" agricultural strategy. They use time-bound products and conditions on a small scale as an aid to self-maintenance within the absorptive capacity of the existing ecosystem. They employed poly-cultural diversity as effective agricultural strategy. Clarke is of the opinion that it would be useful to combine the advantages of primitive group structure with those of modern technology in order to improve the status of the world environment. He suggests that the immediate task of humanity is to apply the principles of permanence "and to build into the neotechnic-dominated ecosphere a structure of permanence. If we do not, we will all--neotechnic and palaeotechnic alike--become victims of progress" (Clarke 1977, 383).

Some indigenous knowledge is not only useful on terrestrial environments, but also in the sea. Among others, Pacific islanders depend on their knowledge of the behavior and movements of the marine animals much of which is new to science (Johannes 1989).

It must be stated that oral traditions and indigenous knowledge are still important among some groups in Europe including the mountain Protestants in France and Italy, the Gaelic-speaking Scottish islanders (Bennet and Cross 1993, 17). Folk healers in Europe have played a considerable role "in the midst of rebellious lower class movements which have struggled to be free from the established authorities" (Ehrenreich and English (n.d.) quoted in Huizer 1994, 62). In the Medieval period, the lower classes relied on "witch healers" as general medical practitioners. It was suspected that these women were associated with rebellious movements. Therefore, the ruling class and the Church launched a terrorizing campaign against "witch healers". Eventually, millions of women were killed in the witch-hunts. Wiredu also writes "[t]here are numbers of white men in London today who proudly proclaim themselves to be witches" (Wiredu 1980, 42).

The African people have a considerable knowledge of their environment and rational forms of land management because they are close observers of weeds, pests, crop conditions, soil types, weather and environmental changes (Richards 1975; 1989;

Johannes 1989; Chambers 1989; Omari 1990; Salih 1992; Salau 1992; Medani Mohamed Ahmed 1994; Abdel Ghaffar Ahmed 1994; Yagoub Abdella Mohammed 1994; Ayers 1995). African peasants have a unique system of soil and water management. Various ethnic groups in the semi-arid zone of Western Africa adapted traditional soil, water and fertility conservation strategies to ecology and human diversity. On the contrary, modern administrators imposed the modern strategies of management on the people and hardly take ecology and human diversity into account (Roose 1992). Yagoub Abdella Mohamed (1994, 179-80) reported that the harvesting of sheet flow run-off water is useful in the central Sudan. In the same way, Babiker (1996) studied the indigenous techniques of water harvesting in Dar Hamar, Western Sudan, which are dispersion of farming units, dry planting and mixed or intercropping in response to the unpredictability and unreliability of rainfall, temporal and spatial variability. The Hamar tribe store rain water "in the hollowed out trunks of the baobab trees, in shallow and deep hand dug wells, natural ponds and large depressions" (Babiker 1996, 17).

Traditional ecological knowledge and scientific knowledge have many things in common. "Both are attempts to make sense of the world, to render it comprehensible to the human mind. Both are based on observations and on generalizations deriving from those observations" (Berkes *et al* 1995, 282). Modern researchers can best understand the nature of local soils and plants with the rural people. Local knowledge may facilitate in a few days soil surveys and mapping that would otherwise take months (Howes 1980). In this regard, Abdel Ghaffar Ahmed (1994) underscores that indigenous and scientific knowledge should not be over glorified. Instead, the right intermingling of the two knowledge systems can help in enhancing the prospects for sustainable food production in rural areas. It is thus suggested that transcending physical planning and assessment of carrying capacities in favor of local knowledge and institution can realize a bottom-up approach. "Problems of resource management relate not only to physical planning and efficient deployment of modern input delivery systems, but also includes the local communities and their readiness to accommodate change" (Salih, 1992, 31). What is required is a two-way flow of information between modern technicians and ordinary peasant farmers. "The least that can be said is an idea borrowed from the people, developed by the agronomist and returned to the people again is much more likely to be adopted than something totally alien to the culture" (Richards, 1975, 110).

A number of international bodies, such as the International Union for the Conservation of Nature and Natural Resources, the International Biodiversity Convention, the Agenda 21 Report of the UN Conference on Environment and Development have recognized the importance of indigenous knowledge (Davis 1993). The World Commission on Environment and Development regards indigenous knowledge as a significant variable and a critical factor in achieving sustainable development. The traditional communities "are the repositories of vast accumulations of traditional knowledge and experience...Their disappearance is a loss for the larger society, which would learn a great deal from their traditional skills in sustain ably managing very complex ecological systems" (WCED 1987, 114).

Linked to this, some indigenous organizations have endeavored to promote indigenous knowledge. For instance, Coordinating Body for the Indigenous People's Organizations of the Amazon Basin represents the interests of several regional and national indigenous organizations in the Amazon Basin of South America (COICA). COICA tries to both participate in local level development and conservation projects and influence the wider global dialogue about environment and development policies (Davis 1993, 5-6).

Ethiopian and non-Ethiopian scholars have also studied different aspects of peasant knowledge in different parts of Ethiopia. Ethiopian peasant farmers have used different conservation practices. They use different mechanisms against hard times. They prepare themselves to avoid unusual food crisis, drought and other problems on the basis of early warning indicators, such as rainfall, area and yield, pasture and water, pest, livestock conditions, diseases, stock, market and market information (Tahal and Shawel 1988; Alemneh, 1990; Dessalegn 1991; Yeraswork, 1995; Workineh, 1997a, b; Belay 1998). Ethiopian peasants have a well-established system of soil classification (McCann 1987; Mesfin 1991; Belay, 1992, 1998). Belay reports that peasants in Southern Wallo identified five types of soils, such as the Eutric Leptosols as *tincha*, the Eutric Vertisols as *Merere walka*, Vertic Cambisols as *tazmima walka*, and Eutric cambisols and Eutric Regosols as *boda* (Belay 1998, 8).

Some studies also show that the Oromo people give important value to the natural environment (Knutsson 1967; Bartels 1983; Hultin 1987; 1994). Kassam and Gemetchu (1994) argue that the Oromo have some of the finest principles and codes of behavior towards nature. They underscore that the Oromo maintain a perfect balance between nature and culture. They further outlined how the Boran pastoralists protect the natural vegetation and manage pasturelands through a combination of different mechanisms.

As I have argued elsewhere (1995a, b; 1997b), both traditional and modern religions have contributed to the preservation of forests in Ethiopia. Dessalegn (1997) also confirmed that peasants in Wallo protected forests for religious reasons. *Atsed* (tree plantations on land adjacent to the Church) and forestry on consecrated land (*bewigz yetekebere dan*) is associated with the Orthodox Church. Nobody is allowed to cut these forests except to repair the Church and to construct new Churches in the vicinity. The Church also protects forests around holy water or spring. Trees on *Wijjib*, a shrine and holy burial ground, are viewed sacred and protected by the Muslim communities in Wallo. The people can cut these trees to construct new mosques or to repair the old mosque (Dessalegn 1997).

On top of that, early Ethiopian writers advised the people to conserve their resources. Dessalegn labeled this as early environmentalism. A Russian trained *Fitawrari* Tekle Hawariat outlined the significance of agriculture, philosophy, botany and environmental science. He emphasized the interlink between person and nature (Dessalegn 1997). Similarly, the Newspaper *Berhanena Selam*, which was established in 1925 by crown Prince Ras Tafferi (later Emperor Haile Selassie I 1930-1974), contained numerous articles about sound farming practices. In fact, some writers advised people to tame the wilderness so as to bring it under cultivation and to clear forests for farming. In some instances, the government itself endorsed such a view, for it is one of the means to produce food crops. "A proclamation that appeared in the issue of 29 November 1928,



for example, provides tax incentives to those who bring forests and 'wilderness' under cultivation" (Dessalegn 1997, 11).

According to Dessalegn, another early environmentalist was *Fitawrari Mammo Seyoum*, later *Dejazmach*, and a Chief Enderassie of Wallo from 1964-1970. It is worth noting that he did not have a formal education. Before proceeding to carry out his administrative duties, he visited different parts of Wallo so as to understand the state of the environment. Following his tour, he made conservation and a forestation plans. He urged all government officials in Wallo to plant trees in their compounds with the aim of influencing the people. Several nurseries were established to provide tree seedlings for peasants. His aim was not, however, fully realized owing to the lack of financial support from the Ministry of Agriculture (MOA), the complex land tenure system, the opposition from some peasants and landlords, lack of sufficient publicity to promote public awareness and public support and the expansion of the cultivated area at the expense of woodland, pasturage and forestry (Dessalegn 1997). I would like to underscore that the environmental concern of *Fitawrari Mamo* is different from the environmental concern of peasants. Although he was not trained in a school, modern forms of administration and ideas in one way or another influenced him. In the same way, the Tigray provincial administration encouraged the people to plant trees in some of the bare lands (Crawford 1973). Thus what has been discussed confirmed that there has been indigenous tradition of environmental concern and conservationism in Ethiopia although I do note that some writers and elites were influenced by modern beliefs and theories.

Besides, emperors and kings tried to protect large forests in Ethiopia for environmental and economic reasons (McCann 1995). Emperor Zera Yacob established the Denqqoro forest in Wallo in the fifteenth century (Dessalegn 1997). Emperor Menelik (1889-1913) also made attempts to protect the country's forests and forest resources. The Ministry of Agriculture was established in 1908 and given the responsibility for prohibiting the indiscriminate destruction of trees, and reward individuals who planted various trees on their land. However, the responsibilities of the MOA were reduced following the ministerial reorganization in the 1940s. It was only in the 1965 that the government reemphasized the need for forest protection and the regulation of forest use. Forest legislation was issued in the mid-1960s in order to bring the country's forests under state ownership. The main objective of this legislation was to enlarge the sources of state revenue rather than to promote resource conservation (Dessalegn 1998, 5). At the beginning of the 1970s the government issued legislation and established government bodies responsible for environmental protection. It is also worth noting that the Ethiopian Forestry Association was established in 1960 and launched a farm woodland or agro forestry campaigning in the aim of encouraging peasants to plant trees on their plot (Dessalegn 1998, 6). Also, despite the fact that the environmental record of the military government was disappointing, it established institutional structures to address environmental issues. One may doubt the soundness of the argument that there has been indigenous environmental concern in Ethiopia on the ground that the natural environment is being degraded in all parts of Ethiopia. This view can be partially justified. Nonetheless, the forces and motives for the degradation of the environment

require examination. In some places, the decline of resources to meet the basic needs of the people compel them to overexploit their resources although they know that this process will undermine the prospect of supporting the future generation. Protection of the environment at the expense of the means of people's survival is unjust. "Environmental justice demands equitable access to, and distribution of the resources of nature, in a manner which is sustainable for present and future generations" (Talbot 1998, 403).

Some scholars convincingly indicated the danger of idealizing village communities and their knowledge. Not all knowledge and activities of local people are valid and environmentally sound. Some of their practices have had undesirable local environmental effects. "The value of traditional and environmental knowledge and management practices thus not taken for granted. Some relevant traditional beliefs are incorrect or misdirected...Superstitions sometimes over-ride objective observations" (Johannes 1989, 7; Klemm 1985, 246). Unnecessary dependence on traditional beliefs may undermine objective observations and the real causes of changes. Unlike the populist perspective that seems to argue that rural people's knowledge can easily be extracted and incorporated into scientific procedures, some writers argue that "RPK [Rural People's Knowledge] is always fragmentary, partial and provisional in nature. It is never fully unified or integrated in terms of underlying cultural logic or system of classification" (Scoones and Thompson 1993, 4). It can also be argued that communities who live in areas of abundant resources (forests) may not be considered as environmental protectors.

## 2. TRADITIONAL OROMO RELIGION AND THE NATURAL ENVIRONMENT

### 2.1 The Oromo Concept of "Waaqa" and Human Destiny

There are three religions in Oromiya: traditional religion, Islam and Christianity. Many Oromo practice traditional religion parallel with Islam or Christianity. Oromo religious belief is based on the view that there is only one *Waaqa* (God). The Arabic word *Rabbi* is also used by the Muslim Oromo and others to refer to their supreme being. According to the Oromo traditional religion, *Waaqa* has multiple attributes. *Waaqa* is He Who is before everything else. *Waaqa* is *Uumaa* (a creator of everything in the world). *Waaqa* is *Hunda beekaa* (omniscient). *Waaqa* is *hundaa tolaa* (omni benevolent). *Waaqa* is *hunda danda'aa* (omnipotent). *Waaqa* is the source and lover of *dhugaa* (truth). *Waaqa* is *Qulqulluu* (pure). *Waaqa* is intolerant of injustice, crime, sin and all falsehood. The Oromo never worshipped carved statues, trees, rivers, mountains or animals as substitutes.

But who is the creator of *Waaqa*? All of my informants agree that *Waaqa* is not a created being. *Waaqa* does not have an elder. There is nothing that has power over *Waaqa*. For the Oromo *Waaqa* is eternal and the final cause of all things. The Oromo thus had the concept of the monotheistic supreme God from time immemorial although the Oromo conception of God is quite distinct from the Western one. The Oromo conception of *Waaqa* illustrates that Momoh's generalization is unfounded. "There is

require examination. In some places, the decline of resources to meet the basic needs of the people compel them to overexploit their resources although they know that this process will undermine the prospect of supporting the future generation. Protection of the environment at the expense of the means of people's survival is unjust. "Environmental justice demands equitable access to, and distribution of the resources of nature, in a manner which is sustainable for present and future generations" (Talbot 1998, 403).

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extremely generated on account of our colonial exposure" (Momoh 1996, 62). Momoh contends that Africans have gods. He identified three gods, such as the ancestors and founders of the clan, the god of the water, mountain, forest or desert and the god of the staple crop or animal. He adds, "there are gods of the elements - wars, trade, hunting, moral gods - vengeance, protection; destiny gods - luck, blessing, misfortune and fate" (Momoh 1996, 63). Momoh further argues that "[t]here are no known African people who have one word for God. What we have are attributes, expressions and litanies describing and designating God. This, in line with what we have been arguing, is absolute proof that the notion of God in Africa is a result of Christian and Islamic Influences" (Momoh 1996, 64). The absence of proverbs, said Momoh, is a clear indication of the absence of the concept of God in traditional Africa (Momoh 1996, 67).

However, as has been stated earlier, the Oromo have one word for the supreme being- *Waaqa*. There are various Oromo proverbs<sup>6</sup> which praise *Waaqa*. Examples include:

- ◆ *Waaqa malee, gaariin hin jiru* (BABO 1998, 624) (There is no one who is kind except *Waaqa* /God).
- ◆ *Waan Waaqni fide lafti ba'aa hin dadhabu* (BABO 1998, 122) (Whatever *Waaqa* brings the Earth does not fail to carry it).
- ◆ *Namni yaa Waaqi jedhe Waaqarraa hindhabu* (BABO 1998, 481) (One who worships God will get everything).

Some writers reported that the Oromo also talked about *Waaqa diimaa* (the red *Waaqa*). Bartels writes, "for the sake of completeness ... people sometimes also speak of 'Waaq dema' - the light-colored *Waaqa* (or 'the red *Waaqa*') in contrast to 'Waaq gurraacha' - the dark-colored *Waaqa*' (Bartels 1983, 107). Daniel also reported that through his interviews he has found out that there are three meanings of *Waaqa*. The concept of *Waaqa* could be used to refer to the expanse of the sky as seen from the Earth, a supreme being, and also could be understood to mean the heaven, as the abode of the Supreme Being (Daniel 1984, 105). Daniel states that "[t]he 'black' aspect of *Waaqa* is usually regarded as the guardian and protector; whereas -- the "red" one is considered to be the aspect of *Waaqa* which is there to punish men in case of wrongdoing" (Daniel 1984, 106). Tippet on the other hand said the following:

[i]n some places [*Waaqa*] is conceptualized as two gods, resident in the sky...one black and one red...either the red god being provoked to anger manifests this in displays of lightning which the black god muffles and turns to thunder, or the two gods manifest themselves in cloudy and sunny days. For some informants these are manifestations of the one god, for others they are two gods. Where they are regarded as two gods the black one is the more friendly to man...and spoken of as creator and father (Tippet 1970, 153).

My informants state that the concept of "the red *Waaqa*" is non-existent in their belief. The Ambo Oromo identified *Waaqa* as *gurraacha* (the black *Waaqa*). They believe that *Waaqa* is above the sky, the cloud. In fact, they mentioned that *biduu* (the rainbow) has three colors one of which is red. *Biduu* is believed to be the belt of *Waaqa*.

Some Western and Ethiopian writers defined *Waaqa* as sky-God. According to Bartels (1983), the word *Waaqa* has a double meaning: sky, i.e., the vault of the sky as we see it and God. Tilahun in his *Oromo English Dictionary* defined *Waaqa* as God and sky (1989, 586). Mudée (1995, 330) defines *Waaqa* as the creator of human beings. Ludolphus (1982) reported that *Waaqa* for the Oromo means "the Heaven" which governs the world. Ceruli (1922) viewed *Waaqa* both as heaven and as God.

I think that the definition of *Waaqa* as a sky God does not seem to be plausible. The phrase "sky God" does not represent the early Oromo concept of *Waaqa*. The Oromo have a common myth that in olden days *Waaqa* was visible and living on the Earth. He used to speak with the people and solve their problems. According to the tradition, one day a goat stepped on *Waaqa* when He was sitting on the ground wearing a cotton blanket. It was after *Waaqa* cursed a goat that its tail was lifted up. A mule is also said to have kicked *Waaqa* and became sterile because of misbehavior. Besides, other people committed sin and annoyed *Waaqa*. *Waaqa* then left the Earth in anger and became invisible. Following this, the Oromo say the black *Waaqa* is living above the blue sky. Thus *Waaqa* is not the visible blue sky (Informants (hereafter: inf(s): Emanssa; Fufa; Merga Jara). Some informants indicate that *Waaqa* is always with us although we don't see Him (Infs: Dusso; Merga Jara; Nagara Fite). Likewise, the Akans of Ghana say that "if you wish to say something to God, tell it to the wind" (Abraham 1995, 52) for God is with the people. It seems to me that the definition of *Waaqa* as a sky God is a recent phenomenon and has become popular through European writers. The Europeans and the Hebrews advanced the notion of a heavenly or celestial God, located at a certain distance in the sky. God has been called the heavenly God, the celestial God, or the God of heaven (Dunquah 1995, 101). In most cases European writers tend to use their own concepts in their anthropological study of African people.

The important question to the Oromo is : how did the idea occur to *Waaqa* to create human beings and the world in which we live? The Oromo believe that above all things *Waaqa* stretched out the Earth, and created all other things. *Waaqa* created the first human being from the soil by breathing at it. After the appearance of the first human being, the Earth cried and asked *Waaqa* the reason why He took its meat and bone to create a human being. *Waaqa* replied that like the cry of the Earth human beings will cry and return to the Earth when they die, whereas, His breath will go to Him. Unlike some ethnic groups in Africa, the Oromo do not believe that the soul of departed ancestors retakes bodily form in new babies in their families and clans. Instead, they believe that at the moment of death the soul will be separated from the body and goes to *Waaqa*. In fact, the Oromo prayed to the spirit of the dead. They prepare a thick local bread, cheese with melted butter, local beer, and honey and celebrate the *Ekeraa* ritual in December every year. *Waaqa* also created devils, vultures, dogs, wild animals and so on. One may wonder why *Waaqa* created good and bad things. According to the informants, illness and misfortune in general is often considered a punishment from *Waaqa* for sins a person has committed. It is because of the errors of human beings that *Waaqa* allowed evil things to exist in the world. Otherwise *Waaqa* is all-good. If *Waaqa* had not tolerated both good and evil things, he would have been ungrateful; His omnipotence and omniscience would not have been known. The Oromo believe that the coexistence of good and bad, beauty and ugly is necessary. In the absence of wise men, the unwise

cannot improve their knowledge (Infs: Emanssa; Erko; Fufa; Gamachu; Nagara Fite; Nagassa).

The Oromo believe that humans can influence *Waaqa*'s actions. Individuals who live and act in accordance with *Waaqa*'s order will be happy, and be respected members of their society. On the contrary, when a person fails to act in accordance with *Waaqa*'s order, *Waaqa* will punish him/her. *Waaqa* can make him/her blind, and can cut his/her hands (Infs: Merga Jara; Ragassa). These supernatural sanctions can result in various types of misfortunes ranging from illness, mishaps, and bad luck for the guilty person and his/her relatives.

As has been stated earlier, the Oromo do not have a dualistic conception of reality. They believe that *Waaqa* and *Lafa* (Earth) are inseparable. They consider the Earth as their mother. They underscore that they suck the breast of the Earth as the baby sucks its mother's breast. All things originate from the Earth and depend on the resources of the Earth for their survival. The Earth is the source of nourishment, survival and life (Infs: Fufa; Gamtessa). Nothing can be outside the Earth. The following proverb illustrates this: *Allaattiin hanga feete barartullee duuti isii lafuma* (The birds that flew in the air come and die upon the Earth) (BABO 1996, 325). This shows that the Earth is the final abiding place of all things that lived and grew. For the Oromo, *Waaqa* is like a father. He gives them rain and helps the Earth grow different plants. In fact, the Oromo do not say that the Earth is *Waaqa*'s wife. What is clear is that *Waaqa* is considered as a male whereas the Earth is considered as a female. I have a serious doubt concerning Haberland's assertion that the Eastern Arsi Oromo believe that "lafti niitii Waaqaati"--"the Earth is *Waaqa*'s wife" (Haberland 1963, 607). Bartels (1983, 108) also said that the Western Matcha Oromo do not consider the Earth as *Waaqa*'s wife. As I have argued elsewhere (1997a), the link between *Waaqa* and the Earth has been expressed in certain myths of Oromo origin, people's blessings, oaths, curses, rituals, proverbs and so forth. As Knutsson noted, "the earth itself is superhuman in character, although it is not equivalent to the heaven. To give weight to the truth of what one says or to a request for something, evidence is presented or a question posed 'in the name of *Waka* and *Lafa*'" (Knutsson 1967, 56).

My informants disagree whether the land belongs to all, the living the dead and the unborn included. Most of them agree that before the conquest of the Oromo by the Abyssinians in the 19th century, the land was free, and no body owned it. Land couldn't be bought or sold. People had use-rights over the land resource, which belongs to *Waaqa*. The land did not have a boundary in the strict sense of the term. But Emperor Menelik and his followers proclaimed that the land belongs to the government. He apportioned the Oromo land and gave it to his soldiers, relatives and churches.

Some informants argue that the land belongs to the living, for they use the resources of the land for survival. They maintain that the dead have already left the land and couldn't claim it. The living will hand it over to the next generation (Infs: Fufa; Gonfa; Galata). Others contend that the land is the private property of the dead; they were buried in the land, and no body can force them to leave the land or to change their place. Human beings originated from the land and returned to it (Infs: Dagaga Kana'a;

Gamtessa). The third group believes that the land belongs to all, living, dead and unborn included. The living get the necessities of life from the land. The dead were buried in the land. The unborn will be born on the land (Infs: Daksissa; Nagara Fite). The third group shares the view held by many Africans. "For Africans land belongs to all, living and dead. We will live in this land where our for parents lived and where our great-great-grand children will live. To make sure that all benefit from this wealth, we have to take care of it properly now. This value system cuts across all ethnic groups in Africa" (Omari 1990, 174). Generally, the Oromo people believe that the present generation is under moral obligation to preserve the land and hand it over to the future generation.

## 2.2 The Concept of "Ayyaana"

Oromo traditional religion teaches that there are many saint-like divinities called *Ayyaana*, each seen as a manifestation of the one *Waaqa*. *Ayyaana* is believed to be the angel of *Waaqa*. It is the intermediary between human beings and *Waaqa*. *Ayyaana* is created by *Waaqa* and cannot create anything. *Ayyaana* can only communicate the problems of humans to *Waaqa*. During possession the *Ayyaana* speaks in the mouth of the *Ayyaantuu* (*Qaalluu*) with the people. When individuals ask *Ayyaana* for help, the latter will say s(he) will ask and beg *Waaqa* for him/her. *Ayyaana* acts according to the will of *Waaqa*. *Ayyaana* alone cannot hurt or kill individuals. But with the help of *Waaqa* *Ayyaana* can be invoked to bring misfortune upon the person unwilling to comply with the traditions of the society (Infs: Emanssa; Fufa). Thus, Ambo Oromo attitude towards the *Ayyaana* (spirit) is at variance with Lewis' view. Lewis reports that the *Ayyaana* (spirits) "can directly affect all aspects of life. They can kill a man or cure him; slay his ox or increase his herd; make him mad or destroy his enemy. They can be vengeful toward the impious or benevolent to the faithful" (Lewis 1970, 174). Unlike *Waaqa* the color of *Ayyaana* is unknown. It should be reiterated that *Waaqa* could only create or destroy human beings and other things (Infs: Emanssa; Fufa; Nagara Fite). The view of my informants is at variance with the idea that "one's *ayyaana* determines one's destiny, since it is assumed that when some one is born, the person is born into an *ayyaana* that determines his or her future" (Daniel 1984, 107). As I will show later, the Oromo believed that *Waaqa* with their respective *Ayyaana* created the days in each month. But for the Ambo Oromo, it is not the *Ayyaana* that determines one's destiny but *Waaqa*.

According to Oromo traditional religion, all created things in the universe have their own *Ayyaana*. Thus there are numerous *Ayyaanas*. For instance, hunters are expected to sacrifice animals for the wild animals they killed during hunting. Otherwise the guardian spirit of the concerned wild animal will attack the hunter.

The *Ayyaana* is attached to individual *Qaalluu* and speaks through his mouth during possession. Both are inseparable. The *Qaalluu* serves as an intermediary between human and the *Ayyaana* (spirit). The role of a *Qaalluu* is similar to the role of a Bishop in the Christian world and of Imam in the Muslim world. He or she is expected to respect traditional taboos (*Safuu*) and ritual observances and follow the truth and avoid sin. The Ambo Oromo identifies several *Ayyaanas*. Each lineage (*balbala*) has its own *Ayyaana*, and each clan (*lammii*) has its own *Ayyaana*. The former may be called *Ayyaana xinnaa* (small *Ayyaana*) whereas the latter can be called *Ayyaana Guddaa* (big *Ayyaana*). The

*qaalluu* is the leader of religious rituals. The *Qaalluu* is also known as the *Ayyaantu* for s(he) has the *Ayyaana* of his lineage or clan.

The *Ayyaana Abbaa* (*Ayyaana of one's father*) is invoked for help in order to fulfill one's duties, to be successful, and to avoid evil acts, for it is believed to be more powerful than one's own *Ayyaana*. Likewise, the *Ayyaana* of the clan is more powerful than a father's *Ayyaana* (Infs: Fufa; Nagara Fite).

The Oromo also use "*Ayyaana*" to refer to a holiday. The days on which the Oromo perform traditional ceremonies are called *Ayyaana*. Some days have been assigned to some of the spirits and conceived as *Ayyaana*. Also the concept of *Ayyaana* can be used to refer to a person's fate (Bartels 1983; Daniel 1984). That someone is *Ayyaantuu* may mean s/he is lucky.

*Nabi* is believed to be the ancient *Ayyaana* of the Oromo (Inf: Emanssa). To give birth to a child, the spirit called *Araashittii* should possess pregnant woman. *Booranticha* is a male spirit, and is believed to be the protector of ox and calf. It is also known as the spirit of the river. An individual is required to prepare traditional beer, Niger seed, flour of roasted barley with butter, salt, pancake-like bread, sauce of lentils, nine *buddena* (large local bread cooked only on one side) and celebrate the *Booranticha* ritual at the river-bed so as to appease the spirit of the river (Inf: Kumalcha).

What is interesting is that the *Qaalluu* institution has had a positive impact on the environment. The Oromo build *Galma* (traditional Oromo ritual hall/Church) at a special place. The *qaalluu* lives and worships in this place. Although the Oromo can build *Galma* on a hill, they generally believe that a slope or a hill is not a favorable place, for it exposes the *Galma* to different dangers. For this matter, they build a *Galma* under a hill, by the side of hideout, or by the side of isolated places (Infs: Emanssa, Merga Jara). These places should be free from yell. Women who have menstruation are forbidden to enter the *Galma*. Such women are considered impure. The believers visit the *Galma* and dance, sing and beat drums to perform a ritual called *dalaga* in order to achieve a state of ecstasy, which often culminates in possession. It is at the height of this that the possessing *Ayyaana* speaks through the *Qaalluu's* mouth and answer prayers and predict the future. It should be noted that the Oromo perform prayer ceremonies besides permanently flowing rivers, by the side of big mountains, hills, stones and trees. The land around the *Galma* and the natural resources on this land are viewed as sacred and are well protected.

In Oromo traditional culture, some individuals claim to know the mystery of human nature and predict the future. These individuals are known as *Xibaartuu* Or *Warra Waa beeku* (those who know something) or *Warra siinii ilaalu* (those who look at the lees of a cup of coffee and predict the future). They also claim to know the message of the smoke of incense. When people get sick and face life crisis, they visit these yarn spinners. The *Qaalluu* leaders also advise individuals to visit them and understand what to do in order to avoid their problems. It should be noted that *Xibaartuu* has a lower social status than the *Qaalluu* leaders. Some informants believe that *Xibaartuu* is knowledgeable and can help the people (Infs: Duresso; Emanssa). The majority of my informants, however, said that the *Xibaartuu* is a deceiver, and does not know anything.



The yarn spinners exploit the people by fabricating false stories. Some even say that they are the instruments of the *Qaalluu* leaders. They advise people to offer money, animals and other gifts to the *Ayyaana* will solve their problem. But the advice of *xibaartuu* is groundless (Infs: Eticha, Gamtessa; Merga Jara; Ragassa).

On the other hand, the Oromo believe that there are hidden *Seexanas* (devils) which are the enemies of the people and *Waaqa*. *Waaqa* "has become the enemy of devils whom he can effect at any time" (Bartels 1983, 121). In fact, *Waaqa* creates the devils. Like human beings they are mortal. But they can be the cause of conflict between human beings, and they can bring harm to individuals and disturb their health. Devils are invisible, destructive and the sources of evil things, misfortunes, and all kinds of human sufferings. When people suspect that a devil brought harm to their child, they will take the latter to *Ayyaana Guddaa* (Big *Ayyaana*). The *Qaalluu* can force the devil to release the child. The *Qaalluu* can make the devil swear not to disturb the child in the future (Infs: Gutema Mitafa; Nagassa). Rivers, ash, mountains, various trees, and the place hit by lightening, and draft is believed to be the abode of devils. The Oromo are used to appease devils by providing various offerings.

### 2.3 The Concept of "Maaram"

*Maaram* is believed to be the divinity of women. *Maaram* was created by *Waaqa* and addressed as *haadha baar* (the mother of ocean). I think this is to indicate that *Maaram* came to the Oromo from outside. The Oromo believe that *Maaram* is the mother of a child. The Oromo women perform traditional ceremonies in respect of *Maaram*. It is believed that *Maaram* will help *barren* women to beget a child, and help pregnant women to give birth to a child. When a woman gives birth to a child Oromo women will gather and ululate (say *ilili ilili*). They also prepare porridge, and splash butter. It is normal for the Oromo to sacrifice an animal during this ceremony. Moreover, *Maaram* is worshipped for the health of the environment, animals, human beings and crops.

The Oromo *Qaalluu* leaders pray to *Maaram* every two weeks for the continuation of offspring of humans. *Maaram* has her own ritual house. Ritual goods include *Jaaloo* (earthen caldron), and *Qoloo* (traditional shirt). It has also *madabii* (raised platform of Earth). The dancing ceremony is performed on Tuesdays, Thursdays, and Saturdays (Infs: Durezza; Emanssa; Fufa).

### 2.4 The Concept of "Ateetee"

Some writers have explained the nature of *Ateetee* and *Maaram*. Knutsson states that the names *Ateetee* and *Maaram* are used interchangeably for the same kind of being (Knutsson 1967, 55). Daniel states that the various songs of *Ateetee* imply that "[a]teetee is a ceremony prepared for *Ayyolee*, *Maaram* and *Waaqa* as thanksgiving by those who have children and a lamentation by the barren women" (Daniel 1984, 111). Bartels, however, questioned this assertion. To the Oromo of Western Matcha, *Ateetee* is the name of the ritual in which *Maaram* is invoked (Bartels 1983). Baxter (1979) had similar observation concerning the belief of the Arsi Oromo. For Cerulli, *Ateetee* is conceived as the goddess of fecundity (Cerulli 1922, 127; Harris 1968, 50).

The view of the Ambo Oromo is at variance with Knutsson's argument. According to the Ambo Oromo, *Ateetee* and *Maaram* are different and have different functions in Oromo religion. The materials used during their ceremonies are different. But both *Ateetee* and *Maaram* are believed to be females.

For the Ambo Oromo, *Ateetee* is the mother of cattle and the spirit of *bakkaa* (melted or processed butter). The Oromo also identified *Ateetee* as *Aayyoo Baar* (the Mother of Ocean) and as *Hadha Dambal* (the mother of overflow, full). The purpose of the *Ateetee* ritual is to help cattle breed well, and to help oxen plough well. There are *Ateetee* cattle in Oromo culture. When a heifer drops a calf, her butter will be stored and used during the *Ateetee* ceremony. Yogurt is also required to be kept for two weeks before the *Ateetee* ritual. The *Ateetee* ritual can be performed in June and January or in any other month. Most of the time, the *Ateetee* ritual is performed on Tuesday, Thursday and Saturday (Inf: Gutama Mitafa; Urgessa Gutama). The women can begin to celebrate the *Ateetee* ritual on Friday, and splash butter on Saturday. Or they can begin on Wednesday, Thursday and splash butter on Thursday and Friday, respectively. Traditionally, it is believed that Monday is the day of the ghost. Wednesday is believed to harden its heart towards the people. But the proper date for *Ateetee* ritual is determined by time reckoning experts. The Ambo Oromo perform *Ateetee* ceremonies every two years (Infs: Duresso; Lami; Merga Jara).

Five or more women are required to participate in *Ateetee* rituals. The wife of *Guulaa* (an individual who have gone through all the rituals of the *Gadaa* and who has his-ruling period behind him)--*Kalaalee* will be elected and spill the melted butter over the women who perform *Ateetee* ceremony. When the son of *Kalaalee* has gone through all the rituals of the *Gadaa*, the *Kalaalee* would be called *Cifree* (Inf: Lemo). The women should not perform *Ateetee* ritual with plaited hair. Their hair should be *daabee* (it should flow down the neck, the front and the sides). She should curl her hair with leaves of *Qobboo* (*Ricinus communis*). Her husband is expected to carry *Caaccuu* (necklace of beads). On the third day the five women perform fertility ritual by splashing their chest, and neck with warm butter. Women are expected to eat porridge. Porridge will be served with *Jaaloo* (tray made of straw). On the fifth day, the husband will take his cattle to the place where the cattle will drink *horra* (mineral water). On mid-day, the husband will return cattle to his premises. When the cattle return home, the woman will milk cows and pour the milk on the back of cows. This is believed to help cows breed well.

During *Ateetee* ritual, an old healthy cow should be sacrificed for the cattle to breed well, for a bull to serve a cow, for a pregnancy to be successful and for a land to be leveled. It is a taboo to sacrifice a cow with broken horns, blind eye, wrong tail and other defects. If a person does not have a cow, he can slaughter coffee (coffee fruits stewed in butter) (Inf: Fufa). The slaughtering of coffee may have been symbolic. "The cherry-like coffee fruits are bitten open and stewed in melted butter. The butter enters the fruits and reaches the beans inside. These beans which, because of their shape, account for the coffee fruits 'use as a symbol of the woman: their shape is reminder of the female organ much as cowry-shells are'" (Bartels 1983, 287). When the husband sacrifices a cow, the *Ateetee* spirit will possess his spouse. The people anoint stick with

butter and prop it against their body. The husband will make libations by curdled milk. He is also expected to set up two green poles in front of the house. The people eat meat, drink yogurt, unfermented ale, and traditional beer. The milk will be served with *Guchuma* (large gourd). The people then praise the cattle in their song. The women dance during the night (Infs: Emanssa; Lemo).

It is believed that if a person fails to perform *Ateetee* ritual, cattle cannot breed well, the calf cannot grow, the teat of animals will be closed, and a person can be visually impaired and crippled. The Oromo say "*Ateetee* ijaaf ijoof gabbaru" (*Ateete* ritual is performed for the sake of the eyes and destiny).

In general, the *Ateetee* ritual has symbolic meanings. The anointment of sticks with butter, the planting of green poles, the shedding of old cows blood, the splashing of the chest and the neck with butter are the symbols of fertility, procreation, and continuation of life on Earth. They symbolize that the survival of most Oromos depend on the survival and rebirth of herds.

## 2.5 The *Mowata* Tradition

Ethiopian and non-Ethiopian anthropologists who have studied the nature of *Waaqa*, *Maaram*, *Ateetee* and *Ayyaana* have been silent about the nature of the *Mowata* culture among the Ambo Oromo. In what follows, I will present a preliminary observation about how *Mowata* has been practiced by the Ambo Oromo. My analysis relies exclusively on oral information both from the study sites and outside. Those who have been practicing the *Mowata* cult and other peasants were interviewed. The readers are advised to consider each position and form their own position.

My informants agree that *Mowata* came to Ambo from Soddo via Walisso<sup>7</sup> although they could not identify the exact date of the appearance of *Mowata* in Ambo. It is believed that originally *Damaamitii* (the deity of *Mowata*) came down to the Earth from the sky; it is an invention of *Waaqa* and it cannot be inherited through blood ties. I think that the *Mowata* tradition has religious and social dimensions.

The *Mowata* ritual is largely associated with women, although men mostly *Fugaa* (woodworkers who are socially despised) and hermaphrodites participate in *Mowata* spirit possession. The *Mowata* society has its own leader who is called *Habaqii*. In most cases, a *Fugaa* is the leader of the *Mowata* society. There is the saying that "Dubartiin qeetti dhirsaan nakkarte ala baateet jaarsi *fugaa* dha doobbiif goraan reeba" (A woman who challenges her husband in his premises will be beaten by a *Fugaa* elder outdoors with nettle and raspberry plant" (Inf: Ragassa). Each locality has its own *Habaqii* and those who reside in the area participate in *Mowata* spirit possession through the guidance of their *Habaqii*. The *Habaqii* is required to be given a whip made from the skin of a hippopotamus by the *Ayyaana*. For instance, Obboo Kumalcha, the *Habaqii* around the city of Ambo, reported that the spirit called Danfaa of the Qaalluu leader Obboo Fayissa Inika gave him a whip. When the *Habaqii* ties the whip in a firm knot, the members of the *Mowata* society will be possessed by the spirit and gather around the *Habaqii*'s premises. By tying the whip, the *Habaqii* can make them unconscious, and may force them to stimulate crying at a funeral, to fetch water, to eat food, and to perform any other duties. In particular, when the *Qaalluu* of *Danfaa* and *Maaram* (well

known spirits in Ambo) and one of the members of the *Mowata* society dies, the members of the *Mowata* society will induce crying at the funeral<sup>8</sup>. To do this the *Habaqii* should be informed about the death of the concerned individual. When the *Habaqii* thinks that they have performed their duties, s/he will dispossess the members of the *Mowata* society of the spirit by untying the whip. The *Habaqii* can pacify a person who is possessed by the spirit and unconsciously tries to attack other people by using fire, thorny bushes and the like. The *Habaqii* employs various phrases to lead the spirit possession. These phrases are considered the language of *Mowata*. For instance:

- ◆ *Ashimmoo damaamitii* (Be possessed by the spirit)
- ◆ *Sebir* (Leave him or her)
- ◆ *Tadumdumii* (Be silent)
- ◆ *Tonyii* (Sit down) (Infs: Kumalchaa; Lemmo).

Individuals who participate in the *Mowata* spirit possession cut the leaves of various trees, whereas, those who do not properly celebrate the *Mowata* ritual cut the thorns of different trees and take part in a funeral.

The *Mowata* tradition is much more complicated than what has been stated. According to informants, the *Mowata* spirit can possess a person in two different ways. A *Qeerransa* (leopard) can, on the one hand, kidnap a person. Initially, a person will be afflicted bodily or mentally (Infs: Duresso; Kumalcha; Lemo). Obboo Kumalcha's personal story illustrates this.

I was ill for about fourteen months. I suffered from diarrhea and vomiting. I was not able to eat well. I only drank coffee and water. Sometimes I ate roasted grains. After the first four months, a red snake with long hair came to my bed. My parents looked after me during my illness for I was not married. My parents did not understand the cause of my illness and why the snake came to my place. They suspected that the snake is a symbol of *Ayyaana*. They had to put butter on my head several times a day. The snake was licking butter. If the snake had not found butter, it could have pierced my head and thereby killed me.

After fourteen months a leopard took me. In the meantime, the members of *Mowata* society began to look for me. The leopard fed me rootworm, beetle and other insects, and protected me from other wild animals. Two or three leopards did this. When the first one collected worms and insects, the other one stayed with the patient. These leopards were special and different from other leopards. Personally, I did not see any of them for I was unconscious at that time. Finally, the *Mowata* expedition saw me after a week. At that time I was with a leopard. All persons who were possessed by the spirit knelt down in front of the leopard to influence it. Then a leopard was given a goat and left me. The fact of the matter is that a leopard did not eat goat given to it. It hit it and thereby killed it. Some times a leopard might refuse to leave the patient alone. When this occurs, *Fugaa* will catch it and throw it away and ask the relatives of the patient whether the latter belongs to them by pacifying the *Mowata* members for they may attack the former. Later the *Fugaa* will clean the patient and ask the members of the *Mowata* to bring the patient

to his premise on a stretcher. In my case, after going home, I drank warm water to clean my stomach from worms and insects. Later on I was given a whip made from the skin of a hippopotamus<sup>9</sup> with eight bells by *Danfaa* (the spirit) of Obboo Fayissa Inika so as to save pregnant women from hurting themselves during spirit possession. Consequently I became a *Habaqii* and prepared a *Mowata* ceremony in respect of the whip. The whip has its own ceremony.

After one year, a leopard came to my place in May for the second time. Firstly it made my mother unconscious by tying its tail. My mother was a member of the *Mowata* society. Hereafter, a leopard took me out of the house by lifting up the door. It then returned to my parent's house and released my mother from the spirit by untying its tail. But nobody saw it when it did all this. The members of the *Mowata* saw me after five days. After performing all the necessary conditions, they returned me to my place. Since then I have been the *Habaqii* of the *Mowata*. I have personally observed the leopard during our search for a patient (Inf: Kumalcha).

It is also believed that a leopard can take a woman if she leaves her house during the night. The leopard may kill a patient if it is not given a goat on time. Some time ago, the members of *Mowata* failed to see a certain Merge, a young girl, for six weeks. Eventually they realized that this girl was killed by a leopard and eaten by a wild animal. They only found her plaited hair, neck and leg at Fincha valley in Wollega. A patient taken by a leopard can only be seen by the *Mowata* members for the spirit helps them to do so. Unlike other *Ayyaana* the *Mowata* spirit does not require a special gift of a bull to be sacrificed (Inf: Kumalcha).

There is also a second way by which a person can be possessed by the *Mowata* spirit. From the outset, a person will suffer from diarrhea, vomiting and other diseases. Following this, two snakes will come to his or her place--one lying at the head of the bed and the other lying at the lower end of the bed. The patient will be unconscious for about one week or two. When the patient seems to stop breathing, his parents will shroud him or her and begin to cry, which in turn will lead to the gathering of the *Mowata* members. Meanwhile, the spirit can possess women if a snake coils itself. Consequently, these women will attack those who are not the followers of *Mowata* spirit and force them to leave the house. The members of the *Mowata* cult will then leave a patient with an old and respected woman and go out for *labsii* (announcement). They will inform other followers of the *Mowata* spirit about the patient and come back to the patient's place. The *Habaqii* will then free the women from the spirit and give them boiled grain. The next morning the *Habaqii* will give the patient a stick. A stick will stay on the lap of the patient for seven days. The *Habaqii* will give the patient food. Finally, the *Habaqii* will free the patient from the spirit. The patient will then be healthy.

A person can also ask the followers of *Mowata* to induce crying during his or her funeral by preparing a big feast. The person is not required to be possessed by the *Mowata* spirit. The person is expected to prepare traditional Oromo beer, food, bread, a sacrificial cow, and inform the *Habaqii* to arrange the *Mowata* ritual. Two *Guulaas* and the followers of the *Mowata* spirit are required to take part in this special ritual. The two *Guulaas* are expected to lead the ritual by beating the law for the funeral purpose. If the

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person fulfills the entire requirement, the followers of *Mowata* will induce crying during his or her funeral (Inf: Kumalcha).

Before the 1974 Ethiopian revolution, the *Mowata* spirit possession was common in its various forms in Ambo. After the Revolution, it was discontinued because of the intervention of the government. The *Habaqii* was imprisoned and forced to untie the whip. After the collapse of the military government, followers of the *Mowata* spirit, particularly in the highlands have practiced the *Mowata* spirit possession. The *Qaalluu* of the *Maaram* in *Gololee* locality has his own *Masqala* (day of the cross) in December every year. A considerable number of people will come from Soddo, Waliso and other places to *Gololee* in order to participate in the *Mowata* spirit possession. Traditional Oromo beer, and food are given to the participants (Infs: Duresso; Kumalcha; Merga Anga'a).

In spite of the revival of the *Mowata* cult, some peasants strongly criticize it. They proclaim that *Mowata* is alien to the Oromo culture and brought to Ambo by some individuals to deceive the Oromo people. They state that individuals are not really possessed by the spirit. Instead, they pretend that the spirit possesses them. Some women use *Mowata* as a cover to meet their lovers on the ground that they are taken by the leopard without their knowledge. After staying with their lovers for some time, they go to some places in which they can be seen by the followers of *Mowata*. They pretend that they were brought to these places by a leopard (Infs: Urgessa Bayissa, Ragassa). Obboo Ragassa reported that he confirmed the falsehood of the *Mowata* tradition. He said that by beating his two wives, he forced them to avoid the *Mowata* spirit possession. He said that if they had been really possessed by the spirit, he could not have isolated them from the spirit. The members of the *Mowata* society intentionally refused to speak to justify that the spirit possessed them. For instance, a certain woman refused to speak on the ground that the *Mowata* spirit possessed her. One person attempted to see whether it is really true. When he began to sing in the nude in front of the woman, the latter laughed at him. Also, she drank henna and tried to justify that she retched blood (Inf: Ragassa). There are also cases when the followers of *Mowata* admitted their mistakes after being beaten by a thorny bush (Inf: Urgessa Bayissa).

The above account of the *Mowata* tradition is open to different interpretations. Why did the *Mowata* tradition come to Ambo? The fact that it has not been practiced in other Oromo lands gives the indication that it may not be an indigenous practice of Oromo. One may suspect that non-Oromo people were overwhelmed by the Oromo, and designed a particular tradition to use it as a means to exploit them. One may also say that although the *Mowata* tradition is a living tradition, some persons can use it to fulfill their sexual desire. It may also be assumed that the *Mowata* cult is a protest by some women and socially despised persons against other members of the society.

Personally I realized that the *Mowata* tradition has had a negative impact on the environment because of the fact that the followers of *Mowata* are required to cut the leaves of various trees and thorny trees to participate in *Mowata* spirit possession. Also, the association between a patient and a leopard does not seem to correspond with the principles of totemism. The relationship between the two is not a reciprocal one. The

patient is believed to be unconscious and cannot help the leopard. On top of that, a leopard can kill the patient when it is not given a goat on time. The Origin and the real nature of the *Mowata* spirit possession require further study both in Oromo and Gurage lands.

## 2.6 The Concept of “Safuu”

*Safuu* is an important concept in the beliefs and practices of the Ambo Oromo. The Oromo believe that *Safuu* involves avoiding embarrassment, bad conversations, lying, stealing, and working on holidays and so forth. *Safuu* is respecting one another and respecting one's own *Ayyaana* and other's *Ayyaana*. The Ambo Oromo say *Safuu* is *ulfina* (respect). We need to show respect to our father, mother, aunt, uncle and so on. Knowing *Safuu* will help us to maintain our culture and revere *Waaqa* (Inf: Emanssa).

*Safuu* also refers to the existence of an attitude compounded of both distance and respect between all things. As Bartels rightly noted, *Safuu* “implies that all things have a place of their own in the cosmic and social order, and that they should keep this place. Their place is conditioned by the specific [*Ayyaana*] each of them has received from *Waaqa*...*Safuu* implies both rights and duties” (Bartels 1983, 170).

*Safuu* can also refer to expression of astonishment, fear, pain, pity, shame, etc. (Tilahun 1989, 511).

## 2.7 The Concept of “Dhugaa”

The concept “*Dhugaa*” has different connotations. Tilahun (1989, 186) in his *Oromo English Dictionary* states that it has two meanings: truth and real or the lowest price of something, not the asking price. Bartels (1983) contends that the concept “*Dhugaa*” involves both truth and justice. Although the concept “*Dhugaa*” can be used in different ways, I am inclined to argue that epistemologically and politically it refers to truth and justice respectively.

The Oromo people think that *Waaqa* likes *Dhugaa* and wants us to protect it. When the Oromo want to confirm something they raise the question “*Dhugaa Waaqaa?* (Is it the truth of *Waaqa?*). The Oromo employ different proverbs to underline the value of *Dhugaa*. For instance, *Hinqall'atti malee, dhuggan hin duutu* (Truth can get thin but never dies) (BABO 1998, 283); *Ijji dhugaan boochu, imimmaan hin dhabdu* (An eye which cries truthfully will not lack tears) (BABO 1998, 299); *Dhugaa malee, dhugaatiin nama hin quubsu* (Truth not drinks that satisfy people) (BABO 1998, 687). As a matter of fact, it is believed that one who failed to tell the truth violates the will of *Waaqa*. *Waaqa* is believed to be the protector of *Dhugaa*. The following folktales demonstrate this:

In the past a certain Oromo begot a son. He occasionally met *Waaqa*. One day he was asked to join elders so as to reconcile the contending groups. During deliberation, this man took the side of his relative without sufficient and solid evidence. When he returned home, he found his son dead. He then asked *Waaqa* the reason for the death of his son. *Waaqa* replied that it was you who killed my son--*Dhugaa*. You sat down on a stool and committed injustice. The man understood his mistake and returned home. Later he begot another son. He was asked to participate in the process of reconciliation. He recalled that partiality will annoy *Waaqa*. He



therefore decided not to talk any word during deliberations. At the end of the peace process he went home and found out that his son became deaf. Then he asked *Waaqa* the reason why He made his son deaf. *Waaqa* informed the man that he repeated his mistake and made *Dhugaa* deaf. The man was convinced and took the initiative to reconsider the case along other elders. Having discussed the case for the second time the elders managed to tell the truth and reconcile the contending parties. When the man returned home, his son heard the voice of his father and began to talk (Inf: Dhuguma).

This folktale shows that failing to tell the truth has damaging effects. *Waaqa* will punish those who committed injustice. This in turn reminds us that the concept *Dhugaa* has a central place in Oromo culture. It is also worth considering the following folktale.

One day there was a dispute between a husband and a wife. Elders were gathered to examine their case and thereby to reconcile them. The woman presented nine points to these elders. After deliberations the elders realized that the woman has *Dhugaa*. Her husband committed nine mistakes. In the mean time, one of the elders suggested that they give one *Dhugaa* to the husband. He said "Gurri dhiiraa maal jedha" (What will the good reputation of a man say when we say that the woman is free?). The elders agreed and informed the woman that as far as eight points are concerned she is justified in accusing her husband. But her husband is not responsible for the ninth accusation. The woman, however, reacted against this decision by reminding the elders that they overlooked one point. But the elders did not change their mind. When the elder who favored the man tried to leave with his mule, *Waaqa* appeared as a man and asked him how the elders settled the case. He informed *Waaqa* what has been decided by the elders and left riding on mule back. Soon after, he realized that his sex was changed to a woman. She then decided not to return to the previous house but to go somewhere else. Consequently, she married a man and begot a son in the new region. One day her younger son went to the market on her mule's back. In the meantime, the elder son saw his father's mule and takes both the younger son and the mule to court. When the lawyers asked the younger son from where he brought the mule, he replied that the mule belongs to his mother. On the other hand, the elder son informed the lawyers that his father disappeared with this mule after attending the peace process. The lawyers asked the younger son whether his mother is alive or dead. The son replied that she is alive. The lawyers instructed the younger son to bring his mother to the court. When his mother came to the court, the lawyers asked her whether the mule belongs to her. She replied that it is her own mule. The lawyers further asked her if she knew both children. She said "yes indeed both are my own children. I begot the elder son when I was a man whereas I begot the younger son when I am a woman." She explained her life story in detail. Meanwhile the people bent their body and touched the ground. When the people stood up and looked at her, she had already become a man. This is the outcome of telling the truth (Inf: Badhane). My informants underscore that this and other folktales indicate that *Waaqa* likes *Dhugaa*, and is truly existent. *Waaqa* is not governing the world acting from afar. He is living with the people.

## 2.8 Oromo Religion and the Wind of Change

As has been stated earlier, the Oromo people have encountered different cultures and thereby adopted the religious beliefs of different ethnic groups. They used the strategy of *Moggaasa* (adoption) by which they considered the conquered groups their relatives. The conquered groups have combined Oromo and their own indigenous beliefs. This shows that the Oromo traditional religion has been changing in response to the new ideas and changes.

However, the Oromo religion encountered obstacles when the Abyssinians conquered the Oromo and other Southern ethnic groups of contemporary Ethiopia in the last quarter of the nineteenth century. The Amhara rulers despised the Oromo religion and forced the people to accept their religion. They regarded *Ayyaana* as a devil. They cut *Dakkii* trees, burned *Galma*, they threw ritual beads in to the river, and called Oromo traditional religion as worthless. They advised the Oromo to bury their dead in graveyards of Orthodox churches. They compelled the Oromo to prepare banquet in commemoration of a dead relative; when the Oromo ignored this feast, they were considered as uncultured savages. The Amhara rulers also forced the Oromo people to avoid the *Gadaa* system (Infs: Emanssa; Fufa). Daniel reported that the local chiefs in Wollega were ordered to ban traditional belief in favor of Christianity after the incorporation of Wollega into the Ethiopian state. "Following their local chiefs most of the subject people were baptized *en masse*" (Daniel 1984, 118-119).

The systematic approach of the Swedish-trained Ethiopian Protestants enabled them to win the confidence of the local chiefs in Wollega. They translated religious books into the Oromo language. Village schools were established by Protestants to propagate their religion. These schools were open to all children of local chiefs and peasants. They also provided medical facilities to the local people. This attracted a large number of followers. "Eventually the continuous and systematic indoctrination seem to have resulted in the grafting of the new teaching on the incompatible parts of the traditional religion to the extent of overshadowing the latter" (Daniel 1984, 122).

The *Irreessa* (thanksgiving festival), which the Oromo used to perform in river meadows just before the beginning of the harvest season every year, became illegal.

During the Italian invasion (1936-1941), the Italians challenged the *Qaalluu* institution in Oromo lands. Although they propagated that the intent of Italy was to liberate the Oromo and other people from the Amhara rulers, the Italians persecuted the *Qaalluu* leaders. For instance, the Italians interviewed *Fitawrari Jida* in Bacho. They asked him to tell them their future. He replied that he couldn't predict future events. The Italians then brought a pregnant red cow and asked him what the cow is going to calve. The *Qaalluu* said that it is going to calve a black calf with a blaze on its forehead and with a white spot (*muxaa*) on its four hoofs. Soon after, the Italians instructed one of the Oromo peasants to slaughter the cow. What the *Qaalluu* said was true. The Italians again asked the *Qaalluu* to tell them what will happen to them in the future. The *Qaalluu* told them that they will be conquered and disappear after five years. Consequently, the Italians got annoyed and killed the *Qaalluu* with twenty-four bullets. Following this incident, the Italians hunted down the *Qaalluu* leaders. My informant was a young man

at that time and one of the victims. The Italians again caught another *Qaalluu* Obboo Kello Garo and asked him to tell them their future. Obboo Kello stated that the Italians would disappear in the near future. The Italians immediately killed him with twenty-four bullets. This incident provoked his son Obboo Jagama Kello, later General Jagama, to rebel against the Italians. Jagama immediately killed an Italian, who was riding a motorcycle, with a spear and shield. Later on Jagama Kello became a well-known general in the Ethiopian army. In spite of this opposition, the Italians again asked a certain *Qaalluu* the same question. In the mean time the *Ayyaana* possessed the *Qaalluu*, and the latter said that you could only kill one person. I will let you kill him. When the Italians tried to kill the *Qaalluu*, the *Ayyaana* lifted him up forty meters above the ground. As a result, the Italians argued that he is a Jesus Christ, and he cannot die. From then on, the Italians changed their attitude and reinstated the *Qaalluu* institution in Ambo (Inf: Taressa).

My informants report that Protestants are challenging the Oromo religion in Gabisa Boji, Imala Dawe Ajo and Birbirsa Dogoma Peasants Associations. The Protestants cut *Dakkii* trees, and corrupted many Oromo children. The present government in the name of democracy and freedom of religion (Infs: Gamtessa, Fufa; Nagara Fite) backs the Protestants.

The military government also had a negative impact on Oromo religion. Government officials said that *Ayyaana* is non-existent. Particularly, the villagisation of the military government challenged the *Qaalluu* institution. The Oromo peasants could not participate in spirit possession. There were different clans in the village. The members of a single clan did not live in the same place. This in turn made the performance of ritual ceremonies difficult. Some peasants destroyed *Dakkii* trees from their previous homesteads (Infs: Fufa; Ragassa, Taressa). Moreover, modern education has influenced the Oromo children to question their culture. The children are not willing to learn Oromo culture. For this matter, the Oromo elders could not transmit their knowledge to the young generation.

Some informants criticized the Amhara rulers for discrediting polygamy. The Abyssinian rulers advised the Oromo not to marry two or more wives but one. The informants underlined that this reduced the Oromo population. Traditionally, the Oromo can have two or more wives (Infs: Gamtessa; Ragassa; Tolessa). Personally, I think that polygamy can have damaging effects on the natural environment. More people will use more resources.

Most of my informants argue that the Oromo culture does not need any change. They said that the Oromo *Gadaa* system, and religious traditions have enabled the Oromo people to protect the natural environment, and to maintain peace and life on the Earth. They thus suggest the continuation of the Oromo tradition as it's at present.

But most of the informants questioned the role of *Xibaartuu*. They said that *Xibaartuu* deceives the people and is useless for the Oromo people. Other educated peasants also criticized the *Qaalluu* leaders. I will discuss more about the weakness of Oromo tradition at a later stage in the argument.

### 3. VEGETATION AND OROMO SOCIETY

#### 3.1 Tree Planting and Deforestation

The Ambo Oromo recount that in the past Ambo was full of forests, and they could have little point in planting trees. These trees were the most important repositories of biodiversity.

At present, however, trees are under threat. The expansion of cities, population growth, increased cash needed for school fees, medical services and tax, environmental change, and the introduction of chemical fertilizer have compelled the Ambo Oromo peasants to clear more lands for agriculture, to burn charcoal, and collect firewood for sale (Infs: Angassa; Nagara Fite; Nagassa). Charcoal burning has been practiced in Birbirsa Dogoma and Uko Korke Peasants Associations since the imperial era. Particularly in Birbirsa Dogoma Peasants Association, charcoal burning and the collection of firewood are the major means of survival for many peasants. During my fieldwork, I saw fifteen to twenty peasants going to the nearby Guder town to sell charcoal and firewood, which they do almost everyday. A small amount of peasants' income needs to be supplemented through charcoal burning and the collection of firewood. But charcoal burning is not common in Imala Dawe Ajo Peasants Association (Infs: Taressa; Lelissa; Ragassa). Peasants in the latter area are relatively rich. Peasants in Gabisa Boji do not burn charcoal owing to the absence of trees appropriate for this purpose (Inf: Gonfa). The large majority (98.8%) of the sample population recognized the prevalence of deforestation in their area (table 8).

Before the 1974 Ethiopian revolution, the Ambo tenant farmers were forbidden to plant trees. Some informants recounted that they were also not allowed to build a decent house let alone plant trees. The landlords had driven most tenant farmers off the land they formerly cultivated so they could construct houses. The landlords thought that tenant farmers could ask them compensation for their trees when they move to other places. The landlords demanded extra payment from peasants when the latter planted trees and improved the fertility of the land. Generally, the landlords did not want to see strong and rich peasants on their land. Of the sample population, 59.4% was not allowed to plant trees (table 9). The respondents underlined that although there was other factors such as poverty, the unwillingness to protect the land on the part of some peasants, the land tenure system was a major hindrance to conserve natural resources. Those who had their own plot could plant and control trees.

Table 8. Percentage of distribution of household heads that have observed deforestation on their land

Community	Peasants who have observed Deforestation	Peasants who have not observed Deforestation
Imala Dawe Ajo	40 (100.0%)	---
Birbirsa Dogoma	39 (97.5%)	1 (2.5%)
Gabisa Boji	40 (100.0%)	---
Uko Korke	39 (97.5%)	1 (2.5%)
Total	158 (98.8%)	2 (1.3%)

Table 9. Environmental protection before the 1974 Ethiopian revolution

Community	Was it easier to carry out environmental protection ?	
	Yes	No
Imala Dawe Ajo	17 (42.5%)	23 (57.5%)
Birbirsa Dogoma	15 (37.5%)	25 (57.5%)
Gabisa Boji	17 (42.5%)	23 (57.5%)
Uko Korke	16 (40.0%)	24 (60.0%)
Total	65 (40.6%)	95 (59.4%)

Thus, one can say that the landlords contributed to environmental degradation. Denying tenant farmers the right to plant trees contradicts with the principles of environmental protection. The landlords should have encouraged peasants to invest on their lands.

Deforestation had also been accelerated by the land policy of the military government. All forests were placed under state ownership. Some peasants destroyed big trees under the cover of darkness owing to the uncertainties of tree ownership, and the absence of strict control on the part of peasants associations. On top of that, peasants were reluctant to plant trees on their plot owing to the redistribution of land over time by peasant's association officials in line with government land policy. Of the one hundred sixty household heads, seventy-eight peasants (48.8%) said that the land policy of the military and the present government has prevented them to invest on their land ( table 10).

Table 10. Environmental protection after the agrarian reform of 1975

Community	Has it been easy to protect the environment?	
	Yes	No
Imala Dawe Ajo	21 (52.5%)	19 (47.5%)
Birbirsa Dogoma	26 (65.00%)	14 (35.0%)
Gabisa Boji	14 (35.0%)	26 (65.0%)
Uko Korke	21 (52.5%)	19 (47.5%)
Total	82 (51.3%)	78 (48.8%)

Although the military government provided peasants with seedlings, they were not willing to plant them with proper care because they were forced to do so. Inadequately planted trees had a low survival rate (Infs: Berhanu; Gutema Mitafa; Ragassa; Takele). Some peasants destroyed different trees after the collapse of the military government.

Nobody seems to be responsible for the protection of forests in rural areas (Infs: Bayissa; Mulata; Olkaba).

In spite of the negative attitude of the landlords, some peasants dared to plant eucalyptus trees during the reign of Haile Selassie I (1930-74). For instance, Obboo Angassa Yadessa planted 5,000 trees in Uko Korke. He said that his landlord continuously harassed him. Many peasants regard Obboo Angassa as their best teacher in the area of environmental protection. Similarly, Obboo Setegn Warati and Gamachu Yeyie planted *Gaattiraa* (*Juniperus procera*) and *Anfaara* (*Budelleja polystachya/Nuxia congesta*) in Cittu locality in Gabisa Boji Peasants Association. Of all peasants I have interviewed, I have been impressed by the efforts of Obboo Ragassa Warerso in Imala Dawe Ajo Peasants Association. In fact, he had his own land before the revolution. He said that he used to buy seedlings from the government from 1966-1974. By the 1974, he had about 50,000 eucalyptus trees. After the revolution peasants association officials tried to expropriate his trees. He was then annoyed and carelessly cut and sold his trees. Later, that the government proclaimed that it would be illegal to appropriate one's trees. Following this Obboo Ragassa began to plant trees. He planted 6000-9000 seedlings every year. He has his own nursery. At present, he has about 49,000 trees the majority of them are eucalyptus trees. He lamented that shortage of land does not allow him to plant more trees. Obboo Ragassa has influenced many peasants not only in his locality, but also in Ambo district at large. Following Obboo Ragassa, Obbo Dalassa Ganati has planted 40,000 trees including eucalyptus, *Gaattiraa* (*Juniperus procera*) and *Arangamaa* (*Pterolobium stellatum*). Furthermore, I have been amused by the diversity of trees, which are planted by Obboo Dhabassa Nagara in Birbirsa Dogoma Peasants Association. He has been planting trees around his premises and on his farm. His trees include eucalyptus, *Gaattiraa*, *Kaachaa* (*Themeda triandra*), *Birbirsa* (*Podocarpus gracilior/falcatus*), *Maraasisaa* (*Celerodendrum myricoides*), *Anchabbii* (*Ocimum suave*), *Waddeessa* (*Cordia africana*), *Bakkanniisa* (*Croton macrostachys*), *Agamsa* (*Carissa edulis*), *Ceekaa* (*Calpurnia aurea*), *Qaraaruu* (*Akacaathera schimperii*), *Xoqonuu* (*Urera hypselodendron*), *Dhummuugaa* (*Adhatoda schimperana*), *Mixoo* (*Rytigynia neglecta*), *Urgeessaa* (*Premna schimperii*), *Bosoqqee* (*Kalanchoe spp.*), *Anfaara* (*Budelleja polystachya/Nuxia congesta*), *Geeshoo* (*Rhamnus prinoides*), *Caatii* (*Cathaedulis*). I have never seen some of these trees before. Obboo Dhabassa is a traditional herbalist and values trees for medicinal, economic, and aesthetic reasons. He also said that environmental friendliness has encouraged him to protect various types of trees.

Likewise, the majority of the sample population plant trees on different places owing to economic, medicinal, aesthetic, belief, environmental friendliness and future concerns (table 11). 90% of the respondents do not plant trees on their farmland. They think that planting trees on their farmland will reduce agricultural production through shading, root interference and attracting anti-crop wildlife such as birds. Other peasants complained that irresponsible individuals could steal trees on their farmland. Others said that they do not have sufficient land to plant trees.

Table 11. Percentage of distribution of respondents who have planted trees

Community	Do you plant trees?					
	On your homestead?		On your farmland?		Elsewhere?	
	Yes	No	Yes	No	Yes	No
Imala Dawe Ajo	36 (90.0%)	4 (10.0%)	3 (7.5%)	37 (92.5%)	9 (22.5%)	31 (77.5%)
Birbirs Dogoma	36 (90.0%)	4 (10.0%)	8 (20.0%)	32 (80.0%)	2 (5.0%)	38 (95.0%)
Gabisa Boji	40 (100.0%)	---	4 (10.0%)	36 (90.0%)	5 (12.5%)	35 (87.5%)
Uko Korke	37 (92.5.0%)	3 (7.5%)	1 (2.5%)	39 (97.5%)	10 (25.0%)	30 (75.0%)
Total	149 (93.1%)	11 (6.9%)	16 (10.0%)	144 (90.0%)	26 (16.3%)	134 (83.8%)

The foregoing discussion reveals that there have been environmentally conscious Oromo peasants in the four study sites from whom peasants in Ambo and rural Ethiopia can learn a lot. Through experience, they realized that planting trees requires the knowledge of the soil, the nature of various species, climatic conditions and so on. They underline that there should be a gap (from one meter to two meters) between two or more trees depending for what purpose the tree is intended to be used in the future. They know highly productive and early maturing species. They have their own nurseries and know that unless seedlings are covered, they would dry up and cannot grow well. Their colleagues regard these peasants as intelligent teachers and innovators.

The Ambo peasants have a wide knowledge of the nature and use of various trees. *Ejersa* (*Olea europaea subsp/ cuspidata*), *Agamsa* (*Carissa edulis*), *Gaattiraa* (*Juniperus procera*), *Laaftoo* (*Acacia Albida*), *Qilxuu* (*Ficus vasta*), are important to construct houses and pens. Peasants use *Waddeessa* (*Cordia africana*), and *Himalaa* (scientific name is unknown) to make yoke. *Ejersa* is essential to make a beam for plough, wedges and flat wooden boards that support the handle of a plow and a plow snare. Peasants also know different trees resistant to the rotting effects of sun and rain, and trees that are termite proof. Peasants use *Laaftoo*, *Bakkanniisa* and others for charcoal burning.

Peasants also plant trees for aesthetic reasons. Big trees are the symbols of respect and happiness. Traditionally, people say so-and-so has big trees around his premises so that his homestead has *Ayyaana*. The birds alight on these trees. The Oromo believe that trees are the children of *Waaqa* and the Earth can only be respected with its trees (Infs: Edossa; Gifara; Gutema Mitafa; Kena'a; Shito).

The Ambo peasants are also well aware of the fact that trees and rain are interconnected. They argue that cutting all available forests will not only deprive the future generation of rare plants and animals, but will also affect climatic conditions leading to drought, excessive wind storm and soil erosion. All of my informants confirmed that the rain starts on the forested lands. They specifically mentioned the names of these places. There is no dust in these places. Instead these places are covered by cloud. The following saying shows the interconnection between cloud and forests. "Shaggar

gubbaan huurrumaa yoo damma baasan malee. Booddeen du'aaf dullumaa yoo amma kaatan malee" (Inf: Gudeta)--"There is cloud over Shaggar (Addis Ababa) unless you extract honey; old age and death are coming later unless you work hard now." Good honey is found in the forests for bees can use various trees. Thus, this saying indicates that honey, forests and cloud go together. *Warqee* (*Enset ventricosum*) attracts rain mostly in highlands. Other trees have similar role both in low and highlands. Springs can only be found around forested areas. My informants maintain that trees help retain moisture by shedding the land from the sun and the wind. They also state that after planting trees they have influenced the weather of their locality (Infs: Galata; Likessa; Ragassa; Gutema Jirane).

### 3.2. Environmental Degradation and Health

Environmental degradation has affected climatic condition and led to new diseases. In particular, malaria is the most widespread disease, causing death, debilitation and suffering, affecting several people in Ambo. It was believed to be a disease of lowlands. But the threat of malaria is increasing in both highlands and lowlands in Ambo. During my fieldwork, malaria killed a considerable number of people in Ambo. Many peasants complained that the government has not paid attention to control the spread of malaria.

Many peasants pointed out that environmental change is the major cause of malaria. Raghunathan's observation supports this view. "Environmental disturbances, particularly loss of forests, population movement, poor health care infrastructure, and the most dangerous malaria parasite, plasmodium falciparum, developing drug resistance and vectors becoming insecticide proof are the main causes for such rampant spread of malaria" (Raghunathan 1993, 95). 88.8% of the sample population said that environmental changes have led to new problems, such as the proliferation of human and animal diseases, anti-crop insects, the overheating of the atmosphere and the acceleration of soil erosion (table 12).

Table 12. Percentage of distribution of household heads that have identified the effects of environmental change

Community	Environmental change has created special problems	Environmental change has not created special problems
Imala Dawe Ajo	36 (90.0%)	4 (10.0%)
Birbirs Dogoma	38 (95.0%)	2 (5.0%)
Gabisa Boji	37 (92.5%)	3 (7.5%)
Uko Korke	31 (77.5%)	9 (22.5%)
Total	142 (88.8%)	18 (11.3%)

Some peasants also suffer from tuberculosis. The major cause of tuberculosis is poverty. TB patients spread tuberculosis by coughing out, spitting millions of TB bacilli, which are inhaled by others and thereby get infected.



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The problem of water supply and sanitation is common in the study areas. In some places, the water is full of living organisms such as leeches and a variety of insects. Some individuals use the open field, and at times even the edges and banks of streams and rivers for toilet. Thus, water-related diseases such as diarrhea, vomiting, amoeba, intestinal problems and the like have affected the people.

Moreover, horses have been ravaged by *biichee*. *Biichee* wounds a horse and kills it after spreading over its body. *Biichee* was not a serious problem in the recent past in the study sites. It is a new disease that has not been controlled by the people. Tick also attacks cattle and dogs.

Environmental change and its negative concomitants have alerted peasants to plant and protect trees. They have tried to control environmental degradation and the spread of new diseases. Both peasants and their children have actively involved in planting trees in June and July. During the dry seasons they draw water from rivers and water their trees.

### 3.3 Sacred Groves

The Oromo religion provides many checks and balances on resource utilization. The followers of Oromo traditional religion have their own sacred trees. Every Oromo has his own *Dakkii* tree that is believed to be the abode of spirits. *Dakkii* tree is a symbol of peace and stability and is believed to be a link between *Waaqa* and the people. A bride leaving her parental home is blessed with the words "May the *Dakkii* accept you". Not all trees are selected as *Dakkii* trees. *Birbirsa* (*Podocarpus gracilior/falcatus*), *Laaftoo*, *Garbii* (*Acacia albida*), *Harbuu* (*Ficus sur*), *Qilxuu* *The Oromo favor* (*Ficus vasta*), *Ejersa*, *Mi'eessaa* (*Prunus africana*), *Gaattiraa* (*Juniperus procera*), *Hoomii* (*Pygeum africanum*), *Somboo* (*Ekeberigia capensis*), as *Dakkii* trees. *Birbirsa* is associated with the *Gadaa* system. The Oromo use *Birbirsa* as a pillar and put green leaves under it so as to appease or propitiate their *Ayyaana*. It needs to be covered by *Jaawwii* (red cloth) and a ram should be sacrificed under it. *Laaftoo* is not a callous tree; it is rather simple and soft. *Harbuu* is chosen for it has a kind of breast that produces milk, and has fruits. Similarly, *Qilxuu* has breast and capable of producing milk. *Ejersa* is one of the respected *Bokkuu* trees (Inf: Fufa). It is forbidden to cut *Dakkii* trees. The inhabitants in any way could not utilize them. The Oromo sacrifice domestic animals under *Dakkii* trees to maintain peace and to avoid diseases (Infs: Bayissa; Duresso; Nagara Fite). *Dakkii* trees have also another advantage--the Oromo climb these trees and control the movement of enemies from a distance (Inf: *Gamtessa*). The Oromo in Imala Dawe Ajo and Gabisa Boji construct fence around *Dakkii* trees. One can find not only one single tree, but a variety of tree species.

Moreover, trees around the *Qaalluu* institutions, springs, and other ritual places are considered sacred. The Oromo also revere *Bokkuu* (sceptre) trees. During my fieldwork, I had the opportunity to observe very big trees around *Bokkuu* *Cittuu* in Gabisa Boji Peasants Association. The *Gadaa* officials use these trees as traditional Oromo court. They discuss social, economic and religious problems of the Ambo Oromo and other Oromo people in different parts of Oromiyaa. No one is allowed to cut a single branch from these trees. Even the women cannot collect dry dung from the compounds of *Bokkuu* trees. There are some exceptions when

some trees can be cut and used to roast meat during the *Gadaa* celebrations. Some individuals cut one of these trees, jerk the meat of an old bull, put it on a spit-like, forked wood and roast it (Infs: Bayissa; Gonfa; Gutema Mitafa; Kana'a; Woldesenbet). Those who tried to cut *Bokkuu* trees illegally did not live long. A certain Fayyisaa died after cutting a *Bokkuu* tree (Inf: Gonfa). Peasants in the study sites also protect trees grown around Churchyards. Unlike peasants in Wallo (Dessalegn 1997), the Ambo Oromo plant eucalyptus and other trees around Church compounds (Infs: Ragassa; Urgessa Bayissa). It should be noted that trees around churches are protected in all parts of Ethiopia for the grounds around churches are considered sacred (Tsehai 1994). "Bees make honey inside the roofs of some churches without being disturbed, and dove and other birds make nests on the ground" (Tsehai 1994, 167). In the past the Oromo used to plant trees on graveyards. These trees are taboo for any use. The Oromo favor *Adaamii* (*Euphorbia candelabrum*) of all trees. For this reason, no body wants to cut this tree. Peasants put beehives on these trees. It is believed that trees on a grave look like the flesh of the dead person and serve as statues. Traditionally this place is called *Iddoo Hammeenya Warraa* or *Tuujuba Warraa* (the grave of so-and-so). Although some individuals have begun to cut these trees, many trees remain untouched. For instance, there are big trees on the grave of Obbo Wayessa Manker, one of the leaders of the Oromo of Korke locality in Uko Korke Peasants Association. According to tradition, when *Kalaalee* or *Cifiree* (the ritual leader of the Ateetee ceremony) dies, she will be buried around her own homestead because of the fact that burying her in the Church will result in negative consequences. The Oromo plant trees on the grave of *Cifiree* even these days (Infs: Likessa; Nagassa).

### 3.4 Green Trees, Grasses and Symbolic Acts

The green environment has special significance to the Oromo. It is the symbol and presage of fertility (germination and vegetation) and of all good things. Plants and animals depend on green environment. It is believed that green environment is the source of life. The Oromo do not sit on stone and dry things. They put green grass on a stone to make it wet. Green trees and grasses symbolize various aspects of reality and people's life. As Appiah rightly noted, ritual implies symbolism. "Symbolism is in fact a feature of all major ceremonial occasions in any culture, and the presence of symbolism in religious ceremonial derives from its nature as ceremonial and not from its nature as religious" (Appiah 1992, 113). *Coqorsa* (*Eleusine jaegeri*) grass is one of the respected and favored grasses in Oromo traditional religion. *Coqorsa* is mainly used to appease one's father's *Ayyaana*. It is symbolized as an uncastrated bull and an elder of all grasses. It is a strong creeper grass, which can stay green during the dry seasons. A single *coqorsa* grass crawls on the ground and covers a large area of the ground. The Oromo use *coqorsa* grass to worship *Waaqa*. *Coqorsa* grass cannot be used in every traditional ceremony. It is associated with *Waaqa* and *Ayyaana*. It must be noted that not every *coqorsa* grass is culturally useful. The Oromo count the marrow of *coqorsa*. A *coqorsa* grass, which has seven, nine, twelve, sixteen marrows, is believed to be good. Only knowledgeable persons know different uses of a *coqorsa* grass with different marrows (Infs: Bayissa; Takele).

*Sardoo* (*Pennisetum clandestinum*) is another revered grass in Oromo culture. It grows in a tract of ground surrounding a house. It is very soft and straight. It is not a callous grass. *Sardoo* is needed for offspring. It is a symbol of peace, fertility and life. Elders hold *sardoo* grass when they reconcile conflicting parties. Women are required to hold *sardoo* grass and *Qundhee* (*Cyperus rigidifolius*), during *Ateetee* and *Maaram* celebration. When a father aims to ask a girl for his son, his relatives hold *sardoo* grass and go to the girl's house. I have noted that *coqorsa* grass cannot be used for this purpose. The father is wishing that the couple are wet, and their lineage will be reproduced. To put matters another way, *sardoo* gives the message that the girl will give birth to a child. If the father takes dry grass to a girl's house, the girl will be barren. *Sardoo* equally serves both the rich and the poor. When a person is asked by both the poor and the rich person to give his /her daughter to their son, s/he is required to apply the principle of first come first served. If s/he violates this principle and favors the rich, the poor can present this case to *Gadaa* officials. It is believed that the health of the daughter can be disturbed by the misdeeds of her parents (Infs: Didha; Dhabassa; Gudissa). When the Ambo Oromo go to sacred places, they are required to hold *Mi'eessaa* and *Birbirsaa* trees. *Mi'eessaa* is a symbol of peace and has beautiful and straight leaves. It does not have thorns that are harmful. It is worth noting that the Oromo don't use trees, which have thorns, to pray to *Waaqa* for help.

The Oromo also use tall grass or green trees as *irreessa* trees to appease the gods. *Irreessa* trees will involve *Urgeessaa* (*Premna schimperi*), *Ulmaa* (*Ekebergia capensis*), *Abbayyii* (*Maesa lanceolata*), and *Hindhee*. When a bridegroom proceeds to the girl's house he is expected to hold the lath of *Urgessa*, which is a symbol of fertility along with a whip and spear (Inf: Basura; Marga Jara). When a person gives a gift to *Ayyaana*, she/he is expected to hold *Hoomii*, *Gaattiraa*, *Ulaga* (scientific name is unknown), and *Birbirsaa*. During *Gadaa* ceremony, the Oromo hold *Urgessaa*, *Ulmaa*, *Hindhee* and a spear (Inf: Gonfa). Moreover, the Oromo anoint dry sticks with butter to make them wet. For instance, they first soot *Waddeessa* with smoke. They then anoint it with butter. Butter is the symbol of fertility. This stick is considered as the stick of blessing. The Oromo are required to hold anointed sticks during the *Gadaa*, *Ateetee*, *Qaalluu*, and other religious ceremonies. A ritual stick cannot be used for other purposes. When the Oromo sacrifice animals as an offering to *Ayyaana*, they will dip a stick into the blood and touch their forehead. The shedding of bull and sheep's blood may well have been a substitute for human sacrifice and reflects the wish of human beings to make their life enjoyable in the future. Blood sacrifice is intended to propitiate *Waaqa*, the earth and *Ayyaana* to ensure fertility, life and peace. *Urgeessaa* tree also symbolizes maturity. During circumcision the Oromo set up *Urgeessaa* in the ground.

### 3.5 The Place of Fragrant Trees and Grasses in Oromo Culture

The Oromo people are able to identify the smell of various trees and grasses and exploit them for various purposes. The Oromo women use different trees to make milk sweet. They fumigate the churn with the smoke of *Ejersa*. Without fumigation the milk will be hurdled. The Oromo women also use *Ciraakkota* (*Ruta chalepensis*) to make yogurt, and red pepper tasty. *Shokonata* is used to process butter and to make cheese tasty. The Oromo peasants argue that urban dwellers do not know how to make milk sweet. The

Oromo women fumigate their clothes and incense their body with the smoke of *Bahaa* (*Olea welwitsehii*) the root of *Qundhii* (*Cyperus rigidifolius*), *Baddeessa* (*Syzygium quineense* subsp.), and *Masarata* (*Cymbopogon citratus*) grass. Most Oromo women prefer these trees. They said that modern perfumes make people ill and are very expensive. *Fragrant* trees are economical, affordable, and do not affect the health of the rural poor (Infs: Eticha; Fufa; Lami; Lemo). When a woman gives birth to a child, she boils the leaves of *Ulmaa* (*Ekebergia capensis*), young *Barooddo* (*Myrica salicifolia*), *Himalaa*, the bark of *Urgeessaa* (*Premia schimper*), and *Luugoo* (*Kalanchoe quartiniana*) and wash her body with their solution. A nursing mother fumigates the cloths of her child with the smoke of *Somboo* (*Ekebergia Capensis*). The rural women boil the leaves of *Biitee* (*Sideroxylon oxyacantha*) and wash their children. Some people also tuck *natrari* (scientific name is unknown), into their nose for it has a pleasant smell (Infs: Eticha, Lelissa). The rural woman put *Masarata* (a fragrant grass), in their box so as to make their clothes smell nice. Peasants also put *Kusaayee* (*Lantana trifolia*) on their bed for it smells nice. The leaves of *Ingug* (scientific name is unknown) tree are used to daub a fingernail. The foregoing discussion suggests that peasant's knowledge of fragrant trees may offer fertile soil for the improvement of the knowledge of perfume makers.

### 3.6 The Selection and Use of Edible Wild Plants

Food habits differ from one region to another and from one country to another. Human beings have involved in the selection, domestication and cultivation of wild plants. A wild plant in one country can be a domesticated crop in another country. For instance pigs and cattle in USA eat maize while it is a staple food in other countries. Teff, i.e., grass like crop (the grains of which are used for making local bread) is a staple food in Ethiopia whereas it is cultivated for hay production in South Africa and Australia. In India, it serves as green fodder (Mesfin 1987). Some ethnic groups in Metekel eat the leaves of various trees while others in central Ethiopia think that this habit is morally unjustifiable.

The Ambo Oromo use different wild plant species for dietary and other domestic purposes during normal period and in time of crop failure. The fruits of *Goraa* (*Rubus stevdneri*), *Angooxoo* (*Rosa abyssinica*), *Qilxuu* (*Ficus Vasta*), are widely eaten in highlands. Peasants and their children eat the fruits of *Harbuu* (*Ficus exasperata*), *Agamsa* (*Carrisa edulis*), *Mi'eessaa* (*pygeaum africanum*), *Angooxoo*, *Goraa*, *Koshommii* (*Dovyalis caffra*), *Waddeessa* (*Cordia africana*), *Qilxuu*, and *Adaamii* (*Euphorbia candelabrum*) in the four study sites. During famine, the people resort to other wild food from the bush. Several wild plants survive droughts where conventional crops perish. These trees are considered as a highly nutritious source of food. *Waddeessa* is considered as the important source of energy (Inf: Urgessa Bayissa). *Hudhaa* (*Flacourtia indica*) is as sweet as a candy (Inf: Gamtessa). The Ambo Oromo also eat the gum of acacia. The rural Oromo prepare *booka* (*mead*) by mixing *Ebicha* (*Vernonia amygdalina*) and honey (Infs: Angassa; Blanta; Duresso). Wild animals, such as baboons, antelopes, and reedbuck graze the leaves of various trees. Colobus monkey eats the fruits of trees.

### 3.7 Oromo Traditional Medicine: Principles and Practices

Traditional medicine involves both rational and psychotherapeutic techniques, together with a folk classification and nomenclature of ills and diseases, and includes both simple family remedies and specialist healers for different types of treatments (Barrau 1966). Traditional healers in different parts of the world, however, have not encouraged the people to learn the properties of medicinal trees. The secretive nature of the knowledge of traditional healers has hampered the transfer of the principles and practices of traditional medicine to curious minds. Therefore, the death of traditional healers means the disappearance of all the knowledge of traditional medicine. The death of the traditional healers led to the stagnation of science, including the science of medicine (Gyekye 1997, 29). Although Gyekye acknowledges the potencies of traditional medicines, he proclaims that there were-and are-enormous problems about both the nature of indigenous medicine and the appropriate or reliable dosage, problems which do not seem to have been grappled with. Diagnosis requires systematic analysis of cause and effect, an approach, which would not be fully exploited in a system, like the one evolved by our culture, which often explained the causes of illness, as it did in any other natural occurrences, in agentive (i.e., supernatural, mystical) terms. Such a cause effect approach to coping with disease would hardly dispose a people towards the search for effective diagnostic technologies (Gyekye 1997, 33).

He further points out that traditional healers are not capable of providing exact measurement of quantity which would affect "the efficacy of the concoction as well as the therapeutic effect of the dosage; in the case of the latter, there was the possibility of under dosage or over dosage" (Gyekye 1997, 33-34). Although traditional healers may not systematically analyze cause and effect, their knowledge is useful for modern society. It is thus imperative to study and document traditional pharmacological knowledge of the rural people in the world for "[i]t is the search for potentially new therapeutic agents to be used for advanced medicine which will ultimately rebound to benefit the local indigenous societies who still fully depend on native floras for cures and remedies" (Schultes 1989, 37).

Lambo contends that traditional and modern medicine are complementary:

[I]t is therefore my conclusion, after a long and determined attempt to appraise both indigenous and modern medicines within the African context, that both are not mutually exclusive. In fact, total exclusion of the theories inherent in indigenous medicine from Western medicine would seem to impede the total acceptance of Western medicine by African societies as a meaningful substitute to beliefs and practices which have long satisfied certain basic human needs (Lambo 1969, 204-5, quoted in Makinde 1988, 99).

Like modern medicine, African traditional medicine is being improved through continuous experiment and observation of the physiological effects and medicinal properties of bioactive plants. I maintain with Makinde that "it could be said that, like Western medicine, traditional medicine has a definite aim. It is also governed by a methodology and a system of principles which dictate the manner in which the act has to be performed if it is to be effective" (Makinde 1988, 100). My study in rural Ambo confirmed the observation of Makinde. There are two kinds of medicines in Ambo: oral

medicine and medicinal herbs. The former is associated with oral incantations and may be regarded as magical or supernatural where as the latter is related to physical effects. Traditional healers are skilled at bone setting, cautery, and minor surgical procedures. Traditional medicine men also possess a wide knowledge of the flora and the properties of a great number of species, and treat different diseases without resorting to magic or superstition. In my previous work (1997a), I have offered the names of different medicinal plants, and I shall not repeat their role here. Traditional medicine in Ambo relies on the intactness of local biodiversity. The Ambo Oromo employ *Anchabbii* (*Acimum sauve*), *Muka foonii* (*Halleria lucida*), white eucalyptus, the roots of *Qabarichoo* (*Echinops vebericho*), *Xuuxaa* (*Acyranthes aspera*), *Bokkolluu* (scientific name is unknown) and *Cingiitii* (*Otostegia irotegrifolia*), via the respiratory system by inhalation in the form of vapors, and smoking and washing against headache, sharp, sudden pain, common cold, and bronchial asthma. It is customary to draw vapors and the solution of these medicines into the left ear and nose for it is believed that different diseases enter the left side of the body (Infs: Likessa; Lami). *Heexoo* (*Hagenia abyssinica*), *Suntuuraa* (scientific name is unknown), *Qacama* (*Myrsine africana*), *Xoqonuu* (*Urera hypselodendron*), *Haanquu* (*Embelia schimperi*) and *Mattarre* (*Glinus lotoides*) are considered to be strongly laxative and effective in avoiding tapeworms and round worms.

The Ambo peasants make a distinction between male and female *Suntuuraa*. Female *Suunturaa* is capable of producing fruits and is a good medicine to treat gonorrhea and a pinching intestinal pain. The male *Suunturaa* is a fruitless toxic plant, which can kill a human being. *Heexoo* and *Hanquu* are found in highlands. The milk of female *Adaamii* (*Euphorbia candelabrum*) and the bread of red *xaafii* and the root of *Mi'eessaa* (*Euclea schimperi*), are effective in killing tape-worms (Infs: Gutama Mitafa; Urgessa Gutama). The smoke of black *Arangama* (*Pterrolobium stellatum*) and the root of *Bosoqqee* (*Kalanchoe spp.*) are capable of avoiding typhus (Inf: Tura). Drinking a potion obtained by pounding *Harma Guusa* (*Ajinga remoti*), *Hadasii* (*Myrtus communis*), the root of *Tuultii* (*Ramex steudelii*), and *Battalee* (scientific name is unknown), can relieve a pinching intestinal pain. Chewing the leaves of *Bakkanniisa* (*Croton macrostachys*) tree and mustard plant can also relieve intestinal pain. Eating parched *Iyyasuu* (*Amaranthus caudatus*) can relieve serious diarrhea (Inf: Urgessa Gutama). *Heexoo* is too bitter for children to drink its solution. For this matter, children will take the fruits of *Battarree* (scientific name is unknown) and pounded Niger seed and chew them to treat tape-worms. Drinking a potion obtained by boiling the leaves of *Qumbaala* (*Apodytes dimidiata*), and the bark of *Hoomii* (*Pygevm africanum*) will help a new born child to be free from stomach ache (Inf: Fufa). Chewing *Killa* (scientific name is unknown) (Inf: Didha) can also cure toothache. Rinsing the mouth by a potion obtained from the leaves of *Bakanisa* and *Itacha* (*Dodonea viscosa*) can alleviate toothache. *Xaabbanyii* (scientific name is unknown) is used to treat malaria. If the women boil the bark of *Barooddoo* (*Myrica salicifolia*), *Hoomii* (*Pygeum africanum*), and *Biitee* (*Sideroxylon oxyacantha*) and wash their body by the solution, they will be healthy. *Hadaa* (*Douyalis abyssinica*) is applied to hasten the healing of infected sores and the swollen leg. Its leaves will be tied to the infected part of the body in order to make it burst (Inf: Eticha). Attaching the pounded leaves of *Waleensuu* (*Erythrina abssinica*), honey and

roasted coffee to the infected part of the body for three days can cure eczema, although it usually produces a burning sensation. My informant said that modern medical doctors couldn't control this disease (Inf: Urgessa Gutama).

*Komanyo* (scientific name is unknown) is also important to treat scabies. The powder made from *Kombolcha* (*Mytenus obscura*) and *Qaraaroo* (*Akacaathera schimperi*) is believed to be a good remedy for snakebites. The Oromo also prepare amulet from the horn of *Gadamsa* (large deer found in lowlands), which can make a snake crazy; when the shadow of a person is thrown on the snake, the latter cannot move and bite the person. The horn of *Gadamsa* is sold in local markets (Infs: Fufa; Mulata; Bayissa). Tobacco is also important in treating snakebites. Also, if a person chews the leaves of white acacia, *Agamsa*, *coqorsa* grass, and spits on the affected part of the body, s/he will be cured (Infs: Gamtessa; Tura). Furthermore, peasants in the four study sites are capable of controlling rabies. The roots of the following trees are collected, crushed and mixed together: *Ceekaa* (*Culturnea aurea*), *Andoodee* (*Phytolacca dodecandra*), *Hooloo* (*Acacia bussei*), *Hiddii* (*Solanum marginatum*), *Qaraaroo*, *Bakkanniisa*, *Ittacha* (*Dodonea viscosa*), *Qilxuu*, *Ebicha* (*Vernonia amygdaliha*), the root of red *Qobboo* (*Ricinus communis*), *Alaltuu* (*Salix subserrata*), *Waddessa* (*Cordia africana*), *Geeshoo*, and wet pumpkin. The mixture of these plants is put in a horn or in any other container and neatly tied in black and white cotton to prevent it from falling out. When animals are affected by rabies peasants mix it with water and pour it into their left ear and nose. But human beings who are affected by rabies will drink a cup of the solution of this medicine (Infs: Bayissa; Mulata, Ragassa, Olkaba; Workineh 1997a). When individuals caught syphilis, they would chew *Hiddii Hooloo* (*Cucumis sp.*) and female *Andoodee* according to the prescription of traditional healers (Inf: Midhaksa). The solution of the roots of *Gurra Harree* and salt is useful in treating *Kuruba* (human or animal disease that can make the victim shiver) (Infs: Dalassa; Tura).

When individuals caught gonorrhea, they would crush *Hiddii Hooloo*, female *Andoodee*, onions, and salt bar and soak them in water and butter, and drink two glasses of the solution for two days (Inf: Ragassa). When a wife refused to sleep with her husband, the latter can force his wife to inhale the fruits of *Asangira* (*Datura stramonium*). It is believed that by chewing *Digaluu Bakkanniisa* (*Phragmanthera regularis*) and spitting on his penis the impotent man can become potent (Infs: Gutema Mitafa; Ragassa; Tura). The Ambo Oromo have been using the branches and twigs of *Ulmaa* (*Ekebergia capensis*) to clean their teeth for millennia.

The Ambo Oromo have also a considerable knowledge of indigenous veterinary medicines. An infusion of the leaves of *Bakkanniisa*, *Hiddii Hooloo*, white eucalyptus, white onion, *Dhummuugaa* (*Adhatoda schimperana*) *Ulmaa*, *Ceekaa* (*Calpurnia aurea*), *Caraanaa* (scientific name is unknown) and *Bosoqqee* is given to animals to be a cure for a stomach ache (Infs: Erko; Nagara; Gudeta; Tura). Animals which have diarrhea and bloated stomach and a pinching intestinal pain will be given a potion obtained by pounding *Caraanaa* and other trees (Infs: Didha). The young leaves of *Gambeellaa* (*Plantago lanceolata*), *Garbii*, *Urgeessaa*, and *Agamsa* are widely employed as eye medicine. After chewing the leaves of these trees, peasants spit on the eye of animals for three days (Inf: Urgessa Gutama). Animals, which are affected by *Qabbana* (which



makes animals weak), will be given the potion obtained by boiling *Qobboo*, *Dhummugaa* (*Justitia schimperana*), *Kalaala* and *Hoomii*. Also, animals will not be affected by *Qabbana* (info: Gudissa) if the rind of *Diddigsaa* (*Gniclia lamprantha*), is attached to their horns. The smoke of *Agamsa*, *Botoroo*, *Waattoo* (*Osyris quadripartita*), *Adaamii*, and the hide of a gazelle will free animals from *Qabbana*. When animals begin to walk lamely, peasants wash the hooves of animals by the pounded leaves of *Bakkanniisa* (Infs: Midhaksa; Urgessa Gutama). The louse in the bodies of animals can be killed by the infusion of the bark of *Waleensuu* and *Gaattiraa* (Inf: Midhakssa). Living organisms such as leeches attack both humans and animals.

During my childhood, a leech bit me; it was sucking my blood for two weeks. Finally, I was given the infusion of tobacco, which immediately killed the leech. A leech clings to the tongue of animals and humans and sucks their blood. A potion obtained from *Andoodee* and tobacco can kill a leech. Peasants put thorns and the stems of Niger seed and stones in the river so that the leeches cannot come out of the river and cling to the tongue of animals. The other strategy to kill a leech is stopping to take cattle to the river and making them thirsty; the leech cannot stay in the nose of animals without sufficient water (Inf: Gonfa). When *buti* (viper-like snake) ejected spray of venom at animals, the later will begin to swell up. The Oromo control this by spraying a potion obtained from chewing white acacia and *coqorsa* grass (Inf: Midhakssa).

The young generation has overlooked the significance of traditional medicine. They have favored modern medicine. It is elders who rely on traditional medicine in the present day Ambo. What has been stated in the preceding discussion reveals that the Oromo have their own principles and methods of applying medicines. They know how much medicine is enough, safe and effective. Through experience they have understood the relative content and power of each medicine. To know the appropriate dosage of a medicine, they use their small finger, cups, glasses and others as tools of measurement. Those who take beyond the necessary dosage may die. Administering traditional medicine also takes age into consideration. Children and fully-grown persons do not take the same dosage. As has been stated, traditional healers know the medicinal properties of local plants, their location, the proper time of collection (some plants are poisonous in certain seasons), the part to be used, how to prepare it (fresh, dried, cut in small pieces, smashed), the solvent to be used (cold, warm, or boiling water, alcohol, the addition of salt, etc.), the way to prepare it (time and conditions to be left in the solvent), and the effects of medicine some of which are beyond the competence of modern physicians. Modern pharmacologists have a lot to learn from traditional medicine. According to Shiva, "[i]f the 120 active compounds currently isolated from the higher plants and widely used in modern medicine, 75 percent have also uses that were known in traditional systems" (Shiva 1997, 74).

### 3.8 Beekeeping in Ambo

The collection of honey from wild nests is common in Ambo. In forested areas hives are made from hollowed-out logs or strips of bark, closed at each end and with just a hole for the bees to enter. The Oromo peasants also make a long rectangular movable-comb hive from blocks of mud and straw and smeared inside with cow dung and smoked, it

holds a number of wooden (or bamboo) top-bars each 55 cm long and 3.2 cm wide. Peasants also construct hives from odd scraps of timber.

Beekeepers fumigate beehives with the smoke of *Gagamaa* (*Olea hochesteteri*) and *Ejersa* (*Olea africana*) that burn with pleasant odor to attract bees to the hive. They also rub inside the hive with beeswax or they place a piece of old wax comb inside the hive and place the empty hive(s) in trees at the right season. A passing swarm will occupy this. Sometimes, honey hunters take honey from nests in tree cavities by felling the trees.

The Oromo peasants in Ambo know a wide range of plants, which are important to bees<sup>10</sup>. Bees collect nectar and pollen from cultivated and wild flowering plants and even from wasteland areas. Although some of the herbs and shrubs might be considered weeds, many of these species are important not just for honeybees but also for other uses. My informants underscore that there are distinct groups of honeybees representing different ecological areas of Ambo. Honey from certain regions shows highly specific pollen combinations. In highlands (*Baddaa*), bees use *Qamaxxee* (scientific name is unknown), *Somboo* (*Ekebergia capensis*) *Mi'eessaa* (*Euclea schimperi*) and *Andoodee* (*Phytolacca dedecandra*) to make white honey. In particular, the people like honey from *Qamaxxee*. In lowlands (*Gammoojji*), bees use *tuufoo* (*Guizotia scabra*) which includes *Keelloo* (*Bidens ghedoensis*), *Hadaa* (*Douyalis abyssinica*) and other flowering herbs), cabbage and Niger seed, to make red honey. The people consider the honey made from *tuufoo* as more important than others. Bees can also make honey from chickpea, *Agamsa* (*Carissa edulis*), clover, *Ebicha* (*Vernonia amygdalina*), and *Kombolcha* (*Mytenus obscura*). Peasants appreciate the mead of *Ebicha*. The saying goes "the meat of a young bull is as sweet as the mead of *Ebicha*" (Infs: Gutama Mitafa, Ragassa, Nagara Fite). But the people did not like honey made from acacia and *Bakkanniisa*.

Beekeeping is thus important in Ambo. It can serve as the sources of food and income. Honey serves as a useful source for carbohydrate. Honey was commonly eaten in its natural state and used in prepared dishes and drinks. Honey is also used to cure stomach and other diseases. "Honey does have some antibiotic activity because it is a sterile solution (its high sugar concentration prevents growth of microorganisms), the enzymes present in honey produce bactericidal hydrogen peroxide; it is highly acidic" (Bradbear 1990, 4). Moreover, the honey is widely sold; revenue was also obtained from beeswax. Beeswax can be used to prepare candle and ointments. At the same time the honey is fermented to make an alcoholic drink-*booka* (*daadhii*-mead). In the past, only the elite drank this, but nowadays every village has a small brewery. Particularly urban women widely used *booka* as a source of livelihood.

One of the advantages of beekeeping is that fertile land is not required for hives. Hives can be placed in trees, on waste-lands (on rocky outcrops and on the poorest soil for which the former has no use) and on flat rooftops. Thus, the physically disabled and landless peasants can rely on beekeeping as the source of income and nutrition. Beekeeping can help the rural poor to become self-reliant. Jones has this in mind when he writes:

Beekeeping is an activity that is ideally suited to rural development. In itself, it can be a small-scale project, which can fit in easily with larger agricultural initiatives. Bees not

only help in pollination and thereby increase the yield of cash, food and fodder crops, but they also make use of the rich resources of nectar and pollen, which would otherwise be unexploited (Jones 1997,5).

What has been stated so far indicates that beekeeping is an environmental friendly activity. It relies on locally available and renewable resources. The rural poor can obtain honeybees from the wild. I would argue that beekeeping could be a useful source of foreign exchange without harming the environment. The improvement of beekeeping in Ethiopia may attract the attention of developed countries that consider honey as an important food for their citizens. The foregoing discussion thus suggests that the rural people should be encouraged to improve beekeeping and manage their bees in a more efficient way on the basis of local materials. They need to plant diverse trees that give good bee forage.

One may object that traditional beekeeping is an example of extreme inefficiency justifying subsistence. The income status of peasants does not change anyway. They have no control of the availability of honey and its price. They cannot accumulate wealth and avoid the risk of health. They cannot improve the quality of honey. This is an acceptable criticism. Traditional beekeeping needs to be supported by the government. Traditional methods of honey collection should be improved if peasants are to promote sustainable development.

In my fieldwork, I have found out that the unlimited use of modern herbicides in rural Ambo killed a large colony of bees and reduced the production of honey in Ambo (Infs: Nagara Fite; Gamtessa; Gudeta; Kuma). All concerned groups should try to avoid the misuse of pesticides and herbicides. Also, after drinking the solution of chemical fertilizers, many foxes died in the study sites (Inf: Gamtessa).

It is worth mentioning that traditionally peasants have tried to mount or suspend the hive to protect the bees from pests and predators. They have tried to protect the hives from strong winds and strong sunlight. Yet it is beyond their competence to control externally introduced herbicides and pesticides. Thus, the government should reconsider the application of pesticides and herbicides in rural Ethiopia. Development agents and Oromo intellectuals suggest that herbicides should be suspended. Because Oromiya has a large number of people who can weed their crops and thereby preserve bees and other species (Infs: Asfaw, Buzayehu; Tujuba).

## 4. INDIGENOUS WILDLIFE MANAGEMENT

### 4.1 Types of Wild Animal

In this chapter, the concept "wildlife" is used in the narrower sense to refer to wild animals. The diversity of climate and topography in Oromiya has attracted a wide variety of wild animals. Black leopard, serval cat, otter, striped hyena, civet, mountain reedbuck, gerenuk, warthog, gelada baboon, colobus monkey, hunting dog, and spot-breasted plover are found in all parts of Oromiya. There are some special wild animals and species of birds in the four national parks established by the government. Oryx, soemmerings, gazelle, caral and 450 species of birds are found in Awash National Park.

destroy some crops, they will use drought and pest resistant crops (Infs: Didha; Gudissa; Bakana; Galata; Barsissa). Peasants select and preserve various crops and seeds on the basis of consumption characteristics, time for maturity, induced adaptability, pest and disease resistance, high yield, reliable and stable yield, nutritional quality, colour, grain size, texture, taste, suitability for use and marketability ( Melaku 1992, 90; Melaku and Hailu 1993, 81). This implies that peasants have never stopped preserving heterogeneous populations of seed. "Unless circumstances prove impossible, small-scale farmers always retain some seed stock for security. Even when forced to leave their farms temporarily because of severe drought, farmers store small quantities of seed in clay pots or similar containers, which they seal and bury in a safe place on the farm so that they can come back a few years later to reclaim and use them" (Melaku 1992, 82). Modern biochemists and biodiversity conservationists can thus rely on the biochemical information developed by the rural poor.

In the study sites, I have noted that traditional seed conservation activities are being eroded<sup>11</sup> as the development agents spread new improved seeds. The introduction of selected seeds has resulted in reduced soil fertility, in some cases declining yields, and increasing vulnerability of crops to pests, disease, weed competition, drought and reduction of genetic diversity. This tendency needs to be changed.

## 6. INDIGENOUS WATER HARVESTING SYSTEM

The main water sources in the study sites include rivers, springs and occasional water such as floods in dry riverbeds, and natural pools and puddles of rainwater. In the rainy months, ponds and rivers assume greater importance. Peasants use water for drinking, cooking, washing clothes, and cleaning household utensils, bathing and making local drinks. Moreover, water is essential for animals and plants.

Water diversion from rivers is common in all sites. During the dry seasons peasants draw water out of a river and a spring using human and animal power so as to water their seedlings and for other purposes. They build long canals and dig ditches, which drain water from the hilly region. To divert the water from rivers to fields, they construct embankment, which is about four meters long. Each village in Uko Korke and Imala Dawe Ajo Peasants Associations has a vast network of canals. About two hundred peasants and eight hundred peasants use small-scale irrigation respectively. They water tomato, onions, potato, pepper, various types of spices, maize and other crops, which are cash crops for some peasants. Peasants in Imala Dawe Ajo have their own water committee, which rations the water and controls an abuse of water resources. Each peasant uses the water once every three-weeks. Very few peasants use irrigation in Gabisa Boji and Birbirsa Dogoma.

Peasants are well aware that intensive irrigation on one plot of land for several years can make the soil thin, dry and thereby reduce its fertility, which in turn may lead to production losses. Trees on irrigated land are liable to change their colour (Infs: Gutema Mitafa; Ragassa). Moreover, "[p]lants grown under intensive irrigation are becoming less resistant to disease and pests. The diffusion of new, genetically uniform, high-

yielding plant varieties has reduced genetic diversity over large areas, and made crops more susceptible to pests and diseases" (Winpenny 1991, 30). Although traditional irrigation system is not sufficient by itself to solve the problem of the rural people, it may offer lessons for modern irrigation designers and managers. Therefore, "[t]he message for 20th century irrigation designers is clear: that for a sustainable system the community must be incorporated into construction, maintenance and operation" (Agnew and Anderson 1992, 146).

The other important indigenous water management concerns the preparation of *bidiruu* (cattle trough). Animals drink water from this vessel and do not go to the water source. Persons draw water from the source. This is important to protect the health of the community (Infs: Gutama Mitafa; Ragassa).

The informants reported that water has never been a serious problem in the four study sites. There are permanently flowing rivers. In fact, women and children, depending on the season and the choices they make, may travel long distances to fetch water. It is worth noting that the collection of water and gathering of firewood is assigned to women and small children. Peasants may also travel long distances in search of more convenient sources for watering their stock (Infs: Dhabassa; Duresso, Gonfa). The Oromo peasants also plant trees around rivers and springs so as to water them during the dry seasons.

Oromo pastoralists have a unique method of water management. For instance, there are three types of traditional *eelaas* (wells) in Borana. The deep or "*Tula*" well is carved out of rock and may reach over thirty meters in depth. The second *eelaa* is known as "*Adadi*" and has the depth of 10 meters or less. The third types of wells are spring fed wells and are located at the base of hill slopes or in lines up a hill slope. The Boran Oromo, their cattle, sheep, goats, camels, donkeys and horses rely on traditional wells. They employ dug out ramps in the wells that lead down to a service area, the "*dargula*". Their cattle drink water from the band-built, mud trough, or "*naannigas*" that is different from the water source. This helps the Boran to avoid water spoilage. The water is stored in a "reservoir"--(*Fatchana*) by a chain of people in the shaft or "*Eella*". The people also fill troughs from "*Fatchana*". They draw the water from the bottom of traditional wells and pour it into the *Naanniga* by using *okolees* (small buckets) made from the hide of buffalo, leopard and giraffe which may contain two to seven liters, by a chain of people stationed up the *Eelaa* on cross timbers or rock shells, and on similar structures between the *Fachana* (reservoir) and the *naanniga* (water trough). In Borana, different grazing areas have their own wells, and traditional wells are controlled by the well elder known as "*Abbaa Erega*"--the father of Erega (MWR 1998).

In Oromo *Gadaa* system, *Abbaa Malkaa* or *Abbaa Laga* is responsible for the proper use of water. He controls the users of water. Those who contaminate the water will be punished (Infs: Asfaw, Buzayehu).

As has been stated earlier, safe water supply and sanitation are lacking in the study sites. Traditional purification techniques such as filtering with cloth, with grass and others do not avoid various diseases. These techniques should be supplemented by modern techniques.

## 7. OROMOS ENVISION THEIR FUTURE

The Oromo are future-oriented people. Contrary to the views<sup>12</sup> of some writers about the African conception of time, the Oromo are not only concerned with the past and the present but also with the future. For the Oromo the past is a powerful tool for critically evaluating why we are in the present situation. The future is a powerful one to enact change. What happened in the past and what is happening in the present affects their future concerns. In light of this, I will discuss how various happenings help the Oromo to envision and make valiant efforts to build their future.. Through my fieldwork, I have confirmed the observation of Baxter (1970) that the Oromo's concern of ancestors and genealogical continuity shows that they are concerned with the future.. Baxter's observation in the pastoral Boran conveys this fact.

No man disposes of cows and camels, even his handhuuraa [a calf given to the son at birth] without consulting his brothers. A father of a herd is a trustee, and a man who imperils his herd would be treated as a potential suicide or murderer and restrained--"Fathers of herds", like fathers of the land or lineage heads in many African agricultural societies, or trustees, and a herd on which future generations depend for subsistence is not at the free disposal of its living "owners". A man has no right to endanger his descendants because, as their "father", he is responsible for their welfare (Baxter 1970, 126).

The *Gadaa* system reflects that the Oromo rely on the present and the past to build the new future. In contrast to some African people, the Oromo did not have a tribal chieftain structure. They had a democratic system of government called the *Gadaa*. As has been stated earlier, at the end of each *Gadaa* cycle, the Oromo used to evaluate the weakness and the strength of the previous government, and formulate new programs and rules by correcting past mistakes.

There are five *Gadaa* grades in a cycle of forty years in Ambo, namely *Roobalee*, *Birmajii*, *Horata*, *Michillee* and *Duulo*. If a person enters office (becomes *raagaa* now), his sons become *Luba* forty years from now. The names of the *Gadaa* cycle differ from region to region. Each of the *Gadaa* grades have features that are very unique. The first *Gadaa* grade, *Roobalee* is believed to have heavy rainfall. The people plant many trees. *Roobalee* is full of happiness and prosperity. Circumcision is common during this period. There are many singers in *Birmajii*. Economically it is not bad. Animals are believed to breed well in *Horata*. It is full of happiness. *Michillee* is believed to be a friend of war. Individuals fight and kill one another. The last *Gadaa* grade, *Duuloo*, is full of war and famine. *Duuloo* has the nick name "*bututtuu*"--tatter. What is interesting is that the Oromo have tried to adjust themselves to the features of these periods. They try to prepare beforehand and avoid famine and suffering (Infs: Dalassa; Dawo; Dhabassa; Duresso; Gamtessa; Lemo; Nagara; Ulfata).

The *Gadaa* system served as the major time regulator for scheduling rituals, assemblies, intertribal warfare and peace process. In this case, then, environmental history can be constructed on the basis of the past record of the five *Gadaa* grades. The informants underscore that generally the natural environment is well protected in *Roobalee* and *Horataa* owing to the existence of rain. Some individuals plant trees. War and famine

cause deforestation in *Michillee* and *Duuloo*. In short, the analysis of the history of *Gadaa* cycles may help us to construct the environmental history of a particular area. On the other hand, time reckoning experts in Oromiya predict future events. This is known as *Dhaya Ilaaluu* in Ambo. Time reckoning experts examine the relative position of the moon and *Jeyii* (the seven sisters near the constellation Orion) after twenty-eight days, and determine the day and the month astronomically for different purposes. Each day has some divine element in it that makes it good or bad. Individuals who were born on one of these days will be affected by the fate of this day. The following saying conveys this. "Namni Ayyaana saree dhalate otoo qabuu kadhata"--"One born with the spirit of a dog always looks for others hand although she or he has of his or her own.(sic)" The Oromo do not promote a fatalistic conception of events. They say that what happens in the present is in no way fated by what has happened in the past. The Oromo people want to build a new future after reflecting on their past experience. Hunger and misfortunes, which dominate one season, are not taken as eternal. The people strive to prevent the recurrence of these events in the future. The Oromo believe that they can influence the actions of *Waaqa*. When parents of individuals born on bad days perform traditional ceremonies and pray to *Waaqa*, the status of the concerned individuals will improve. If a poor person works hard and leads his or her life in accordance with the order of *Waaqa*, he or she can be rich. On the contrary, when a rich person is full of conceit, and despises *Waaqa* and the poor, *Waaqa* will punish him or her. In this case, then, *Waaqa* can change the destiny of human beings.

Time reckoning experts are capable of determining propitious days for social, economic, and religious activities. They have special names for the first twenty-seven days. The first day of the month is known as *Inikkaa*. It is believed to be the day of lightning. According to oral tradition, *Waaqa* quarreled with a devil and wrongly struck a human being with lightning. *Sorsa* is characterized by poverty. *Alkajima* is associated with war. One born with the star of *Alkajima* will go to war and destroy his enemy. He can only beget one child. A person born with a star *Arba* is worthless. If s/he constructs a house, it will be demolished soon. *Awalakka* is a star of buffalo. A woman who marries a man on this day will be a slut. If a boy is married to a woman on *Basa*, his spouse would be dirty, and likely to weep all the time. Her house will leak throughout her life. A person born with the star *Coora* would become a hero. He is the father of war. *Coora* is supposed to be good for crops and marriage. *Dureettii* is supposed to be a good day. The star *Dullattii* is believed to be good for marriage. Three consecutive days are called *Salbaana*. If one marries on one of these days, his spouse, and his brothers and sisters will quarrel and kill one another. *Salbaana* is supposed to be characterized by evil. The star *Gardaadummaa* is unfavorable to a horse. A horse will die suddenly with its beautiful saddle. The star *Wata* is favorable to a snake. The spirit of a woman married to a man on this day is believed to be dangerous for her spouse. Her first three spouses are expected to die. Her spirit can only accept the fourth husband. The star *Rumruma* is favorable to a hyena. A hyena does not go hungry on this day. *Lumaasa* is conceived as the star of a lion. People eat meat on this day. As a result, cattle cannot breed well. *Gidaada* is the day of *Gadaa* and blessing. A girl married to a man on *Gidaada* likes

song. *Ruda* is the spirit of sheep. A girl married to a boy on *Ruda* is believed to be dirty but rich. A girl married to a boy on *Areerii* is believed to be neither rich nor poor. She will have milk. *Aduula* is the star of a thief. No one can put a thief under control. Three consecutive days are known as *Garba*. The first *Garba* is believed to be movable, the middle *Garba* is immovable and the last *Garba* is cool. If a boy marries a girl on one of these days, the family of the latter is likely to be destroyed, whereas the family of the former will flourish. *Bita* is the star of small gazelle. A girl married on this day will only give birth to one child. The twenty-eighth day does not have a special name. In Oromo calendar, the days move backward. If the first day *Inikkaa* starts on Monday this month, it will be Sunday the coming month. Not every Oromo can be a time reckoning expert. Specific clans or individuals who are blessed by Waaqa and for whom the law is beaten at Bokkuu Cittuu can only understand the position of the moon. If the time reckoning experts fail to follow the necessary procedures, they can not determine the days. The informants state that *Dhaya* is the most reliable means of predicting the future (Infs: Blanta; Midhakssa).

The Oromo also believe that when something such as a scarp coil round the sun, a rich person will die soon. The songs of children are also believed to indicate what will happen in the future. It is believed that songs are first introduced by devils (Inf: Takele).

As I have argued elsewhere (1997a), the Oromo use the flowering and fruiting trees and voice of birds to anticipate the behavior of the natural environment and the weather conditions. The Oromo have realized that when Agamsa fruits well, *xaafii* will sprout well. When *Angooxoo*, *Mi'essaa*, *Biitee*, *Harbuu* and *Goraa* fruit well, wheat, sorghum, barley, bean, pea, and other grains will grow well in fall. When *Xuuxoo* (*Caanarina eminii*) sprouts well, there will be flowers the coming season. If these trees do not fruit well, the Ambo Oromo expect famine and other problems, and do everything possible to avert these problems (Infs: Angassa; Dhabassa; Duresso; Fufa; Galata; Lelissa; Nagara Fite). The Oromo peasants do not expect honey in the future, when trees and grasses fail to blossom on time. When Bamboo trees unexpectedly sprout, and the *coqorsa* grass changes its colour from green to white within a short period of time, the existing government is likely to be replaced by a new government (Infs: Lelissa; Ragassa). When *Heexoo* tree sprouts well, the coming season is believed to be characterized by prostitution. When *Caraanaa* plant sprouts well, famine is expected in the future. The growth of *Garbii* trees, however, implies happiness and prosperity (Infs: Erko; Fitale; Tirfessa).

The informants also state that heavy rainfall for a long period of time can lead to crop failure and famine; crops will rot and be overgrown by weeds. When human beings and animals frequently drown in the river, because of unexpected heavy rainfall, war and famine will be expected in the future (Infs: Abdissa; Berta; Bekele; Dabala; Galato). The delay of rain can also result in crop failure. When cabbage needs more water than usual to be boiled, the coming season is believed to be full of happiness and wealth (Inf: Dhabassa).

According to informants, individuals make short-term decisions on the basis of the voice of various birds, particularly *faroo* birds. Some individuals are able to understand the



meaning of the voice of birds. By hearing the voice of a flock of birds, the Oromo can suspect that the birds saw a snake, wild animals, or other things, and take all the necessary measures to avoid danger. According to my informants, when birds make sounds like *kifkifo* and *tintifo*, rain will come soon. The roar of EMU and *Aa'ee* heralds the coming of rain. EMU and *Aa'ee* will eat earthworm thanks to the rain (Infs: Abdissa; Ragassa; Taressa). When birds make sound like *hinqucuciin* and *kokoko*, they understand that their day is full of happiness. The voice of birds, according to informants, can convey any other message (Infs: Dabala; Dinagde).

Moreover, *Tumsa* (white birds) move to the war front in order to eat corpses. When they move to the north or the south, it is believed that the war is going in that particular direction. The Ambo Oromo also confirmed that the movement of a group of butterflies implies migration. When they move northwards or southwards, a military confrontation between opposing forces will be expected. For instance, in 1991, the Ambo Oromo observed that a group of butterflies migrated to west (Wollaga), the place where the military government and rebels were involved in war. After three months, these butterflies returned to the north, with the forces of Ethiopian People's Revolutionary Democratic Front (EPRDF), the dominant member of the present Ethiopian government (Infs: Erko; Gudeta; Nagassa; Tirfessa).

When animals turn their nose to the direction of the wind and sniff, rain is expected. When a hyena howls twice, four times or ten times in a strange way, somebody is expected to die soon (Infs: Duresso; Erko; Fitale). It is believed that when dogs come and bark facing skywards, someone will die soon. When dogs roll on the ground, a domestic animal is expected to die (Inf: Gonfa).

It is interesting that there are some persons who are believed to read *Moora* (entrails) and predict future events in a person's life. According to tradition, *Waaqa* gave a book to the Oromo. Unfortunately, a cow ate this book. *Waaqa* then gave entrails to the Oromo to use it for predicting future events (Inf: Lelissa). Entrails have a tendril of life, offspring, wealth, umbilical cord and other features. I have been informed that individuals who can read entrails died some time ago. In fact, there is one person named Obboo Disassa Waktole in Maaruuf Peasants Association. This practice is common among Boran Oromo. The Boran reads the lines of the entrails. When the entrails appear as a hole, it indicates that someone will die soon. A hole is a symbolic representation of a grave. When the lines of entrails come together, war is expected in the future. The Boran Oromo used to slaughter a calf that has never grazed grass, and read its entrails. The *Hayyuu* is required to slaughter a calf and ask experts to read the entrails. For the Boran Oromo, this is a reliable method of prediction (Inf: Dagaga Cuche).

The light from the torch of *Masqala* (new year ritual in mid-September) is believed to convey a message. If the light looks dark or red, there will be rain in fall whereas, if the light looks white there will be no rain. If rain extinguishes the torch, prosperity is expected in the future. The people also believe that if they light the torch in moon light, thieves will disappear in the future from their locality in day light (Infs: Basura; Fufa; Gonfa; Nagara).

Some individuals claim to have the power to make the *Ekeraa* (the spirit of a dead person) speak with relatives of the former. They are known as *eker dubbiftuu*. According to tradition, individuals exist in the form of a spirit called the *Ekeraa*. A person is required to pray to and to give offering by slaughtering an animal every so often to one's parents' *ekeraa*. My informants, however, did not talk about suffering after death. I have been informed that the spirit of a dead person can speak about how the person died, why did s/he die, his/her unfinished plans, and his/her misdeeds. The spirit can ask the relatives of a dead person to pay his/her debts and to perform any other task. Many Oromo believe that this is true. The following concrete case is worth considering:

One day a certain person forgot his purse with gold in one of Guder's hotel. A bed attendant, who refused to admit it, stole his purse. The person prayed to *Waaqa* and left Guder. The bed attendant died after one year. Then his mother approached *Eker Dubbiftuu*, and communicated with the *ekeraa* of her son. The spirit informed her that her son died because he stole some one's purse and failed to tell the truth. The spirit asked the mother to pay the money and return the gold to the owner. However, his mother could not find the owner. She realized that he passed away in Negele Borana. Consequently, she went to *Bokkuu Cittuu* and asked *Gadaa* officials for advice on 29 November 1998. The latter advised her to be ready for traditional rituals (Infs: Gutama Mitafa; Urgessa Bayissa).

Some peasants doubt the role of *Eker Dubbiftuu*. They said it is impossible for the spirit of a dead person to speak (Infs: Gamtessa; Ragassa). Obboo Ragassa reported that he approached *Eker Dubbiftuu* and they tried to deceive him.

Unfortunately, *Eker Dubbiftuu* is non-existent in the study sites. My attempt to interview Obbo Garomssa, a well-known *Eker Dubbiftuu* in Gatiro locality in Dandi district, was not successful, for he was sick during my fieldwork. As some peasants stated, I am not sure whether I can accept the claims of *Eker Dubbiftuu*. Further research should be undertaken to understand the real nature of *Eker Dubbiftuu*.

Although it is very difficult to defend the soundness of their belief, some peasants also report that the dreams of some individuals are reliable. They dream about the problems that will come to a person, and how to avoid life crisis (Inf: Gamtessa).

There are rainmakers in Ambo, whom society reaches out to propitiate *Waaqa* and the spirits who are believed to be the guardians of the environment. Obboo Dhabassa, a one time *Caamsituu*, (a person who can drive rain away), told me that he failed to follow the rules and lost his knowledge. *Caamsituu* is forbidden to eat flax, intestines, lamb, chicken, and egg, and is forbidden to drink water. When he performs his duty, he cannot bathe. In other words, water should not touch his body. The *Maallima* is a person who is supposed to bring rain. During the absence of rain, people engage in supplication for rain. The Ambo Oromo carry necklace of beads and pray to *Waaqa* at *Bokkuu Cittuu*. The ritual is intended to reconcile the environment and *Waaqa*. The rainmakers are from specific clans and are supported by *Gadaa* officials.

In general, the Oromo people use different indicators so as to have a positive relationship with the natural environment in the future. They take the necessary measures to avert famines and other crises. They try to respond to both natural and historical processes.

## **8. KNOWLEDGE, POWER AND THE TRANSMISSION OF ENVIRONMENTAL KNOWLEDGE**

This chapter deals with the following cluster of questions: What is the relationship between power and knowledge? Whose knowledge counts in local environmental decisions – of the rich or poor? male or female? old or young? whose are not? Why? Is knowledge open to every one, and does its acquisition depend simply on individual aptitude in Oromo society? How does environmental knowledge transfer from one generation to another? What is the appropriate age to receive instruction concerning all aspects of life? Are there cultural limitations in the acquisition of knowledge?

### **8.1 Knowledge and Power**

Indigenous environmental knowledge is largely derived from peoples' interactions with their environment, and is equally based on the processes of social interaction. Knowledge is socially and politically constructed. To put matters another way, although the people have developed their knowledge through experimentation and observation over centuries, knowledge has been influenced by social relations of power. "Knowledge processes are embedded in social processes that imply aspects of power, authority and legitimating; and they are just as likely to reflect and contribute to the conflict between social groups as they are to lead to the establishment of common perceptions and interests" (Long and Villarea 1994, 49). In both industrialized and the so called developing countries, those who have power and the potential to decide and act with autonomy define and promote knowledge so as to fulfill their vested interests. The post-structuralist French philosopher Michel Foucault convincingly states that "the criteria of what constitutes knowledge, what is to be excluded and who is designated as qualified to know involves acts of power" (Foucault 1971). That is why Western scholars and powerful capitalist countries doubted whether the indigenous knowledge of various people in developing countries is really knowledge. Consequently, they have tried to apply modern knowledge as a model of truth to other cultures and socio-economic realities.

Similarly, those individuals who have had access and control over resources have tried to impose their will over the poor sections of the people in developing countries. In my present study, I have found out that this is common in Ambo, particularly before the 1974 revolution. The people accept the ideas of rich peasants as valid even if they talk non-sense. One of my informants states that "Sooreessi afa qodaa afa loqodaa yoo ta'eyuu Obboo abalu jedhuun; dubbiisaas ni fudhatama" (Inf: Merga Jara)--"Even if the rich is nonsensical, he is addressed as Mr. so-and-so and his argument is acceptable." Thus, wealth matters most and appears as the measure of knowledge. The Oromo said,

*"Namni amma jirru issati ga'a"* (A person is as worthy as his/her wealth). On the other hand, the poor talks sensible things but often he is not accepted. Even the relatives and the mother of a poor person don't like him/her. As the saying goes, *"Namni omaa hin qabnee fi namni harka cabaa fira hin qabu"* (A person who does not have anything and a person who has a broken hand don't have relatives) (Infs: Eticha; Lami). During public discussion, the poor are advised not to speak. The following saying reflects the position of the poor in the community. *"Dubbiin iyyeessaa lama: tokko karaatti hafti, tokko garaat hafti"* (Inf: Erko). (The talk of the poor is two: one does not hit its target, and the other is suppressed within him). Nobody takes the argument of the poor into account. The following proverb indicates that the poor is knowledgeable. *"Bishaan mishaan ganna dhufa loontu namaa hin dhugu malee, gorsi mishaa hiyyeessatu dubbata namatu jallaa hin dhageenye malee"* (Pure water is in abundance during the rainy season, although cattle refuse to drink it) (BABO 1996, 22). Useful advice is available with the poor but people do not listen to them." Although the poor have a profound knowledge about the matter under discussion, she or he prefers to be silent so as to avoid embarrassment. The following proverb also reflects people's attitude towards the poor and the rich: *"Sooreessi dheeraa tolaa akka jabbi argutti, deegaan gabaabaa tola akka carqiin ga'utti"* "It is better for the rich to be tall so as to see his calves from afar as it is better for the poor to be short so that his cloth would cover him". This proverb suggests that the rich person control his or her environment because of his or her wealth. Whatever little things the poor own is better for him or her. Thus, there has been a hierarchical structure among the local people that has promoted superiority complex on the basis of wealth.

However, negative attitudes towards the poor have begun to change. After the 1974 revolution, poor peasants have begun to listen to one another (Infs: Erko; Fufa; Setegn).

Linked to the question of power, the Oromo culture does not seem to be favorable to women. The role of man and woman in the production and transmission of knowledge has been influenced by social relations. In Ethiopia in general and in Oromiya in particular, very few women participate in politics. The proverb "Women in the kitchen/pantry, man in the court" shows how women are excluded from politics. In Ambo, housework is supposed to be the vocation of women. It is the responsibility of the woman to provide household fuel and collect domestic water as part of the day-to-day household work. The following Oromo proverbs show that women are not knowledgeable: *"Dubartiin dheertuu qabdi malee beektuu hinqabdu"* (Woman can grow tall but without wisdom). *"Dubartiin dubbii hintolchitu soora tolchiti"* "Women cannot speak intelligently, but she can prepare good dish in the kitchen) (BABO 1998, 142). *"Dubartiin beekaa dhalti malee, waan beektu hin qabdu"* "A woman gives birth to knowledgeable persons, but knows nothing) (BABO 1998, 708). Moreover, the following proverbs confirm how women are often subordinated to men. *"Dhiira Malee, dubartiin mana hin bulchitu"* (A male and not a female administers a household) (BABO 1998, 683). *"Mootiin nadheenii, bishaan ol yaafti!"* (The leadership of a woman makes the water flow upwards) (BABO 1998, 445). This means that a woman cannot play a leadership role. *"Dubartiifi harreen ulee jaalatti"* (Woman and donkey like to be beaten). Culturally, the aggressiveness of men appeared as a token of strength.

The following short folktale also demonstrates how women are despised in the Oromo society. It refers to the talk between a visually impaired old man and his neighbor.

Neighbor: A human being is walking over there.

Old Man: Who is walking over there?

Neighbor: A woman.

Old Man: Go away, a woman is not a human being (Inf: Dhuguma).

There are cases in which a woman is considered more useful than a useless man. Consider the following saying. "*Heebooo gadheedhaa mannaa ulee ceekaa qarrachuu wayya, ilma yartuudhaa mannaa durba gaarii uummanii soodaatti irkachuu wayya*" (It is better to have a sharpened *Ceeka* stick than a useless spear as it is better to beget a good girl and be supported by a son-in-law than having a useless son). It is also worth noting that there have been some attitudinal changes towards women since the 1974 Ethiopian revolution.

The foregoing discussion demonstrates that the poor and women have little say in local environmental and developmental decisions in Ambo. The poor were not allowed to improve the quality of the environment. In the past, they were forbidden to plant trees and to construct good houses. The poor thus used "the hidden transcripts of the weak" to transmit their invaluable environmental knowledge to their children. "Such hidden transcripts may be expressed openly, but in disguised form, through rumor, gossip, folktales, songs, gesture or jokes. It is only through such forms of communication that hidden voices can be given some countervailing force against more powerful actors" (Scoones and Thompson 1993, 17). Women are considered as inferior producers. Men have the right to transfer their resources to other men. In short, traditional attitudes towards the poor and women have negatively affected the natural environment.

## **8.2 From the Past to the Present: The Transmission of Indigenous Environmental Knowledge**

Among non-literate people, environmental knowledge is embodied in their social norms, myths, legends, religious symbolism, folktales, arts, proverbs, folk songs, jokes, poems, riddles, dramatic rituals and so forth. These serve as data for historical reconstruction, analysis of environmental changes and environmental philosophy. As Ba convincingly argues, "oral tradition is the great school of life, all aspects of which are covered and affected by it" (Ba 1981, 168). Oromo oral literature, for instance, offers a unique opportunity to understand the historical development and transmission of environmental knowledge. The absence of a body of writing among the Oromo does not in itself mean the absence of environmental history and ethics. The Oromo convey their environmental knowledge through a variety of oral sources. "In the case of the Oromo—a corpus of oral sources can be categorized as traditions referring to historical origins, migrations, wars, and settlement" (Tesema 1994, 984), records of land heritage, moral principles, social and political life, God and the relationship between human beings and natural environment. In Ambo, fathers and mothers have a prodigious memory, and advise children to have a correct understanding of the basic rules and procedures of traditional religion. Children are advised to take blessings from their parents, to develop positive

values towards the environment, to respect their parents, and their culture, to avoid immoral acts, such as telling a lie, stealing, murder, to worship *Waaqa*, and to plant trees. The good and bad deeds of various individuals and the respective positive and negative consequences are presented to the children (Infs: Dagaga Kana'a; Emanssa; Nagara Fite). Accordingly, environmental education begins in each and every family. The teaching and advice of the elders and fathers is largely expressed through proverbs. A proverb is considered the lifeblood of arguments. There are proverbs about proverbs. "*Dubbiin mammaaksa hin qabne, ittoo soogidda hin qabneen qixeedha*" (As cheese provides sausage to the bread, so does a proverb to talk) (BABO 1998, 144). "*Jabbiin bifa kormaati, mammaaksi bifa dubbiiiti*" (Proverbs give colour to a talk as the bull father gives colour to the calf) (BABO 1998, 329).

The Oromo people urge their children to be knowledgeable and wise. The following proverbs underlie the values of knowledge for the continual existence of the society. "*Dallaa ceekaa hi qabne raase qileensi, raase qileensi, lammii beekaa hin qabne nyaate bineensii, nyaate bineensi*" (A fence without a strong *ceekaa* tree can easily be shaken by wind as a relative without knowledgeable person can easily be eaten by wild animals). The Oromo think that it is very easy to destroy people without knowledgeable person. "*Gaachana gaallee hin qabne qabannaan nama dhiba, lammii beekessa hin qabne faarsuun nama dhiba*" (It is difficult to use a shield without a handle as it is difficult to praise a relative without knowledgeable person). "*Allaattii shanii mannaa risaa tokkicha wayya, wallaalaa shanii mannaa beekaa tokkicha wayya*" (A hawk is better than five vultures as a single knowledgeable person is better than five fools). A hawk seems to be cleaner than vultures. Vultures eat rotten things, which a hawk does not eat. "*Heebo yartuudhaa mannaa hofaa qabachuu wayya, obbolaa yartuu baay'eedhaa mannaa kophaa dhalchuu wayya*" (It is better to have a sharpened wood than a useless spear as it is better to be born alone than having many useless brothers and sisters). The Ambo Oromo also teach their children through the medium of stories, fables, and folktales. The following concrete story about a certain Mane Bulli, one of the leaders of Ambo Oromo in the past, is worth mentioning.

After getting very old, Obboo Mane was unable to lead his people. He thus called his clan for a meeting by preparing a splendid meal with many things to eat and drink. During deliberations, he asked his relatives the following four questions: What is death without mourning? What is shouting that does not have anybody to help? Who is loved by people without doing anything for them? Who is hated by people without hurting anybody? All of his relatives failed to answer his questions. Meanwhile he called his elder son, Banti, and informed him what was going on. His son promised to answer his father's questions. He said that sleep is the death, which does not have mourning. When one falls asleep, one cannot hear anything. Sleep is similar to death. Shouting, which does not have anybody to help, is that of cockcrow. A cock used to make a loud cry but nobody would bother about it. The one who is loved without any contribution is a little baby. Everybody likes to kiss a baby. It is an old person who is hated without causing any harm to people. Obbo Mane then asked his relatives to accept his son as the forthcoming leader, for he is too old to be a leader in the future. His relatives endorsed his suggestion (Inf: Duresso).

Oromo children are expected to gradually improve their knowledge. That means, understanding starts at an early age and develops gradually. Early childhood proper care makes a very serious difference after one has fully grown. The appropriate age to begin instruction is 7 or 8 although it is not fixed. Some children can receive instruction before or after the stated age. Some children are trained to do specific household tasks starting at age three or four; through the years girls learn cooking and cattle tending while boys learn horse riding and spear throwing. Children learn more about their environment by tending siblings and cattle, helping out in cultivation. Some children are allowed to learn about medicinal plants, hunting practices and so on. Every Oromo is expected to learn war tactics, politics, ritual, law, administration and others during various *Gadaa* grades. Young men enter the *Gadaa* or *Luba* at the age of 40 years with all the necessary knowledge to handle the responsibility of administering the country and the celebration of rituals. Male members of the society are required to be trained in warfare including equestrian skills, archery and the martial arts. The following proverbs emphasize the value of proper training. "*Inn cadheedhaan hin beekne haarrii dhaanuu hin beeku*" (One who cannot understand during his or her youth cannot understand during his or her old age). "*Korma mowu gooranatti beeku*" (A strong bull is known while a calf in a stable.) "*Guddisa badduun, mataa jallatti*" (Someone who is not brought up properly, his or her head cannot be straight) (BABO 1998, 218). "*Gonfoon chalqaba baddeet murraan mataa hanqatte*" (If making of a hat spoiled from the beginning, when completed, it cannot cover the head), goes an Oromo saying.

The Oromo wisely advise their children without capitalizing on their mistakes. They use proverbs to incite them to be strong and wise. It is worth considering the following proverbs and sayings: "*Ennaa iriyaan qayya ulattu mana gubdi sittii fakkaatee? Ennaa iriyaan akkasitti hojjattu maal sittii fakkaatte akkasitti hin hojjattuu?*" (When your peer smokes incense, do you think that she or he is burning the house? When your peer performs a good work, what do you think? Why don't you work in the same manner?). "*Badhaadharra qaaniif loon tiksu, jedhe Basharee Adaamii*" (A certain Bashare Adami said, before becoming wealthy one has to dare to look after cattle). The message of this saying is that one cannot be rich out of the blue. "*Ilmi bara hin fakkaanne du'ee lafa haa fakkaatu, jedhe Burayoo Abbaa Gosaa*" (A certain Burayoo Abbaa gosaa said, a son who does not live according to the time has to die and get buried). Burayoo was a wise man in Qellam locality, Wollaga (Tesema Ta'a, personal communication). Burayoo underscored that one has to adapt to the conditions of his time and environment. "*Kan haatti maagii hin foone intalli dirii footii? Kan abbaan ofii hin goone gandi maal namaa gootii?*" (Can a daughter whose mother cannot make a simple spin make the complicated one? Can neighbors help someone who does not help himself or herself?)

In fact, when the young refuse to accept the advice of their parents, elders, religious leaders and other persons, and society will criticize them. The elders urge them to appreciate their advice. They try to convey that one who understands and makes use of a story is better than a storyteller, though the latter gave birth to a story like a pregnant woman. Precisely because, if the latter fails to accept the advice, it will turn out to be worthless (Inf: Badhane). The Ambo Oromo tell fables to their children in order to emphasize that failing to accept the advice of elders will result in negative consequences. The following fable about an old hyena is an interesting example.

A certain hyena brought up three children who were called *Ganama* (morning), *Guyyaa* (day), and *Galgala* (evening). Eventually, the hyena got old and became weak to move from place to place. The three children then advised their father not to go out of their den, and promised to provide everything necessary for its life. One day the three children planned to look for something to eat. Ignoring their advice their father also followed them. In the meantime they saw a horse, and tried to eat it. The people then tried to chase them out of their homestead. The three children easily fled and left their father behind. The old hyena asked *Ganama* to wait for it. *Ganama* refused to do so on the ground that its father refused to accept its advice in the morning. The old hyena then asked *Guyyaa* the same question. *Guyyaa* replied that it can not help the old hyena for it has warned the former during the day. The father desperately appealed to *Galgala*. Nonetheless, the reaction of *Galgala* was similar to its brothers. It reminded the father that it has already advised it during the night. Finally, the people killed the old hyena. By ignoring the advice of its children, the old hyena disappeared for good (Inf: Duresso). This story shows the didactic and subversive function of story telling, which provides "ritual and artistic space in which it becomes relatively safe to say things which may not be acceptable if said directly and without 'masks'" (Bennet and Cross 1993, 44).

What has been discussed so far confirms that the Oromo people have preserved indigenous environmental knowledge even without a written record. As Momoh persuasively argues, "[P]roverbs are to the traditional African what a book is to a student; he studied and mastered proverbs just as a student studies his subject matter in books. Proverbs are to the traditional African elders a pedagogical instrument to educate the youths just as the modern formal schooling system is an educational forum for instructing the youth" (Momoh 1996, 60).

It would be, however, wrong to underestimate the contribution of written sources to keep accurate records of environmental knowledge. Written sources are essential to preserve the memory and the wisdom of indigenous environmental experts. I share the view held by Appiah (1995) that written sources can help us to consider general claims, and to foster the intellectual division of labor. Appiah writes "[i]n the absence of writing, it is not possible to compare our ancestors' theories in their actual words with ours" (Appiah 1995, 13). I sincerely think that both oral and written sources are important to preserve and reconstruct environmental history and ethics.

Also, the Oromo advise their children to avoid the unlimited use of resources, and to think for the future. They say "*Namni boru hin beekne hardha qofa sagal nayaata*" (He who does not think for tomorrow eats nine times a day). "*Namni kan darbe hin beekne, kan dhufu hin beeku*" (A person who does not know the past will find it difficult to predict the future) (BABO 1998, 497). "*Boolli guyyaa argan halkan nama hin nyaatu*" (A hole seen during the day does not swallow a person during the night) (BABO 1996, 168). "*Hantuunni boolla lama qabu hin du'u*" (BABO 1998, 717). (A rat with two dens will not die). This saying indicates that one who saves at present will not starve in the future. "*Ifaan guurratanii, dukkanaan daakkatan*" (One who collects crops in day light will grind during the night) (BABO 1998, 293). "*Tarkaanfachuu dura lafa laallachuu wayya*" (Before you stride, better look at the ground where your foot rests) (BABO



1996, 288). These and other proverbs help children to think twice before performing their duties.

Although wisdom as a general capacity is given an important place in Ambo, it is regarded as worthless and harmful when it surpasses the requirement. As the proverb goes, "*Gamnummaan baay'atte, gowwaa nama gooti*" (Being too much clever will turn a person into a fool) (BABO 1996, 193). Similarly, some Oromo elders say "*Jiruun mana doqnaatti hafeet, lubbuun mana luknaatti hafeet, cubbuun qe'e gamnaatti hafe*" (Wealth remained in the house of the greedy, safety remained in the house of cowardice and sin remained in the home of a wise man). For the Oromo, wisdom should be used with care. Some wise men try to deceive the people to fulfill their desire. The Oromo consider this immoral. The Oromo also praise sustainable use of resources. They do not, however, promote greediness.

The other important point is that knowledge, for instance, information concerning different aspects of society and nature is transferred from one generation to the next through observation and participation. The young learn different practices by observing and participating in various economic, political, and religious activities. They gather with the Oromo elders and ritual leaders in the open air in a meadow under the *Odaa* (*Ficus gnaphalocarpa*) tree and other trees. They observe and learn what is going on during proceedings (Infs: Bayissa; Emanssa; Lelissa; Takele; Tsedale, Tura).

## 9. INDIGENOUS ENVIRONMENTAL KNOWLEDGE AND INTELLECTUAL PROPERTY RIGHTS

In this chapter, I will examine how intellectual property rights have been conceptualized and practiced in modern society. A preliminary attempt will be made to show the possibility of extending intellectual property rights to peasants.

There are two types of property objects, namely tangible and intangible property. While physical objects such as land, household goods, individual animals or herds of animals belong to tangible property, intangible or intellectual property objects include a list of abstract objects, such as patents, copyrights and trademarks (Oksanen 1998). When someone has a property right, she or he has the right to use what is owned, to exclude others from doing so, and to transfer the right to another person (Stare 1972, 200-207). The owners of tangible property have permanent rights to control and use it.

Intellectual property objects are abstract and can be protected by certain institutions and laws. The relationship between individuals and property objects are determined by property right regimes. The purpose of property right regimes "is to manage people in their use of environmental resources" (Bromley 1991, 21).

Intellectual property rights are aimed to "reward and provide recognition for intellectual creativity" (Shiva 1997, 9). To put matters another way, intellectual property rights protect products of the mind. In particular, patents are a part of the intellectual property rights and "are state-granted and legally constraining protection for inventions, and through them the patent holder appropriates an exclusive right to an abstract object such as the formulae for penicillin and its derivatives" (Oksanen 1998, 20). The patent

system is designed to incite individuals to promote creativity and protection of mental achievements about which are neither possessions of natural objects nor discoveries of biochemical qualities in wild organisms. "Consequently, patents are to be granted to those clearly identifiable people who have invented things or processes that are novel, non obvious and capable of industrial application" (Oksanen 1998, 5). This shows that Northern countries claimed property rights on plant variety for a patent of an invention of an industrial product, e.g., novelty, industrial application and originality through the modification of the plant variety's characteristics and quality (Nijar 1996, 76). The patent law of Northern countries shows that the discovery of a product of nature, and the knowledge pertaining to it are not supposed to be patent able, for they lack *invention*. According to Stenson and Gray, "with traditional knowledge, however, there is no single act of creation: traditional knowledge is not the discovery of a single person or group of people, but the result of centuries of collective experience...in which case there was never any one person or group of persons entitled to private property in this knowledge" (Stenson and Gray 1997, 190). Western countries and corporations owe little value to the knowledge of different plants that serve as the bases of plant-based drugs for the pharmaceutical industry. They believe that "Third World" people do not have intellectual rights of biodiversity but property right derived from a geographical accident, and they can be entitled to geographical fee for the drugs that are extracted by foreigners from their plants and animals. The knowledge in the resource of indigenous peoples is considered to be common and can be accessed freely. "Communities are in many case de facto or de jure possessors of natural resources. It is disputable whether intellectual property rights can be granted to them" (Oksanen 1998, 19). Accordingly, the people can be considered as creative provided that they can make profits and guarantee them through intellectual property protection. It seems that all value is supposed to be reducible to market prices, and all human activity to commerce. This in turn negates the creativity of other people who do not aim to make profits but to promote the free exchange of ideas as the basis of creativity. Regimes governed by IPRs usurp the creativity of the local people, their knowledge, social and economic lifestyle and practices. "Knowledge and resources are, therefore, systematically alienated from the original custodians and donors, becoming the monopoly of the transnational corporations" (Shiva 1997, 67).

Some Western scholars argue that the "weak" intellectual property protection negatively affects Western industries in "Third World" countries. They lament that protection of one's idea is very weak, and individuals have no confidence to protect their ideas. As Shiva convincingly argues, "[i]nstead of seeing the structural inequality of the international economic system as lying at the roots of Third World poverty, IPR advocates explain poverty as arising from a lack of creativity, which, in turn is seen as rooted in a lack of IPR protection" (Shiva 1997, 11).

Some writers thus underscore that IPRs are formulated in line with the interests of multinational corporations and the reality of social, economic and political organization in industrialized Western countries. In the last quarter of the twentieth century, power is shifted from the hands of national states to the hands of transnational corporations. The political rights of transnational corporations [property and investment, mobility of

capital and technology, control over life forms (patents)] have superseded the political rights of citizens in the world. Accordingly, power and capital are concentrated in corporate hands. Shiva argues that "IPR regimes in the context of "free trade" and "trade liberalization" become instruments of piracy at three levels: resource piracy, intellectual and cultural piracy and economic piracy ( Shiva 1996, 63). Industrialized countries have used multilateral international trade instruments such as the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) to extend their intellectual property rights regimes to plants, animals and microorganism (Nijar 1996, 75). Transnational corporations use intellectual property rights to lay claim to indigenous practices used in developing countries. Under intellectual property rights provisions contained in GATT and enforced by the WTO, exchanging seeds is viewed as illegal trade practice although peasants have freely exchanged seeds for generations. The Uruguay Round Agreement gives patent rights for traditional, communally bred plant to a handful of transnational corporations. Companies that hold international patents for seed varieties ask peasants to pay royalties and buy their own seeds from transnational corporations. Some companies have genetically transformed varieties of crops in preparing their patent claim.

Moreover, rules established in the GATT's recently concluded Uruguay Round regarding trade-related intellectual property rights (TRIPs) and trade related investment measures (TRIMs) are favorable to transnational corporations. TRIPs enable corporations to privatize and patent life forms, including plant and other genetic resources of "Third World" countries. The TRIPs provisions in GATT 1994 "guarantee ownership rights to products made in the laboratories of the North from the knowledge of indigenous peoples and local communities...only the North's industrial model of innovation is recognized; the cumulative collective system of innovation of traditional communities is excluded by the TRIPs provisions" (Nijar 1996, 88-89).

In contradistinction to the proponents of IPRs, this study and contributions of many a scholar confirm that peasants are innovative, and critical students of their environment. They are not passive possessors of biochemical information. They actively participate in the production of knowledge. However, the motive force of innovations is not to amass limitless private profit and wealth. Peasants are primarily interested in fulfilling their basic needs, and solving social, economic, political and environmental problems. In some instances, the members of a certain society are free to use the fruits and inventions of some individuals. "This gave rise to free systems of science and technology, which were there for any one to use" (Tewelde Berhan 1996, 16). This, however, does not rule out the fact that some medical practitioners, time reckoning experts, artisans and other peasants who have unique knowledge are not willing to transfer their knowledge to other people other than to their children. As Tewelde Berhan rightly noted, "[t]hese specialized systems of science and technology developed their own intellectual protection systems, usually in the form of the knowledge being 'unbuyable'" (Tewelde Berhan 1996, 16).

Some writers suggest that the owners of the habitat of a certain species of organism should have a claim to genetic information the species provides. Vogel argues that we should "create legal title over genetic information as it occurs in nature...These

landowners will enjoy rights analogous to intellectual property rights (e.g., patents, copyrights, trademarks, and trade secrets) whenever the information on their land is commercialized " (Vogel 1994, 4). What Vogel is suggesting is that the possessor of biogenetic information should have certain rights to it. In this connection, it has been suggested that property rights should protect both the "human capital" and "natural capital". Timothy Swanson claims, "if one society generates information useful in the pharmaceutical industry by means of investing in natural capital (non-conversion of forest, etc.), whereas another generates information by investing in human capital (laboratory based research and school-based training), each is equally entitled to an institution that recognizes that contribution" (Swanson 1995, 6).

Other writers praise the collective rights of indigenous people. An interdisciplinary team of experts from the "[T]hird World Network, an international group of "Third World" individuals and organizations developed concepts of collective intellectual property rights in 1993 (Shiva 1997, 80). CIP systems recognize the rights of peasants and thereby enable them to protect the biological and cultural diversity of peasant societies across the "Third World" and to protect the free spaces for knowledge systems, which are basis for the local communities (Shiva 1996, 61; 1997, 80). These systems further recognize the value of all knowledge and production systems.

There have been other international attempts to address the property rights in genetic resources. The enactment of an international convention in the early 1960s--the Union for the Protection of New Varieties of Plant (UPOV) heralded the emergence of property rights for commercial benefits in genetic resources (Nijar 1996: 76). The World Food and Agricultural Organization (FAO) also adopted Undertaking at its 22nd session in 1983 in response to the complaints of developing countries about the common heritage of humanity. Free access to basic resources as well as to improved and elite variety is recognized by this undertaking although several industrialized countries ignored this undertaking on the ground that improved materials did not form part of the common heritage of mankind. But Plant Breeders' and Farmers' Rights were recognized in 1989 and 1991 by more than 160 countries as a result of the debates that began in March 1987 meeting of FAO's Commission on Plant Genetic Resources (CPGR) (Nijar 1996, 76-77).

The other significant attempt by the states to tackle the biodiversity loss by means of establishing international rules of governance over biological and genetic resources is the Convention on Biological Diversity (CBD). The CBD recognizes that the states have "sovereign right to exploit their own resources pursuant to their own environmental policies..." (Art.3). Consequently, concerning genetic resources, "the authority to determine access...rests with the national governments and is subject to national legislation" (Art. 15(1)). Farmers' and indigenous peoples' rights were acknowledged as important means of conservation and biological diversity although this has not been fully supported by the existing international mechanisms. Regrettably, international attempts have not changed the existing situation.

I would suggest that if the people in the world are to protect the creativity of nature and of diverse knowledge systems, the dominant IPRs, TRIPs, patents on life, and the

fundamental principles of TNCs should be reconsidered, and changed in favor of the protection of all forms of knowledge. Intellectual property rights whether we call it collective or not, that recognize the rights of peasants, indigenous people and industrialized countries should be instituted. As has been stated, the present IPRs are not inclusive of the innovations of peasants and other indigenous people in the world. The local people should be empowered and supported by the concerned groups. They must benefit from their knowledge of the natural environment and its resources.

## 10. INDIGENOUS ENVIRONMENTAL KNOWLEDGE AND ENVIRONMENTALLY SOUND DEVELOPMENT

In this chapter, I shall briefly look into the notion of sustainable development and the relevance of indigenous environmental knowledge to environmentally sound development. But the detailed study of the notion of "sustainable development" is beyond the scope of this study.

As Worster correctly observes in the 1960s and 1970s, when contemporary environmentalism first emerged, some environmentalists believed that environmental destruction could only be averted by limiting population growth, uncontrolled development of technology, appetite and greed. The progressive, secular, and Western materialist philosophy, on which Western civilization has rested for the past three hundred years, has often been presented as the major cause of environmental degradation. Consequently, challenging the foundation of this philosophy has been claimed to be the only appropriate measure to remove an eminent danger of extinction of humankind and the whole fabric of life on the planet Earth.

It is also worth noting that the first United Nations Conference on the Human Environment held in Stockholm in 1972 confirmed for the first time that environmental problems are global concerns and cannot be solved by one nation alone. Delegates from different nations agreed that development should be harmonized with the environment. The conference established The United Nations Environment Program (UNEP), one of whose objectives is to monitor the global environment (Kupchella and Hyland 1993, 543). During this conference, Maurice Strong, Secretary General of the Stockholm Conference, coined the concept "eco-development" (Brohman 1996, 307), and in subsequent years this concept has been further developed and popularized by Ignacy Sachs (1974), Glaeser and Vyasulu (1984), and international organizations such as the International Union for Conservation of Nature (IUCN) and others (Adams 1990, 51-52). The aim of eco-development is to "change ecosystems in the direction of higher productivity and greater relevance to human needs, while respecting the interdependence between man and nature" (Ambio 1979, quoted in Adams 1990, 52). Eco-development was intended to improve the economic well being of the people without damaging the ecological system. "Eco-development refers to a process which is geared to the satisfaction of basic and essential human needs, starting with the needs of poorest and neediest in society" (Glaeser and Vyasulu 1984, quoted in Adams 1990, 53). The major advocates of eco-development further argue that the adoption of appropriate and intermediate technologies, the encouragement of conservation lifestyles, the promotion

of renewable energy bases and the use of bottom-up, participatory approaches are favorable to environmental sustainability (Brohman 1996, 308). Eco-development approach also alerts developing countries to be self-reliant.

By the 1980s it became clear that radical change was unlikely. According to Worster, "since it was so painfully difficult to make that turn, to go in a diametrically opposite direction from the way we had been going, however, many started looking for a less intimidating way. By the mid-1980s such an alternative called 'sustainable development' had emerged". In fact, the notion of "sustainable development" appeared in the World Conservation Strategy of International Union for the Conservation of Nature (1980). IUCN and the United Nations Environment Program (UNEP) have backed it. Moreover, it appeared in the works of Lester R. Brown (1981). It was believed that the concept of "sustainable development" could integrate environmental issues into development planning.

Here, it should be noted that in the 1980s, countries in the South gave priority to development so as to overcome poverty and reverse global economic inequalities. They thought that concern for environment was a luxury, which only developed countries, could afford (Weizsacker 1994,3).

In contrast, developed countries in the North favored environmental protection. They advised the South to strive for economic growth that would enable them to acquire costly Northern pollution control technologies (Weizsacker 1994, 4; Sachs 1995, 431). Sachs explained the conflicting interests of the Northern and Southern countries during the Rio conference in 1992. "While the Northern countries main concern was about nature, the South, in the run up to the conference, managed to highlight the question of justice" (Sachs 1995, 431).

In 1987, the World Commission on environment and development employed the notion of "sustainable development" in order to avoid the conflicting views of the Northern and Southern countries (Weizsacker 1994, 5). Accordingly, owing to the so-called Brundtland Report, *Our Common Future*, many contending parties have accepted the notion of "sustainable development".

Furthermore, radical ecologists such as deep ecologists<sup>13</sup>, social ecologists and eco-feminists have tried to elaborate the principles of sustainable development. They called for the reexamination of the ends and the means of development. It is worth noting that many environmental ethicists have tried to base themselves on non-Western traditions in order to derive conceptual resources for the new environmental ethics. They have pointed out that Eastern thinking is holistic in the sense that the human and the natural worlds are inextricably entwined within an organic whole. Culture and nature are inseparable. For instance, Buddhism and Hinduism have developed the principle of compassion for all sentient beings (Clarke 1993). Taoism, Buddhism and Hinduism emphasize that humans are linked to the natural environment (De Silva 1993; Ip 1993). Chinese Taoism is a mystic teaching and recognizes the essential unity of humanity with nature and the fundamental harmonization of all things through the balancing of yin and yang (Clarke 1993, 22). Ip (1993) argues that Taoist philosophy can provide the necessary metaphysical underpinnings upon which an environmental ethics should rest

since it teaches that everything is inherently connected to everything else, and recognizes the intrinsic values of natural environment.

Moreover, animism has been practiced by North American Indians. Most of them believe that spiritual forces activate nature. The sacred writings of the Hindus also embodied the principles of animism (Clarke 1993, 17). Callicott (1982) confirms that American Indian representation of nature is more animistic and symbolic than mechanical. Traditional American Indians regard all features of the environment as inspirited. The American Indian conceives nature as an element in which he exists (Momaday 1994). All humans and the non-human natural entities possess a consciousness, reason, volition, and are coequal members of a natural social order. They all have personalities. People belong to a human community and a community of all nature as well. "Existence in this larger society, just as existence in a family and tribal context, place people in an environment in which reciprocal responsibilities and mutual obligations are taken for granted and assumed without question or reflection" (Callicott 1982, 306). All creatures are believed to be the children of one father and one mother. The bonds of kinship, mutuality, and reciprocity bound diversified and complex world together. Callicott maintains that traditional American Indian attitude toward nature provides the foundations for ethical restraint in relation to non-human nature. In other words, American Indians worldviews involve principles of an environmental ethic (Callicott 1982).

Likewise, The Maori people in New Zealand conceive the environment as a community of kin rather than as resources to be exploited. Patterson (1994) contends that the Maori traditions can be considered as symbolic representations of ecological principle.

Other writers seem to assert that some Eastern traditions do not lead to the establishment of a harmonious relationship between humans and the natural environment. Tuan, for instance, doubts whether attitude and values determine behavior. He says that Western humanists appreciate the virtues of Oriental's quiescent and adaptive approach towards nature. In China, the philosophical-ethical precepts of Taoism and later, Buddhism served as the basis for adaptive attitude towards nature. Although Tuan (1968) recognized that old traditions of forest care existed in China, he lamented that both Mediterranean Europe and China have engaged in gigantic transformations of the environment that has led to deforestation and erosion. Forests were depleted for the making of charcoal, export, the construction of old Chinese cities, and to deprive dangerous animals their hiding places. He adds that although Buddhism is responsible for the preservation of trees around temple compounds, it has contributed to the depletion of the timber resources by introducing to China the idea of the cremation of the dead. He underlines that there are intractable discrepancies between environmental behavior and attitude. In other words, what people think is less closely related to how people live (Tuan 1968, 188).

In contrast to Tuan, Callicott argues that the environmental impact of Greek and Roman civilization was consistent with the general thesis that world views substantively affects behavior. He states that "[a]mong the Chinese before Westernization, the facts that Yi-Fu Tuan presents, indicates as many congruencies as discrepancies between the traditional Taoist and Buddhist attitude toward nature and Chinese environmental

behavior" (Callicott 1982, 308). White also states that "[w]hat people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny--that is, by religion" (White 1994, 48-49).

Personally, I share the view held by Callicott and Ames that "[b]ehavior does not flow exclusively from attitude and values; but neither are attitudes and values simply irrelevant to what people do and how they live" (Callicott and Ames 1989, 285). Callicott and Ames seem to argue that the present environmental crisis had its roots in both Eastern and Western civilizations. "Reflection on the ancient record of human depredation and environmental destruction suggests that the roots of our ecological crisis reach far beyond the variable topsoil of intellectual history, whether Eastern or Western, into the common substrata of human nature itself" (Callicott and Ames 1989, 282).

In line with Native American philosophy and the Eastern traditions, deep ecologists have tried to foster a new ecological consciousness and sensibility, which recognizes humanity as one part of the ecosystem in metaphysical, moral and social terms without overlooking the irreducible individuality of human beings (Marshall 1995). They suggest that to realize sustainable development, industrial activities on earth should be reduced, consumption lifestyles should be changed, the size of the human population should be stabilized and wild ecosystems should be restored and protected. According to Naess, sustainable development does not merely reflect the protection of special spectacular items--pounds, wolves, acid-rain, ozone layer and the like but "ecologically sustainable development will automatically refer to the whole planet and not to ecologically arbitrary boundaries of nations" (Naess 1990,90). Deep ecologists advocate that while narrow ecological sustainability is concerned with the protection of humans from great ecological catastrophes, wide ecological sustainability has much to do with overall ecological conditions in which development ensures the full richness and diversity of life forms on the Earth (Naess 1995b, 464; MacLaughlin 1995, 89). Deep ecologists see human population as a problem and call for the reduction of the number of population. Naess criticized the so-called Brundtland Commission Report (1987), for neglecting the population issue. He thinks that without subsequent population reduction, sustainable future development is impossible (Naess 1990, 92-93; Tokar 1988, 135; MacLaughlin 1995, 88). Deep ecologists also argue that recycling, appropriate technology and renewable sources of energy are required to be used by human beings in order to minimize the destruction of non-renewable limited resources. In short, deep ecologists suggest that to realize sustainable development, industrial activities on earth should be reduced, consumption lifestyles should be changed, the size of human population should be stabilized and wild ecosystems should be restored.

Similarly, social ecologists have challenged traditional development approaches. They comment that the latter overlooked the role of cultural traditions, myths, folklore, spiritual beliefs, cosmology, ritual beliefs, ritual forms, political associations, technical skills and the knowledge of a local community for development. This indifference to people's cultural values and cosmology led to the breakdown of local community and its subjugation to the culture of domination (Chodorkoff 1990, 72 and 73).



Thus, social ecology urges human beings to build an ecological, harmonious, and peaceful world. It calls on local communities to become more self-reliant on the basis of their own indigenous resources and talents. Self-reliance promotes interdependence among communities, sustainable ethos in the realms of production and consumption, decentralization in the political sphere, and healthy respect for diversity. Accordingly, social ecologists suggest that ecologically sustainable and locally self-reliant society could be developed through decentralization and community scaled technologies (Chodorkoff 1990, 74-75).

Although various scholars have theorized about sustainable development, it seems to me that much of this effort is wasted. The notion of "sustainable development" has become obscure and controversial. It has been defined in various ways, and thus it is difficult to provide a clear and simple definition. As Brohman rightly observes, "alternative theories of sustainable development often appear contradictory and utopian" (Brohman 1996, 320). Many of the proponents of sustainable development do not address the political economy of the development process and the distribution of power. Hence the concept of sustainable development remains reformist, calling for a modification of development practice. The plentiful "green" talk by politicians and development bureaucrats has not led to enough radical change in ideas, aims or policies. According to Sachs, "'Sustainable development' calls for the conservation of development not for the conservation of nature" (Sachs 1995, 343). For Sachs development experts have used the concept of sustainable development to maintain the ideology of development. Some writers also criticized the Rio Conference. Worster argues that the Brundtland report failed to explain the intrinsic value of nature because "the 'Our' in its title refers to people exclusively" (Worster 1995, 424).

The adherents of development see radical ecologists as antagonistic to development and Third World countries. Particularly, deep ecology is considered as a new variant of Western domination and "neo-colonialism" which favors sustaining spectacular animals over the people. Ramachandra Guha, for instance, states that deep ecology's exclusive focus on wilderness is positively harmful when applied to the Third World, for the protection of wilderness can result in the physical displacement of existing villages and their inhabitants. Therefore, the social consequences of an exclusive focus on wilderness might be different for different countries (Guha 1995).

Johns (1995), on the other hand, charges that Guha is partly wrong in claiming that deep ecology equate environmental protection with wilderness. Because deep ecology recognizes the place of humans in nature, "with regard to places where it is appropriate for humans to settle, how to combine livelihood with environmental integrity is a major emphasis and how to move toward the re-establishment of a real community, embedded in the local system is a priority of the deep ecology movement" (Johns 1995, 255). Naess (1995a) also reveals that deep ecology is not a threat to the poverty stricken people of the Third World. He underlines that there is no deep ecologist who suggests that "Third World People" should stop using any trees or stop any new human settlement in any wilderness whatsoever.

Even though sustaining wilderness is not the single goal of deep ecologists, I am of the opinion that deep ecologists paid more attention to wilderness than to human

communities. I am against the segregation of land from the local population without solving their problem. Deep ecologists did not clearly show how developing countries could alleviate poverty and prevent further environmental degradation. As has been stated earlier, in many developing countries, the problem is not lack of environmental consciousness. The point is that the people cannot protect the environment at the expense of their survival. They have no choice other than to continue to use the already degraded environment. I believe that without paying attention to the needs of the present generation, we cannot consider the needs of future generations, for the future generations are unthinkable without the survival of the present generation. To put matters another way, we have to pay attention to issues of justice in the distribution of resources between the present and future generations.

Social ecologists rightly suggest that decentralization of power, where real authority and resources devolves to local communities, can accelerate the process of development, since it provides greater opportunities for people to participate in decisions that affect their immediate environment. This is fine enough, but the proposals of social ecologists do not seem to go beyond theoretical speculation in a world, which is dominated, by powerful capitalist countries and transnational corporations.

On top of that although one can maintain that indigenous belief systems can be either environmentally friendly or destructive, some Western and Eastern environmental ethicists including, Callicott 1982; Hargrove 1989; Ip 1993; Patterson 1994; Momaday 1994; Marshall 1995; Sessions 1995 and others have overlooked the contribution of Africa to environmental ethics. They either kept quiet or what they said about Africa was rather thin compared with what they said about Native Americans and Asians. Hargrove, for instance, did not say anything about African traditions when he boldly asserted that "[a]n open-minded comparative study of Eastern environmental attitudes and values will enable Western environmental philosopher better to recognize and criticize their most ingrained and otherwise unconscious assumptions inherited from the long and remarkably homogeneous history of Western thought" (Hargrove 1989, xx). I would like to underline that anyone who believes that there is nothing to be learned from Africa is terribly ignorant of Africa or possibly a racist. There is a lot to be learned from those who are sufficiently familiar with the ecological insights of African peasants. An environmental ethicist who overlooks African environmental ethics will make his or her subject incomplete.

One may object that Africa has the worst environmental record on earth and therefore has no contribution to make for global environmental management. Africans have not overcome their own environmental and developmental crisis. As it stands, this seems to be the correct assessment of African environmental record. But the real issue is not as simple as that. One has to examine how and why Africa has faced environmental and developmental crisis before concluding that Africans are environmentally unfriendly.

The foregoing discussion about Oromo attitudes towards the environment suggests that Oromo environmental knowledge can offer a good foundation for modern environmental ethics and science. One may argue that this claim would not stand up well for people who do not share Oromo beliefs. Although this could be a valid criticism, my intention

is not to suggest that Oromo environmental ethics can generate universal principles by which worldwide environmental problems will be put under control. What I am suggesting is that modern environmental ethicists can make use of the wealth of biological and ecological insights and sustainable resources management systems developed by the Oromo people and other cultural groups in order to effectively deal with environmental problems. To put matters another way, Oromo attitudes towards the environment may offer insights for redirecting the behavior of neo-technic societies towards a more sustainable path. Better-said, global environmental problems can be tackled through more cross-cultural and interdisciplinary approaches.

Modern environmental scientists can enrich their knowledge by making systematic ethical inquiry into environmentally sound practical experiences and religious beliefs of Oromo and other cultures. Although moral and empirical claims seem to be of logically different sorts, empirical facts about the natural environment is important for modern environmental ethics. In fact, Hume asserts that we cannot rightly infer any normative claim from any set of purely empirical premises. He was concerned with the distinction between fact and value. He seemed to argue that science cannot be a basis for ethics, and normative policy recommendation cannot be grounded on science. However, experience confirms that "empirical suppositions play a crucial role in moral argument" (VanDeVeer and Pierce 1994a, 9). Science is useful to explore particular issues in applied ethics. "Thus, many explorations in environmental ethics must make good use of the results of biology, botany, chemistry, geology, climatology, marine science, forestry, and so on (both basic and derivative and mixed fields)" (VanDeVeer and Pierce 1994a, 9). Likewise, modern environmental ethics and science may make use of peasant's environmental and agricultural science. As I have argued elsewhere, modern environmental scientists can derive the following lessons from the Oromo environmental ethic: the ethics of preservation, an ethic of production--the fact that without production and transformation of nature human life is unthinkable; the green environment is a *sine qua non* for the survival of all living things; the positive relationship with the environment and the appreciation of the earth as a mother of life (Workineh 1995b, 1997a). Western and other modern scholars should also take cognizance of the fact that mental knowledge, which came from communing with nature, is equally significant for the health of the environment. Hence, "[o]ne thing Western man must learn from the African is that mental analysis and generalizations must come last rather than first in our knowledge of anything, we must first live and tangle with that thing" (Kaboha 1992, 76).

Moreover, modern environmental ethicists and scientists can learn about the nature and specific features of the local flora and fauna, climates, diseases and other threats to health, pharmacological remedies, beekeeping, agricultural and fishing practices from Oromo peasants and other local communities.

The foregoing discussion about Oromo environmental and agricultural sciences suggests that protection of the environment and promotion of economic development are complementary; they are the basis of sustainable development. Peasants use various modes of sustainable resource management, various sustainable methods that enable them to secure food, income, employment, social welfare, diversification of crops, and

preservation of animal and crop species. As a matter of fact, the social and economic activities of traditional societies correspond to many key goals of sustainability. The evidence indicates that many regions of the South contain the seed of their own sustainable future (Noerberg-Hodge and Goering 1995, 23). Furthermore, many writers confirmed the positive role of indigenous knowledge in sustainable agricultural development (Brokensha *et al* 1980; Norgaard 1984; Thrupp 1989; Waters-Bayer 1992; Medani Mohamed Ahmed 1994).

There have been well organized rural institutions from which all members more or less equally benefit in rural Ambo in particular and Ethiopia in general. Indigenous mutual aid associations involve *Eddir* (neighborhood burial associations) and *Iquub* (savings exchange groups). *Both women and men can form Eddir*. The rich and poor individuals have the same status in the *Eddir*. It operates on the basis of elaborate written by-laws. *Iquub* is a saving association where each member agrees to pay periodically into a common pool a small sum so that each, in rotation, can receive one large sum. In rural areas *Iquub* has many economic advantages. When a member faces economic crises he/she will be allowed to collect the pool free of charge. As Dejene suggests, "[t]he *iquub* could be used as a launching pad for savings mobilization schemes (such as savings and credit cooperatives) in the rural areas. Such savings may help the promotion of small and micro enterprises in rural areas where banks are not available" (Dejene 1993, 259). *Deboo*, the village-based mutual help arrangement, is also practiced in Ambo. It is a tradition of supporting each other, especially elders, sick peasants who do not have their own oxen, by groups of friends and neighbors. What interests me is that the social interactions among the members of mutual help organizations are strong. I think that these organizations can be used to enhance environmentally sound development. "Cooperatives which grow out of mutual aid organizations may be better equipped to mobilize the energies of the rural population, and may therefore also achieve better economic results" (Pausewang *et al* 1990, 8). Popular participation in local organizations is essential for self-reliant economic development. Environmentally sound development can be maintained through optimum use of resources, adoption of an integrated development strategies, implementation of local level land use planning, adoption of appropriate farming practices, promotion of public cooperation and environmental education.

However, we need to approach indigenous knowledge and its possessors with caution. As has been stated earlier, many writers have identified the negative aspects of the knowledge of various cultural groups in the world. One might want to look at how things developed in Japan where the dominant religion--Shinto--is basically animistic and would, therefore, be expected to have had a more positive impact on human-environment relations. But, it has, in fact, hardly prevented Japanese industrial development from being exceedingly destructive.

Personally, I do not think that Oromo indigenous environmental knowledge is perfect. It has certain limitations. For instance, in the Oromo culture, women do not have equal status with men. They were considered as weak and ignorant. In most cases, higher education is restricted for males. The Oromo culture supports polygamy, which again restricts the rights of women. This attitude needs to be changed. I think that

environmentally sound development cannot be materialized without active participation of women. In some cases, depending on their wealth and power, some elders and religious leaders may appear as autocratic elitists. They may use their knowledge against their opponents by violating the principles of Oromo religion and ethics. The informants, for instance, report that some *Qaalluu* leaders ask the poor people to provide them with bull and heifer and thereby compel the poor to avoid traditional Oromo religion. The *Qaalluu* also asks the children of the dead persons to be responsible for the mistakes committed by their fathers and grand fathers during their lifetime. Also, some individuals who are responsible to present the case of believers to *Ayyaana* need bribe. The informants suggest that all this should be changed (Infs: Berhanu; Takele). In fact, as Lewis noted, “[t]roubled people bring cattle, money, food, liquor, grain, clothing, pots, kerosene, and all manner of goods to the spirits” (Lewis 1970, 176). Some *Qaalluu* leaders associate themselves with politicians and help the latter to exploit the people (Inf: Merga Anga’a) although the *Qaalluu* does not possess political power. In fact, in the past candidates for the *Gadaa* offices are required to participate in political debates at the *Qaalluu* village since the latter is the spiritual center.

Some peasants and Oromo intellectuals doubted whether *eker-dubbiftuu* could really communicate with the spirit of the dead persons. They said that the so-called *eker-dubbiftuu* is a deceiver (Infs: Dagaga Cuche; Gamtessa) .

Development agents in Ambo and Oromo intellectuals argue that the position of peasants towards holidays should be changed. Most Orthodox Christian peasants don’t work on saints’ days. This tradition hinders the process of development and needs to be changed (Infs: Adanu; Hailemariam). Also, Oromo intellectuals criticized the followers of traditional Oromo religion for sacrificing animals during religious rituals. This, they said, is economically harmful. It does not change anything.

Moreover, although there are exceptions, some peasants hesitate to adopt new technologies, particularly the poor peasants are the last to adopt modern agricultural knowledge. Peasants may not easily adopt new varieties of crops (Infs: Haileyesus; Tujuba). On top of that, indigenous knowledge may not solve wide range problems of the society. It may easily solve local problems. Indigenous technologies are not universally applicable, but are locally grounded.

Thus, peasants can make use of the knowledge of environmental ethicists. Environmental ethicists may alert peasants to understand the long-range effects of environmental degradation which are beyond the purview of local peasants and otherwise unavailable. Peasants by themselves may not meet the growing demands of population on the basis of local knowledge. Modern science and technology are required to increase productivity and to satisfy the growing demands of population.

In any case, indigenous environmental knowledge should be given due attention if we are to promote sustainable development in developing countries. Concern about sustainable development should focus on the environments in which the poor live and from which they draw their sustenance (Adams 1990, 87). The empty talk about sustainable development which has been so far the concern of environment and development theorists should be replaced by concrete measures that will satisfy the

needs of local peoples, and improve environmental quality for both the present and future generations. Development agents in Ambo realized that without taking the knowledge of peasants into account development and environmental plans couldn't be translated into practice. Some development agents reported that initially they tried to impose their ideas on peasants and failed to appreciate their knowledge. Their advice resulted in crop failure. Because by ignoring the basic features of the local soils and crops, they forced peasants to apply the knowledge they received from schools. They now realized that peasants are scientists themselves and can teach development agents and also receive knowledge from the latter. It is noteworthy that development agents and Oromo intellectuals agree that indigenous knowledge should be integrated into modern environmental protection efforts. Unfortunately, the instruments to realize this wish are not in place. I have been informed that in addition to their own duties, development agents are forced to collect tax and promote the political ideology of the ruling party in Ambo. In fact, peasants do not trust development agents and are not willing to cooperate with them. Development agents and their leaders lamented that they faced the same problem during the military government. This suggests that development agents should not be forced to participate in unnecessary activities that may isolate them from the majority of peasants. Both development agents and peasants can learn from one another. The respondents themselves suggested that environmental and developmental problems could be solved through the joint efforts of government officials and peasants, environmental education, protection of natural resources, population control and so on. For this purpose, we need to ask environmentally sound development for what? for whom? run by whom? for the benefit of whom? Can we go beyond utilitarian, economic and anthropocentric definitions of sustainability? How can we integrate ecological sustainability and economic development? How much resource utilization is consistent with conservation?

## 11. CONCLUSION

Oromo traditional attitudes towards the environment have enabled the Oromo to consider themselves as part of the natural environment and take care of it. It is believed that the Earth is the mother of all living things and demands a proper care. The rationale behind Oromo traditional religion has important message for modern environmental ethicists. In many respects, Oromo traditional religion is environmentally friendly, and fosters positive relationship with the environment. The preceding discussion makes it clear that for the Oromo, land is not only a resource for man's utilitarian ends, but also it needs care because it has been given to them by their ancestors, and has its own value given to it by *Waaqa*. Accordingly, the present generation is obliged to preserve it and hand it over to the future generation. The essence of this religious tradition is to live in partnership with the natural environment. It should be stated that this harmony with the natural environment does not rule out the fact that the Oromo have been using it. The fact of the matter is that most of the Oromo people do not abuse nature's generosity by consuming more than what is needed. The Oromo thus believe that the natural environment and human beings are linked together in a web of relationships. There is no unbridgeable gap between humans and supra-humans, *Waaqa* and the Earth.

It is worth noting that although the Jewish and Christian doctrine of creation is presented as one of the major causes of the present ecological crisis (White 1994), some churches in the West call for a relationship of respect and care for nature and ecological system in the last quarter of the twentieth century. I think this is a promising move and conform to the general principle of Oromo religion. As Attfield suggested, "[i]n the United States, most of the Churches are nowadays strongly environmentalist and strong enough to exercise considerable political influence, and even philosophers and ethicists committed to the independence of ethics from religion may need to take all this into account, if only in pragmatic grounds" (Attfield 1998, 79). Therefore, the dialogue between traditional and modern religion can serve as the basis for constructive borrowing to the benefit of both the local people and modern environmental theorists.

It has been shown that peasants in the study sites have perfected indigenous methods of environmental protection through their prolonged struggle with their natural environment. Generally, peasants have been sharp-eyed, open-minded, experimentally oriented and innovative producers. They do not merely transmit ancient traditions from one generation to another generation. They observe, experiment, interpret, and evaluate their own traditions and externally borrowed practices and traditions. In some instances, peasants who live on and by the land are more knowledgeable than modern technocrats about the natural environment. As has been indicated earlier, there are a wide variety of indigenous experts in the fields of agriculture, medicine, climate and so forth.

Not all practices of peasants are environmentally friendly. Some practices should be changed in order to avoid their negative effects on the natural environment. The negative attitude towards women and the attempt to exploit the people in the name of Oromo traditional religion are so destructive and must be changed. To put matters another way, certainly Oromo environmental knowledge is capable of improvement. The possibility of such improvement requires the cooperation of peasants, intellectuals, and government.

Maximum attention should be given to knowledge and skills of peasants in conservation and natural processes in order to promote environmentally sound development. I sincerely think that promoting maximum self-reliance, economic and political control, and environmental sustainability can revitalize local economies. Without the transfer of power and wealth to the rural poor, it will be difficult to avoid environmental degradation and promote conservation based development in the world in which the international political economic system is committed to growth and great inequality.

I would like to argue that peasants should play a role in environmental protection and development efforts. Only by involving peasants at the grassroots level will we have the political strength and will to implement serious changes needed to address serious environmental and developmental problems. Peasants should be encouraged to use appropriate and alternative technologies, renewable resources, organic farming practices rather than chemical based agriculture, drought resistant and the most productive species, and perennial herbaceous vegetation, to maintain biodiversity, adopt new varieties, improve indigenous environmental science and to manage their bees in a more efficient way than with the traditional fixed-comb hives and thereby optimize yields of honey and beeswax. I am not suggesting that indigenous practices should be

romanticized and maintained forever. Rather I would like to underline that we can make use of environmentally friendly indigenous practices.

This study also suggests that those peasants who are exemplary in the area of environmental protection should be given remuneration by the government and possible donors. They should be given the chance to visit peasants in other places to improve their knowledge through mutual exchange. On top of that, the government should financially and technically support peasants to conduct their own research on their environment and to use the land and trees. Modern scientists with varied backgrounds can join peasants who have multidimensional knowledge of the natural environment. Thus the establishment of a research oriented traditional institution is imperative in Ethiopia. Beijing's Institute of Indigenous Medicine and New Center for Ayurvedi Medicine are the two examples outside Africa. Also, the Nigerian Association of Medical Herbalists (NAMH) and the African Traditional Medical Association (ATMA) in Nigeria have played a considerable role in improving traditional medicine. They teach individuals and issue a fellowship certificate to distinguished herbalists (Makinde 1988, 104-105). The law should support the achievements of peasants. That means, the principle of intellectual property rights should be revised and involve all kinds of knowledge.

This study suggests that we can overcome the dichotomy between indigenous and modern environmental knowledge. It gives the clue that the combination of indigenous and modern environmental knowledge may facilitate cross-cultural understanding and thereby enhance the process of development and local and global environmental management. I would argue that the kind of ethic embodied in indigenous beliefs and values does not contradict the kind of ethic found in modern beliefs and values. But these kinds of ethic complement each other, and in some instances one is superior to the other.

Indigenous systems of production and environmental protection need to be integrated into food and environmental policies in Ethiopia. Isolated attempt of the rural poor or modern technicians and environmental theorists alone hardly avoid threats to the environment. Thus, I would argue that peasants' knowledge should be linked with modern science and technology. To achieve this, all parties should avoid prejudices. Prejudices can be blinding or enabling.

This study specifically recommends further investigation of indigenous environmental ethic in Oromiya in particular and in Ethiopia in general.

#### NOTES

The origin of the name *Galla* is unknown. Many writers and travellers offered different and contradictory hypotheses. Huntingford (1969) assumed that the name *Galla* was probably given to strangers by the Sidamas, since the Sidama word Galo means stranger, that is, non-Moslem. Cerulli (1992) interpreted the phrase "Gala-lencada" as wandering lion. The Jesuit historian Father Balthezar Tellez thought that the name *Galla* was derived from Hebrew and Greek word "milk" (Beke 1848, 3). Beke thought that it was probably because of the fairness



of the *Galla* that the Jesuits designated them as milk. According to Braukamper "the name *Galla* was not restricted to the Oromo, but was also transferred by the Amhara and European authors to a number of neighboring groups such as Hadiya--Kambata--East Gurage" (1986, 1). Although there is no evidence that indicates that the word *Galla* is a bad word, it was given negative and derogatory meanings by Abyssinian rulers. The Oromo "usually adopt the proud title of 'Ilm Orma' the son of men; and they call their language Afan Oromo" (Beke 1848, 3).

- 2 The "Modern" period in the history of philosophy is conventionally supposed to begin in the 17th Century with the works of Sir Francis Bacon (C. 1561-1626) and of Rene Descartes (1596-1650). Bacon and Descartes initiated modern philosophy by destroying the previous philosophical assumptions and methods which had been dominant since the early Middle Ages. In this paper, however, modern environmental ethics does not refer to ideas or systems originating in the period from the time of Francis Bacon and Rene Descartes to the present period. Although many writers have already raised environmental issues in different ways, it is only in the 20th Century that Aldo Leopold and other environmental ethicists proposed an extension of ethics to cover all the species of the living systems of the Earth. Consequently, modern environment ethics appeared as a distinct branch of ethics in the 20th Century. Thus, I use the phrase "modern Environmental ethics" to refer to twentieth century ethical theories relating to the human relationship to the natural environment.
- 3 The indigenous knowledge Vs modern scientific knowledge is an ideological construction. Some western scholars and modernizing groups consider modern knowledge as a universal horizon for humanity. On the other hand, they marginalized and disenfranchised indigenous knowledge. In this study, my intention is not to reverse the binary opposition and to favor tradition over modernity. Instead, I would argue that indigenous and modern knowledge are not rigidly hierarchical and mutually exclusive. Modern knowledge is an extension and development of indigenous knowledge. In some instances, they are parallel and convergent.
- 4 Environmental ethics is a critical study of the normative issues and principles relevant to the relationship between human beings and the natural environment. It is primarily concerned with how human beings can live responsibly with the natural environment. "The scope of environmental ethics is as extensive as its sphere: the realm of actions, policies, and lifestyles which impact on the natural environment, together with their contexts and their consequences, and the principles and attitudes which underlie these actions, lifestyles, and policies" (Attfield 1998, 74).

There are two main approaches in modern environmental ethics: human-based (anthropocentric) and non-anthropocentric. The adherents of these approaches disagree on the question as to whether there is value beyond human environment. Environmental theorists have made a distinction between intrinsic (non-instrumental, non derivative) and instrumental value. "The distinction between these two kinds of value has intersected interestingly with two general approaches to value theory, on human-centered and the other not" (Brennan 1995, xxi). A thing is of intrinsic value if it has value in its own right, or for its own sake. Intrinsic value depends on the nature of its bearer. A thing is of instrumental value if it serves as a means to some other ends. A thing that serves as a means to release to some other value

may also be of value in its own right. Thus, "the categories of instrumental and intrinsic value are not exclusive" (Brennan 1995, 563).

According to the human-based ethics, all, and only, humans count or are valuable in themselves. Human beings are both the actors and the proper subjects of morality. In this case, then, the natural environment has instrumental value. In contrast to the human-based ethics, the non-anthropocentric ethics stresses that things, apart from humans, should be the proper subjects of moral concern. There are different strands of thought within the two approaches. A detailed study of these strands is beyond the scope of the present study. Readers are advised to read the works of some environmental ethicists that are listed in the bibliography.

In this study, I will discuss how modern environmental ethicists treat the concept of sustainable development, and the lessons to be derived from indigenous environmental ethics.

Some people might debate whether there is such a thing as indigenous environmental ethics. The evidence at our disposal confirms that indigenous knowledge is not just a passing on of folk wisdom in a static way from one generation to the next. Peasants do not passively follow the course of nature. Many peasants critically and rationally evaluate the commonly accepted opinions and practices of their people and thereby develop their own independent views about society and the natural environment. When they are affected by what is going on in the society, they come up with quotable proverbs, which originate from their reflective remarks. There are principles of thought in peasants' knowledge. It is on this basis that one can talk about indigenous environmental ethics.

The cleavage between developed and developing countries is misleading. I acknowledge what David Slater refers to as a "persuasion of the post-modern turn" which contends that in a world of fragmentations, pluralities and hybridization, the older, modern terms of North and South, West and East, First World and Third World, Developed and Underdeveloped, seem intrinsically obsolete. However, throughout this study, I will interchangeably use this "old and modern" terms both because of a lack of better terms and, as many writers stress, because I need to re-think patterns of inequality and power relations, rather than neglect or deny their continuing significance under the guise of plurality and difference.

Unless otherwise stated, all proverbs in this study were gathered from the study sites.

It may be argued that the very word "*Mowata*" is derived from the Gurage word "*Mweyata*" though the two words do not seem to convey the same meaning. In Gurage culture, "the passage of girls into adolescence is signaled by initiation into an age group called *mweyat*...The initiation ceremony which, expressed in Gurage linguistic idiom, is to 'throw the *mweyat* girls', is conducted yearly in each maximal lineage distinct by the Fuga chief *mweyat*. Once the chief has 'thrown' the girls, they remain under his ritual authority, and together with his Fuga assistants they attend the ritual needs of women" (Shack 1966, 132-133). It is worth mentioning that the *Fugaa* can also be the ritual leader of *Mowata* cult.

Participants in *Mowata* spirit possession also use the word *Damaamitii* that is close to the

Gurage word *Damwamwit*. For the Gurage, *Damwamwit* is a female deity, which can be called a 'guardian spirit', which concerns the welfare of the Gurage. "The Gurage concept of *Damwamwit* is realized in the manifold expressions of her supernatural power to inflict harm; the consequences evoked if anyone fails in his or her social and ritual duties are epitomized and manifested in the ritual illness of the *zitana*" (Shack 1966, 185). The fact that the relatively disadvantaged *Fugaa* has participated in both the *Mowata* cult in Ambo and the *Mweyat* in Gurage gives the clue that probably the *Mowata* cult is rooted in *Mweyat* initiation rites. Further anthropological study is required to understand the differences and similarities between the two traditions.

The occupational specialists of the Gurage, collectively known as *Fuga*, are divided among themselves into woodworkers (who fell trees, chop wood, assist in house building, and aid in burials and other important rituals), blacksmiths, and tanners (Shack 1964, 50-52).

- 8 It is worth noting that among the Amhara people there is a tradition of hiring women whose job is to stimulate crying at a funeral.
- 9 Similarly, the Qaalluu leaders and the Gadaa officials consider a whip made from the skin of a hippopotamus sacred and used during religious, social and cultural ceremonies. They are not allowed to use other types of whip.
- 10 Fichti and Adi (1994) identified 400 herbs and shrubs for bees and 100 trees for bees in Ethiopia from about 6000-7000 species of the flora of Ethiopia.
- 11 Genetic erosion is also caused by the replacement of native seed stocks by the grains introduced as food aid by relief agencies in the places hit by drought (Melaku 1992, 83).

Shiva also identified habitat destruction due to internationally financed mega projects, such as the building of dams, highways, mines, and aquaculture, in areas rich in biological diversity, and the technological and economic push to replace diversity with homogeneity in forestry, agriculture, fishery, and animal husbandry as the two primary causes for the large-scale destruction of the tropics' biological diversity. In particular, biological diversity was replaced with biological uniformity and monocultures through the green revolution (Shiva 1997, 65).

- 12 For instance, Mbiti reports that Africans conceive time as a composition of those events, which have occurred, those, which are taking place now, and those, which are immediately to occur. For him, the Africans do not seem to have the concept of the distant future. For traditional Africa, time is only a two-dimensional phenomenon, with a long past, or *Zamani*, a present, or *Sasa* (Mbiti 1969). As Masolo (1994) noted, Mbiti's view endorsed Levi-Bruhl's view that the concept of the future is indifferent to primitive people because of their inability to abstract from the series of events of experience in order to conceive a lineal order of succession, in which such events occur (Levi-Bruhl 1923, 123-24, 445-46). The theory advanced by the proponents of this line of thought is at variance with the evidence at our disposal. As I will show further down, the Oromo have the concept of distant future.
- 13 Arne Naess, the Norwegian philosopher, coined the term "deep ecology" in 1972. Naess reported, at the Third World Futures Conference in Bucharest in 1972, that there were two

environmental movements in the 1960s: a shallow anthropocentric technocratic environmental movement and an eco-centric deep, long-range ecology movement (Sessions 1995, xii). Naess explains that shallow and deep ecology are different in the sense that the former is concerned with the traditional moral framework--avoiding pollution to our water supply and preserving wilderness for man's use. Deep ecology, however, stresses that the biosphere has intrinsic value independent of human beings.

Social ecology appeared earlier than deep ecology. The American ecologist E. A. Gutkind used the term social ecology for the first time in 1954. Social ecology is conceived as comprehensive *holistic* conception of the self, society and nature (Bookchin 1982; Clarke 1992).

Francoise d'Eaubonne, the French feminist writer, coined the term "eco-feminism" in 1974. She advocated that women could lead an ecological revolution, and contribute to the protection of the Earth. Eco-feminists believe that patriarchy is the root cause of exploitation and the environmental crisis. They propose that the social and political institution should be radically restructured in order to solve environmental problems ( Merchant 1992).

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