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Indigenous and Modern Environmental Ethics:

**A Study of the Indigenous Oromo
Environmental Ethic and Modern Issues
of Environment and Development**

Ethiopian Philosophical Studies, I

by
Workineh Kelbessa

The Council for Research in Values and Philosophy

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ACRONYMS AND ABBREVIATIONS

BABO	Biiroo Aadaa fi Beeksisa Oromiyaa [Oromia Bureau of Culture and Advertisement]
CBD	Convention on Biological Diversity
CIP	Collective Intellectual Property Rights
CLIMA	Center for Legumes in the Mediterranean Agriculture
COICA	Coordinating Body for the Indigenous People's Organisations of the Amazon Basin
CPGR	Commission on Plant Genetic Resources
CSA	Central Statistical Authority
ECOSOC	United Nations Economic and Social Council
EPLD	Environmental Protection and Land Use Department
EPA	Environmental Protection Authority
EC	Ethiopian Calendar
EEC	European Economic Community
ECTDME	Ethiopian Coffee and Tea Development and Marketing Enterprise
FAO	Food and Agricultural Organisation (UN)
FFW	Food For Work
FSS	Forum for Social Studies
GATT	General Agreement on Tariffs and Trade
GTP	Gumaro Tea Plantation
ILCA	International Livestock Center for Africa
ILO	International Labour Organisation
IPRs	Intellectual Property Rights
IUCN	The World Conservation Union (formerly the International Union for Conservation of Nature and Natural Resources)
MOA	Ministry of Agriculture
MWRD	Ministry of Water Resource Development
ND	No Date
NGO	Non-Governmental Organisation
OBAD	Oromia Bureau of Agricultural Development
O B PED	Oromia Bureau of Planning and Economic Development
PA	Peasants Association
PBR	Plant Breeder's Right
PRR	Property Rights Regime
RAFI	Rural Advancement Foundation International (Canada)
RPK	Rural People's Knowledge
SPP	Several Species
TGE	Transitional Government of Ethiopia
TNCs	Transnational Corporations
TRIMS	Trade-Related Investment Measures
TRIPS	Trade-Related Aspects of Intellectual Property Rights

UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UPOV	Convention of the International Union for the Protection of New Varieties of Plants
WCED	World Commission on Environment and Development
WEN	Women's Environmental Network
WIPO	World Intellectual Property Organisation (UN)
WTO	World Trade Organisation

PREFACE

This book investigates the Oromo environmental ethic and the relationship between indigenous and modern environmental ethics. It aims to sift useful ideas within Oromo indigenous beliefs and practices which are relevant to environmentally and socially sound development. This process undercuts some of the modern arguments and opinions about what counts as authority, who counts as an expert, and who counts as a scientist. It is the result of some years of field research carried out among the Oromo people, for it is among the cultures of Africa that I have first-hand or inside knowledge through both natural upbringing and deliberate reflective observation. Attention was paid to what the people actually believe, practise and say, rather than to what they are supposed to believe, practise or say. Besides seeking information from different groups of people, I made direct observations and drew conclusions.

Oromo environmental knowledge has never received a full-scale study. There have been books on Oromo history, religion and culture, but no exposition of the Oromo environmental ethic and environmental ethics. Some individuals who were handicapped by ignorance, total or partial, of the Oromo language and culture, and who approached their study with preconceived notions, have produced distorted views. It is time to critically approach these works and provide a more correct account of how people really perceive and protect their environment. This book has attempted to do this as a contribution to the ongoing debate on the subject of indigenous environmental knowledge and ethics. Its major findings and conclusions are that there have been indigenous environmental and developmental experts among the Oromo people. The Oromo people 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 the environment.

It is also argued that the Oromo world view has included an environmental ethic that can serve as the basis for a contemporary environmental ethic. Unlike anthropocentrists the Oromo have deep concerns for the future and health of both human and nonhuman creatures. The book further shows that indigenous and modern knowledge are not mutually exclusive. Indigenous and modern environmental ethics have their own limitations and cannot be a panacea for all ills in isolation; both have something to teach as well as something to learn.

The book also suggests that the principles of conventional intellectual property rights should be revised, and include local knowledge entitlements. This book also suggests that the present power relations at the local and international levels should be changed in the direction of just and environmentally and socially sound development.

Whatever may be the force with which some of the views are expressed in this book, they remain largely suggestions which are open to

debate and are not, by any stretch of the imagination, the final word on the subject. It is expected that this preliminary work will serve as a gateway to further serious study of the issue.

The study relies on various available relevant documents, including oral literature, questionnaires, interviews and personal observation. It relies mainly on fieldwork and first-hand information gathered from informants and my previous works on indigenous environmental knowledge. I have learned much on the topics discussed here over the last few years from conversations with Dessalegn Rahmato and Robin Attfield, and reading their works and those of other environmental theorists, as well as from talking to Oromo peasant farmers and pastoralists.

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I am also grateful to agricultural development and extension workers, Oromo intellectuals, members of Ethiopian Environmental Protection Authority, environmental theorists and other individuals who have provided me with information for this study. My thanks also go to government officials at the zonal and district levels and Peasant Association leaders in the study sites for supporting my fieldwork.

I am also greatly indebted to Dessalegn Rahmato, my former professor at Addis Ababa University, who encouraged me to study indigenous environmental knowledge and its impact on development and environmental protection.

I owe many thanks to my supervisor Professor Atfield for his proper and unfailing guidance, many useful insights, ideas, criticism, support, and encouragement at critical times. His theoretical reflections have sustained and provoked me in thinking, and opened new areas for me which I have yet to explore. His availability both in Cardiff and through long-distance correspondence has been critical in the completion of this study. I am grateful to him for the time he has spent to make my study fruitful.

My study would not have been finalised without the unfailing help of my brother Zewdie Gudeta in various aspects. He kindly sent me all relevant documents and information from Ethiopia during my final year in Cardiff. He has never refused anything I have asked of him.

I wish to express my profound gratitude to The British Council, Addis Ababa University, UNESCO and the Leche Trust for financially supporting my study. In particular, I am most grateful to Dr. Ing. Hailu Ayele, Academic Vice President of Addis Ababa University, for supporting my studies in several ways.

I am also grateful to all the library staff of Cardiff University, of Addis Ababa University libraries; of Biodiversity Institute, Science and Technology Commission and The British Council libraries in Addis Ababa, and of the libraries of London University, of the School of Oriental and African Studies and of London School of Economics and Political Science for their assistance.

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PART I
HISTORY AND LITERATURE

CHAPTER I

INTRODUCTION

1.1. CONCEPTS AND OBJECTIVES OF THE STUDY

1.1.1. Concepts

Indigenous Knowledge. Indigenous knowledge is embedded in community practices, culturally based value systems, systems of production and consumption (Sabine Hausler, 1995:184), institutions, relationships and rituals. Indigenous knowledge is the body of knowledge acquired by local people through the accumulation of experiences, informal experiments, and intimate understanding of their environment in a given culture (B Rajasekaran, 1993). Indigenous knowledge is based on local resources and time-tested environmental management practices. In this study, I use the terms “indigenous,” “traditional” and sometimes “local” interchangeably to connote something which was created and preserved by previous generations, and has been inherited wholly or partially and further developed by successive generations over the years. Indigenous knowledge is constantly evolving, and involves both old and new ideas and beliefs. The rural people do not slight imported values or stick solely to their ancestral custom. Instead, they have tried to improve their tradition in line with the new circumstances and thereby adapt foreign values to their way of life. Therefore, indigenous knowledge embodies both internally generated and externally borrowed and adapted knowledge. Indigenous knowledge tells us how people conserve trees, revere wild animals and transmit knowledge from one generation to another.

Indigenous People. Many writers narrowly use the term “indigenous people” to refer to Native Americans and Australian Aborigines who have been dominated by Europeans since the fifteenth and eighteenth centuries respectively. These writers do not often consider peasant farmers in Africa and Asia as indigenous people. In Canada, the native people are considered as first nation people. In its broader connotation, the concept “indigenous people” has been used to refer to the people who are native or original to the lands where indigenous knowledge is originated (Surendra J. Patel, 1996:308). This definition does not seem to capture the environmental knowledge of Oromo people and other groups who have been moving from place to place in response to various factors. At the same time, as the term “indigenous people” is of limited scope relating to some specific group of people, I do not use it to refer to farmers in the European sense. I use the term “indigenous people” to refer to the inhabitants who have employed traditional techniques and time-proven methods in a specific environment, and/or at various places to which they were forced to move because of migration and other environmental and

social factors, but have continued to use their culture, social institutions and legal systems.

Peasant Farmers. Many writers use the word “farmers” to refer to all people in the world who till the land with tractor or oxen without qualification. European farmers are different from peasants who are incapable of using modern agricultural machines. To avoid confusion, I use the term “peasant farmers” for people who use oxen to till their land and rely on subsistence agriculture.

An Indigenous Environmental Ethic. An indigenous environmental ethic is the set of values and beliefs of an individual or group of people relating to the environment. It involves individuals’ or people’s attitudes towards the environment.

Environmental Ethics. Environmental ethics is the philosophical enquiry into the nature and justification of general claims relating to the environment. It is theory about appropriate concern for, values in and duties to the natural environment and about their application. It is concerned with what the people are committed to doing concerning the natural environment.

Indigenous Environmental Ethics. Some people might debate whether there is such a thing as indigenous environmental ethics. However, 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. Peasant farmers and pastoralists do not passively follow the course of nature. Many peasant farmers and pastoralists 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 and their thinking about nature. Their view of the value of the natural environment is based on reasoned thought. Accordingly, there are principles of thought (implicit or explicit) in various peasant farmers’ and pastoralists’ knowledge. It is on this basis that one can talk about indigenous environmental ethics (that is, indigenous theories concerning environmental values and duties) even though one should not claim that the Oromo people as a whole have developed a system of indigenous environmental ethics. In fact, it would be unrealistic to argue that indigenous environmental ethics and modern environmental ethics have similar status and range of influence. Yet comparisons remain possible and instructive.

In this work, the term “indigenous environmental ethics” is used sometimes to refer to the ethical views of philosophic sages who have their own independent views, and in most cases it is used as a plural (of

“environmental ethic”) to refer to the norms and values of various Oromo groups and of other indigenous peoples.

Modern Environmental Ethics. The “Modern” period in the history of philosophy is conventionally supposed to begin in the 17th century with the works of Francis Bacon (1561-1626) and of René Descartes (1596-1650). Bacon and Descartes initiated modern philosophy by destroying the previous philosophical assumptions and methods that had been dominant. In this work, however, modern environmental ethics does not refer to ideas or systems originating in the period from the time of Bacon and 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. Thus, I use the term “modern environmental ethics” to refer to the theories of environmental ethicists in the twentieth and twenty-first centuries.

Developing and Developed Countries. 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 hybridisation, the older, modern terms of North and South, West and East, First World and Third World, developed and underdeveloped, seem intrinsically obsolete. The current context of increasing differentiation between countries encapsulated under these terms; the virtual disappearance of the so-called second world; and the problematic modernist connotations of the terms make the terms “first” and “third” questionable. However, throughout this study, I will interchangeably use these “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.

Environmentally and Socially Sound Development. Conventionally, development has been defined as a process of change aimed at attaining economic growth (a rapid and sustained rise in real output per capita). In this definition, human and social transformation are not given sufficient attention. But high economic growth rate does not necessarily suggest higher levels of human development. There has been a gap between income and human development (for instance, levels of life expectancy and literacy) in many countries. Recently, some development theorists and the United Nations Development Programme (UNDP) in its Human Development Reports since the beginning of the 1990s have questioned this approach and paid attention to the role of human development (see UNDP, 1990-2000; Nigel Dower, 2000). Human development is intended to promote human well-being. The main parameters of human well-being

include health, literacy, life expectancy, community, rule of law, liberty, and the exercise of choice or “control” over one’s life (Dower, 2000:40-41). The UNDP Human Development Report defines the concept “sustainable development” in the following way:

Sustainable human development is development that not only generates economic growth but distributes its benefits equitably; that generates [sic] the environment rather than destroying it; that empowers people rather than marginalising them. It is development that gives priority to the poor, enlarging their choices and opportunities and providing for their participation in decisions that affect their lives. It is development that is pro-people, pro-nature, pro-jobs and pro-women (1994:iii).

In this work, development which empowers people and involves economic well-being, environmental care and social concerns is regarded as sound. As Dower has noted, “[a] form of development might be sustainable while being undemocratic, socially unjust or cruel to animals” (2000:44). Accordingly, the term “environmentally sound development” is used to refer to environmentally, socially and economically justified development. This form of development also involves environmentally friendly indigenous knowledge and practices and promotes people-centered development.

It should be noted that 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. However, the detailed study of development theories and the notion of “sustainable development” is beyond the scope of this work.

Anthropocentrism. Anthropocentrism is the view that regards humans, their interests and their well-being as the sole objects of moral concern and the sole bearers of moral standing. Weak anthropocentrism, however, does not see the natural environment as a means to human ends although it is a human-centered view. It endorses the view that the natural environment and its inhabitants have value and need proper care. It takes into account the practical relations between human beings and the natural environment, and does not suggest that every kind of human exploitation of the natural environment is immoral. On the other hand, metaphysical or teleological anthropocentrism is the view that everything was made for humanity.

Oral Literature. The term “oral literature” is used to refer to different forms of media, such as proverbs, riddles, folktales, songs, and other oral testimonies which have been used by oral societies to transmit knowledge from generation to generation. Unlike written literature, oral literature is realised through a performer who formulates it in words on a specific

occasion, and its continued existence depends on repeated performances (Ruth Finnegan, 1970:2).

1.1.2. Objectives of the Study

The general objective of the study is to explore the relationship between indigenous and modern environmental ethics by critically and systematically examining Oromo environmental values and practices, to sift useful ideas within that corpus which are relevant to environmentally and socially sound development, and to undercut some of the modern arguments and opinions about what counts as authority, who counts as an expert, who counts as a scientist, and to argue that there is indigenous environmental and developmental expertise among the Oromo people. This is thus at the same time a philosophical and an interdisciplinary investigation, the components of which vitally contribute to one another.

The specific objectives are:

- to examine indigenous perceptions of the environment, and show how indigenous knowledge systems can serve as a critical resource base for the process of development and a healthy environment. The study also examines the relationship between indigenous environmental knowledge and Intellectual Property Rights.
- to explore at the levels of theory and practice, the linkage between indigenous and modern environmental ethics, a process which will
 - show how environmental ethics, as it is usually practised, cannot capture rural people's concerns about the environment.
 - unravel whether indigenous beliefs and practices can serve as possible sources of ecological wisdom
 - show how modern environmental ethicists, development experts and the rural people can learn from one another.
- to examine the practical implications of the above for environmentally and socially sound development.

1.2. SCOPE AND LIMITATIONS OF THE STUDY

This study is limited in its scope. It is not aimed to present details of the Oromo environmental ethic in all fields or of the relationship between indigenous and modern environmental ethics in all respects. It will give some examples that will point to the general principles governing Oromo people's attitudes towards the environment and discuss the views of major environmental ethicists whilst ignoring the views of many other interesting philosophers although their views are equally important. It attempts to show that there are some prospects for collaboration and mutual exchange. It will thus argue that environmental crises cannot be solved only by appealing to modern environmental ethics or any other environmental

theory. The role of indigenous environmental ethics should be given due attention.

The work comprises fifteen chapters. The first chapter deals with the objectives, methodology, scope and limitations of the study. Chapter two presents a short history of the Oromo people. Chapter three offers a brief review of the literature on indigenous environmental knowledge and Western traditions and the natural environment. Chapter four focuses on the state of the environment in Ethiopia. It attempts to show how environmental degradation has led to the erosion of indigenous environmental knowledge. Chapter five deals with Oromo ecotheology. It will examine the Oromo conception of the Supreme Being, the spirits and other beliefs and practices, which are relevant to the protection of the natural environment. Chapter six is devoted to the examination of Oromo conception of time and divination. Chapter seven mainly concerns the place of wild animals in Western culture and Oromo society. It offers a brief sketch of Western and Oromo attitudes to wild animals. The Oromo view of wild animals is mainly depicted on the basis of fieldwork in the study sites. Chapter eight deals with the place of forests in Western and Oromo culture. The aim of this chapter is to provide an overview of Western and Oromo attitudes to forests. It tries to identify the differences and similarities of Western and Oromo attitudes towards forests. Chapter nine deals with indigenous systems of water harvesting. In chapter ten, I examine the role of indigenous agricultural knowledge in Oromia.

Chapter eleven focuses on the role of oral traditions in Oromo environmental ethics. In this chapter, the role of sages, and how environmental knowledge is transmitted to the younger generation, are studied. It also discusses the relationship between power, knowledge and ethics in Oromo society. Much of the discussion in this chapter relies on the examination of Oromo proverbs and myths. Chapter twelve looks into the challenges and limitations of indigenous environmental knowledge. The thrust of the chapter is to suggest a thorough and critical examination of indigenous beliefs and values in order to avoid unnecessary romanticisation of indigenous knowledge and the wholesale, uncritical, nostalgic acceptance of indigenous knowledge or the wholesale, offhand rejection of it. Chapter thirteen concerns Intellectual Property Rights and indigenous environmental knowledge. It explores how the concept of IPRs is currently conceptualised and practised in the world. I shall argue against some writers that indigenous knowledge involves invention and should be given attention. I would suggest that the current IPRs should be redefined so as to recognise the knowledge of indigenous people around the world. What I argue in this chapter is consistent with a range of theories of ethics.

Chapter fourteen deals with the relationship between indigenous and modern environmental ethics. It argues that the either/or of indigenous knowledge against modern knowledge is not natural. Some Western scholars and modernising groups consider modern knowledge as a universal horizon for humanity. On the other hand, they have marginalised and

disenfranchised indigenous knowledge. The purpose of this chapter is not to reverse the binary opposition and to favour tradition over modernity. Instead, it argues that indigenous and modern knowledge are not mutually exclusive. Modern knowledge is an extension and development of indigenous knowledge. In some instances, they are parallel and convergent. Thus, by discussing the views of the major environmental ethicists and other writers who have studied indigenous environmental knowledge, this chapter expounds and defends the thesis that indigenous and modern environmental ethics are complementary. The last part of this chapter suggests how environmental and development problems can effectively be solved in today's unequally divided world. Chapter fifteen provides a general conclusion.

1.3. METHODOLOGY

The main sources of this study are the various available relevant documents, structured and unstructured interviews with key informants, elders and religious leaders (see Appendix One), and personal observation. Oral information has been gathered over a two-year period. I have employed interdisciplinary approaches developed by philosophers, anthropologists, development theorists, historians and other multi-disciplinary works because of the nature of the subject. Various scholars have studied indigenous environmental knowledge in different parts of the world, and their publications have proved valuable sources, complementary to my own findings.

Some people may wonder whether fieldwork is necessary for a philosophy work like this. Unlike modern scientific knowledge recorded in books and journals, Oromo indigenous environmental ethics is not found in written form. Oromo beliefs are implicit in Oromo practices. Oromo environmental ethics is embodied in the social norms and myths of the Oromo culture, legends, religious symbolism, folktales, proverbs, songs, chants, and dramatic rituals. Proverbs and other performance-based approaches, such as the plays, songs, jokes, poems, and riddles of a society, culture or period may reveal more of its values, customs, conflicts, stresses, changes and transformations than does all the formal scholarship of historians and social scientists to date. In particular, proverbs may give special insights into how environmental knowledge has been shaped by a host of ecological, sociocultural, political-economic, and historical factors. Many of the Oromo practices and beliefs express important attitudes towards the environment. Because of the above objectives I chose to conduct fieldwork in two selected areas of Oromia, itself part of the Federal Republic of Ethiopia – in Borena and Illuababorra. I, therefore, have employed empirical data to elicit the principles and beliefs of the Oromo people, some distinctive to Illuababorra, others distinctive to Borena, with the objective of discovering authentic Oromo attitudes towards the environment. I have developed an Oromo account of environmental

knowledge and ethics in chapters 4, 5, 6, 7, 8, 9, 10, 11, 12 and some parts of other chapters on the basis of the findings of my fieldwork. By contrast, the principles and role of modern environmental ethics and IPRs have been researched by reviewing published works.

1.3.1. Location and Physical Features of the Study Sites

This study covered two study sites. The first one is located in Borena zone, southern Oromia. The Regional State of Oromia is located in the central part of the Federal Democratic Republic of Ethiopia, with larger protrusions towards the south and west directions (see Map One).

There are contradictory views concerning the location and size of Oromia. Under the government, Oromia is one of the ethnically based regions in Ethiopia (see Map One). According to the Physical Planning Department of Oromia Planning and Economic Development Bureau, Oromia is extended from 3° 40'N to 10°46'N latitude and from 34°08'E to 42°55'E longitude. It has an area of 353,690 kms, which is 32% of the total area of Ethiopia (OBPED, 2000:1). On the other hand, Tilahun Gamta writes, “[t]heir fertile country, Oromia, located between 2⁰ and 12⁰ N and 34⁰ and 44⁰ East, is 600,000 square kilometers” (1993:17). There are twelve administrative zones, 180 districts and 375 urban centres in Oromia. Extensive ranges of mountains, dissected plateau, hills, undulating and rolling plains, deep gorges and valleys are the major features of the topography of Oromia.

Based on the 1994 Population and Housing Census result, about 20 million people, of which 17,730,000 were rural and 2,300,000 were urban, were living in Oromia in 1997 (see OBPED, 2000). Some writers, however, have doubted this official figure and estimated that about 30 million Oromo people live in Ethiopia (see, for instance, Asmarom Legesse, 2000:xii; Asafa Jalata, 1998:2).

The Borena Oromo are found in southern Ethiopia along the border of Kenya and also in Kenya (see Map Two). They are largely nomads and cattle herders rather than agriculturists. The choice of Borena as one site of investigation was influenced by several factors, the most important being the fact that compared to other parts of Oromia, Oromo indigenous institutions are intact in Borena zone. The observation of the anthropologist Asmarom Legesse in 1973 is still sound in Borena: “There is a direct and thoroughly instructive parallelism between the contemporary social organisation of the Borena and the organization of the Oromo as a whole in the sixteenth century” (1973:11), although the Borena society has undergone an internal process of structural change. But “the Kenyan Borena have in varying degree abandoned their traditional way of life under the influence of Islam and the colonial experience” (Legesse, 1973:14). Borena has been considered as the cradleland of the Oromo (Legesse, 1973). Due to this, Borena has attracted the attention of Ethiopian and non-Ethiopian anthropologists. Thus there is already a modest background

literature providing evidence of settlement and land use patterns, the *Gadaa* system and the traditional water management system. Against this background, attempts have been made to study how the Oromo indigenous environmental ethic and, relatedly, Oromo indigenous environmental ethics, have been changed, revised, and undermined by the process of adoption, continual migration, conquest, assimilation and the like as we move from the south to different parts of Oromia.

The second study area is located in Illuababorra, western Ethiopia (see Map Two). The existence of thick forests in Illuababorra motivated me to study the nature of the indigenous environmental ethic in this area.

1.3.2. The Study Instrument

I have applied both quantitative and qualitative methods of research. But in this book the findings of quantitative data are not included except for when it is important to make reference to them. My preliminary study revealed that a questionnaire did not allow the informant to clearly reveal his or her thoughts and insights about the natural environment. Therefore, my research was based largely on qualitative information.

Interviewing is a relatively important source of qualitative data. Among other considerations, it makes possible face-to-face encounter with informants; obtains large amounts of expansive and contextual data quickly; facilitates cooperation from research subjects; facilitates access for immediate follow-up data collection for clarification and omissions; is useful for discovering complex interconnections in social relationships; is good for obtaining data on non-verbal behaviour and communication; facilitates analysis, validity checks, and triangulation; facilitates discovery of nuances in culture; provides for flexibility in the formulation of hypothesis; provides background contexts for more focus on activities, behaviours, and events; and has great utility for uncovering the subjective side, the indigenous person's perspective on organisational processes (Mark Hughes, 1997:169-170). It should, however, be recognised that interviewing has weaknesses including the fact that data are open to misinterpretation due to cultural differences; it is difficult to replicate; researchers' characteristics can influence procedures; it can cause danger or discomfort for researchers; the informants may not be honest; and its outcome depends on the ability of the researchers to be resourceful, systematic, and honest, and on the way they handle bias (Hughes, 1997:170).

Another important point is that although interviews have disadvantages, including the fact that a knowledgeable person can dominate them and other related problems, focus groups are a rich and worthwhile source of qualitative data. Not only do focus groups provide space for interaction between participants, but they also allow the researcher to access sites of "collective remembering" (J Kitzinger, cited in Caroline Oates, 2000:187).

Although observation is useful in both qualitative and quantitative research, it enables us to understand how people practice their beliefs in various places. Accordingly, in spite of their shortcomings, interviewing, focus group discussion and observation enable us to understand values and attitudes of the people towards the environment at a level inaccessible to a questionnaire.

I followed certain procedures to ensure the relevance of the interview guides and the questionnaires. The first draft was given to specialists for their comments and suggestions. After incorporating their comments, the interview guides and the questionnaires were given to my supervisor who edited and approved them with some suggestions and comments. Subsequently, the questionnaire and interview guides (see Appendix Two) were translated into the Oromo language by the researcher with the help of specialists. Following this, I made a preliminary reconnaissance in Borena and Illuababorra zones and selected the districts and the study sites in 1998. Some respondents were asked to comment on the interview guides and questionnaires. A few changes were made based on their comments and my preliminary study of the Oromo culture, and these instruments were reviewed again by the study supervisor during my second visit to Cardiff in Summer 1999.

I have used the Latin alphabet to write Oromo words, but I have used the usual English spelling for the names of individuals and places. Oromo and Amhara words are italicised in the text. I could not find English words that capture the real meaning of some Oromo words. I have also supplied scientific names of indigenous trees.

1.3.3. Procedures

The main part of the research involved open-ended semi-structured in-depth interviews with elders, religious leaders, indigenous experts in different fields, and other knowledgeable persons in the study sites and outside the study sites including at Addis Ababa. I noted that the interviewees who would say that they couldn't answer the questions owing to cultural and religious reasons were prone to resist philosophical questions too. The Socratic tradition of subjecting idea to questioning is not easy to use in rural areas where the people are determined to oppose those who question the soundness of longstanding practices and beliefs. Moreover, in many parts of Oromia, fieldwork is not common. Some women were not willing to be interviewed owing to the existing culture. Culturally, women are not expected to sit under trees and participate in group discussion. This is considered the responsibility of men. These and other similar problems required me to spend some time so as to build up a true atmosphere of trust between the respondents and myself. Maximum care and effort have been taken to persuade the interviewees by explaining the purpose of the research.

The interviews were not uniform for all interviewees. Since each individual has different forms of knowledge, emphasis was given to his or her special knowledge. The duration of the interview varied in length between one and two hours, depending on the enthusiasm of the interviewee. I interviewed some knowledgeable elders for about twelve hours at different times. By the end of the study, 58 informants (52 males and 6 females) had been interviewed (see Appendix Three I). The informants were asked to reflect on Oromo ecotheology, the Oromo conception of time and divination, indigenous wildlife management, indigenous forest management, the indigenous water harvesting system, indigenous agricultural knowledge, the relationship between knowledge and power, the causes and consequences of environmental degradation, and the challenges to and limitations of indigenous environmental knowledge. It was not just information, e.g. facts, names and dates that I obtained from these interviews, but also insights, thoughts, attitudes, beliefs and practices relevant to the natural environment. The study also involved focus group discussions in which four to nine participants discussed different aspects of the Oromo environmental ethical beliefs and Oromo environmental ethics. Finally, a total of 12 such groups (69 informants [66 males and 3 females]) participated in focus group discussion (see Appendix Three II). I have mentioned in the text the name(s) of informant (s) when the idea that a person or a group of informants expressed is an independent personal view, unique, new or controversial. But I have not mentioned the name(s) of informant(s) when the ideas they put forward are common to many informants and to the Oromo people at large. Moreover, I have participated in some religious ceremonies, harvest festivals and working parties, which also helped me to detect the Oromo indigenous environmental ethic.

I also interviewed 21 (16 males and 5 females) agricultural development and extension workers (see Appendix Three III), 8 Oromo intellectuals (3 members of Land Use and Environmental Protection Department of Oromia Bureau of Agriculture, and 5 intellectuals with different academic backgrounds) (see Appendix Three IV) about Oromo environmental knowledge. I selected Oromo intellectuals on the basis of their specialisation, their published works relevant to the Oromo, and their knowledge about Oromo culture. The three informants from Oromia Bureau of Agriculture were selected in consultation with the leaders of this organisation. In addition, I interviewed three members of the national Environmental Protection Authority, one member of Ethiopian Biodiversity Conservation Department (see Appendix Three V), two non-Oromo Ethiopian intellectuals and 6 non-Ethiopian environmental theorists about whether one can develop a conservation ethic in today's climate of increasing interest in material goods and decreasing interest in spiritual and ethical matters, about the relationship between indigenous and modern environmental ethics, the possibility of attributing Intellectual Property Rights to peasant farmers and other indigenous people of the world and other related issues (see Appendix Three VI). I selected environmental

theorists on the basis of their present activities, writings and fields of specialisation. I read some of the works of environmental theorists and found that interviewing such people on the basis of their work helps the researcher greatly to understand their position, and their contribution to the subjects of indigenous knowledge and the natural environment.

1.3.4. Conclusion

In this section, I have discussed the research methods I used in the study, the uses and limitations of these methods and how the data was analysed. I selected informants on the basis of their experience, knowledge and role in their society. Although I have used both quantitative and qualitative research methods, my study was largely based on qualitative research methods because of the nature of the study. The questionnaires have restricted value in helping the researcher to discover indigenous values and attitudes towards the natural environment. Interviews have proved to be more useful to discover indigenous visions, and to generate indigenous theories of the natural environment and its inhabitants. Sometimes they confirmed questionnaire findings and other times they diverged from the questionnaire findings. For instance, some household heads regarded wild animals as their enemies. This view clashed with the views of knowledgeable Oromo informants who argued that animals and human beings are created by God and cohabit on mother Earth.

Interviewing Oromo intellectuals about the environmental practices of their people further enabled me to discover Oromo environmental values. In particular those who have done considerable research on Oromo culture have deeper knowledge than most informants. Some informants, particularly in Illuababorra, have only explained what is presently going on in Oromo society in their area with little reference to the distant past. Yet some Oromo intellectuals have explained how modern religion, alien invaders and other related factors have been destroying the Oromo culture. It is equally true that some Oromo intellectuals have not had appropriate knowledge of their people.

Interviews with what I call “environmental theorists,” who have done considerable research on environmental issues and/or are environmental theorists by profession, are also very useful instruments for understanding the link between indigenous and modern environmental ethics and science. My discussion with these theorists has enabled me to broaden my knowledge of the subject. I have found out that interdisciplinary approaches are very useful in studying and understanding the encyclopaedic environmental knowledge and ethics of peasant farmers and pastoralists, subjects which are too often neglected.

1.4. SIGNIFICANCE OF THE STUDY

There have been misconceptions by scholars about indigenous

knowledge, and about Africa. Some scholars have made huge generalisations about Africa after studying one or two cultural groups. The myopic view of some scholars about indigenous knowledge has been a real obstacle to developing and understanding the Oromo environmental ethic. The major significance of this study is that it suggests the revision of these misconceptions.

While the study of indigenous environmental knowledge and ethics is important as a special field on its own and this work makes a contribution to that field, it is anticipated that one of the distinctive features of this study is that it will generate a great deal of interest not only among environmental ethicists but also among other scholars and among the general public as well.

It is further envisaged that this study will not only be an additional contribution to the literature, but also serve as the basis for many development interventions at the local, zonal and national levels in Ethiopia.

CHAPTER II

A SHORT HISTORY OF THE OROMO PEOPLE

This chapter outlines the history of the Oromo people. To understand and appreciate the Oromo concern for future generations (both future human and non-human generations), their conception of time, environmental attitudes and decisions over the use of resources, it is important to understand their history, particularly the history of the *Gadaa* system. Oromo history has influenced and shaped Oromo environmental ethics, religion and cultural beliefs.

The Oromo constitute one of the largest ethnic groups in Africa. They belong to a Cushitic group in East Africa. Other Cushitic speaking groups include Somali, Konso, Afar, Sidama, Kambata, Darassa, Agau, Saho, Beja, Burji, and others. Today the Oromo are found from Rayya in southeastern Tigray in the north to Borena in the south and from Harargie in the east to Welega in the west and beyond, though their territories are not always contiguous. The Oromo are also found in Kenya.

Abyssinian rulers (who conquered the Oromo people in the last quarter of the 19th century), court historians, monks and their European supporters contend that the Oromo did not belong to Africa. They assumed that the Oromo people came to their present land only after the sixteenth century. They have used Bahrey's *History of the Galla* as an important source. Herbert Lewis states that Manoel de Alemeida

was largely dependent upon Bahrey's text for his knowledge of the Galla [Oromo], however, and thus Bahrey's *History of the Galla* is our most valuable primary source on the early history of the Galla (1966:32; see also G W B Huntingford, 1955:9).

Bahrey was an Abyssinian priest who lived in Gamo, southern Sidamo, in the 16th century. The irony is that he characterised the Oromo as barbarian hordes. His work gives the clue that he was blinded by preconceived notions and prejudices about the Oromo. This is evident in the opening paragraph of his work.

I have begun to write the history of the Galla in order to make known the number of their tribes, their readiness to kill people and the brutality of their manners (see Bahrey, 1967:111).

Bahrey tried to assert that the Oromo history is exclusively the history of war, killing and devastation.

It should be noted that the origin of the name *Galla* is unknown. Many writers and travellers offered different and contradictory hypotheses. The Jesuit historian Father Balthezar Tellez thought that the name *Galla* was derived from Hebrew and Greek word for “milk” (see C T Beke, 1848:3). Beke thought that it was probably because of the fairness of the *Galla* that Jesuits designated them as “milk.” Huntingford, similarly, said that “[t]heir comparatively light skins suggested to the early missionaries that their name was derived from the Greek Gala, ‘milk’” (1955:16). Enrico Cerulli (1922) on his part interpreted the phrase “Gala-lencada” as “wandering lion.” C F Beckingham and G W B Huntingford (1967) assumed that the name *Galla* was probably given to the strangers by the Sidama; since the Sidama word *Galo* means “stranger,” that is, non-Moslem. According to Ulrich Braukamper, “the name *Galla* was not restricted to the Oromo, but was also transferred by the Amhara and European authors to a number of neighbouring groups such as Hadiya–Kambata–East Gurage” (1986:1). Although there is no evidence that indicates that the word “*Galla*” is a pejorative term, 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; see also Huntingford, 1955:11). The Oromo people hate to be called *Galla*, and prefer to call themselves Oromo.

Another Abyssinian writer *Alaqa* Taye G/Mariam (1955 EC) [1963 GC] stated that the Oromo came to Africa from Asia and Madagascar via Mombasa in the fourteenth and sixteenth centuries. The evidence at our disposal, however, indicates that this view is misguided and fabricated by Abyssinian rulers and historians to denigrate the Oromo people and justify the system of Abyssinian domination.

On the other hand, some writers have appealed to religion to locate the homeland of the Oromo. They stated that Arabia was the original homeland of Oromo. Muslim Arabs have begun to infiltrate into the Horn of Africa since the tenth century AD (see Braukamper, 1986).

Furthermore, various ethnologists, historians and anthropologists have tried to identify different areas as the places where the Oromo developed or differentiated into its own community of people. But the exact place is unknown. In any case, some writers agree that before the sixteenth century, the people lived in different parts of present day central part of south Ethiopia, particularly in Sidamo and historical Bali (see M D E Almeida, 1954: 9-11; Braukamper, 1986:35, 37; Herbert Lewis; 1966:27, 35 and 41; Mohammed Hassen, 1994: xiii).

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 the Cushitic speakers who have inhabited northeastern and eastern Africa for as long as recorded history. After careful review of various works on the origin of the Oromo people, Braukamper, for instance, writes: “[w]ith respect to an origin of the Oromo from a country outside Africa, there is—as far as I can see—no solid base of information whatsoever to

consider it seriously” (1986:32). Moreover, *Afaan Oromo* is one of the most widely spoken languages in Africa. Only Arabic and Hausa surpass it in terms of the numbers of speakers in Africa (Gadaa Melbaa, 1988:9). This is also a clear indication of the existence of the Oromo people in this region for many years. According to Darrel Bates, “[t]he Galla [Oromo] were a very ancient race, the indigenous stock, perhaps, on which most other peoples in this part of Eastern Africa had been grafted” (1979:7; see also Mohammed Hassen, 1994:XIII).

An important question is: who were the Cushitic people? Drusilla Dunjee Houston reported that the ancient Cushite empire of Ethiopia “covered three continents and held unbroken sway for three thousand years” (1985:2). She further argues that the ancient Cushite Empire or Old Ethiopian civilisation was the foundation of Eastern, Middle Eastern and European civilisations. Ancient Cushite Ethiopians domesticated wild animals, wheat, barley, oats, rye, rice and other cereals. The reference of the name “Old Ethiopia” is different from the modern nation of Ethiopia whose capital is Addis Ababa. The name “Ethiopia” has been used to refer to the modern state since 1896. 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. Ancient historians and new findings (archaeological and linguistic evidence) suggest that the ancient Ethiopians manifested strong political power as long ago as about 3000 to 3500 BC.

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 Cyclopaedia of Biblical Literature, quoted in Houston, 1985:30).

History also 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. Therefore, there had been a serious confrontation between the Semites and the Cushites. Geographically, the Northern Abyssinia proper includes the present regions of Tigray, highland Eritrea, Gonder, Gojjam, Northern Shawa, and part of Wollo.

With the rise of Islam in the seventh century, the Christian Kingdom of Abyssinia was weakened and isolated from the rest of the world for nearly a thousand years. Although both the Muslims and Abyssinians had devastated the culture and the people of Old Ethiopia, there was a conflict between the two. Arabians and Persians controlled the coast of Aksum and damaged its economy. Moreover, the advance of Islam in the South East through Zeila was of paramount importance for the future of the region. The Muslims conquered the Abyssinians around 1525. Ahmed Ibn Ibrahim Al Ghazi (referred to as Gagn Mohammed) was the leader of the entire region until he was killed by a Portuguese expedition in

1543. At that time, the Oromo remained neutral and watched this struggle with interest. The death of the Abyssinian Emperor Galawdewos at the hands of Amir Nur of the Harar Muslims in Fatagar in 1559 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).

Accordingly, the 16th century movement of the pastoral Oromo to different parts of the country had been facilitated by the Jihad of Imam Ahmed (1529-1543) when the Christians and Muslims devastated each other (Mohammed Hassen, 1994:2 and 20). Some writers argue that the movement of the Oromo to different parts of the present day Ethiopia in the 16th century was the return of the Cushitic Oromo to their roots (see Asfaw Beyene, 1992). The movement of the Oromo was not exceptional in this part of the world. The Afar, the Somali, Sidama, Hadiya, Gedeo and Dawaro fully participated in the medieval population movements in East Africa.

According to some writers, there were two major groups descended from the two houses of the person Oromo represented by Borena and Barentu (Bareytuma) (Bahrey, 1967:112; Mohammed Hassen, 1994:4)—the elder and junior respectively. Various writers use different forms of the word “Barentu”: Bareytuma, Barentu, Barento, Barttuma, Barentom and so on. To avoid confusion, I use the word “Barentu” in this book, although there is no evidence to show that it is the right word. Bahrey said that Sapira is the father of Borena. Borena and Barentu involved several clans who dispersed to different parts of the Oromo lands (for details see Mohammed Hassen, 1994). Bahrey said that Bareytuma had six children: Karayyu, Marawa, Itu, Akacu, Waratisa and Humbana. On the other hand, Borena was believed to have the following children: Dacha, Jele, Kono, Bacho, which four are called Tulama; Hakako, Obo, Suba, which three are called Sadacha; Chele, Liban, Guduru, and Hoko, and these are called Afre (Bahrey, 1967).

According to Mohammed Hassen, Tulama-Matcha, the southern Borena and Guji were the three confederacies that belong to Borena. It should be noted that the term “Borena” is used to refer to two groups. On the one hand, it is used to refer to the Matcha-Tulama that spread to the north. On the other hand it refers to the southern Borena and Guji that spread over southern Ethiopia.

Before the establishment of the modern state of Ethiopia, the Oromo had two types of social organisation, namely a complicated class system, the famous *Gadaa* system and a moiety-clan-lineage structure (Karl Eric Knutsson, 1967:30). An extended discussion of the *Gadaa* system is

beyond the scope of this work. I will try to briefly discuss how the *Gadaa* system has been working in Borena. This discussion is very important to understand the Oromo environmental ethic. The Oromo culture is based on the *Gadaa* and the *Qaalluu* institutions. I will discuss the nature of the *Qaalluu* institution in chapter 5.

The concept *Gadaa* has different meanings. First, it refers to the Oromo social system as a whole. Secondly, it is used to refer to the sixth grade (see below) of the system in which the elected members of the grade have ritual and political responsibilities for a period of eight years. Thirdly, it refers to a calendar period of eight years. Fourthly, it is used to refer to a person belonging to the class which occupies the grade “*gadaa*” (see Ton Leus 1995:320).

The *Gadaa* system is a democratic egalitarian system that has its own leaders who conduct government (political, economic, social, judicial, legislative, ritual and military affairs) of the Oromo society for non-renewable eight-year terms.

According to the Borena oral historians, the *Gadaa* system did not begin in Oromo lands in the sixteenth century. The Oromo people had developed the principles of the *Gadaa* system in the distant past. However, owing to the introduction of modern religions, particularly Islam in Oromo lands, the people decided to ignore the *Gadaa* system and follow the new religion for about 72 years. The Oromo people reintroduced the *Gadaa* system in 1457 with the new *Abbaa Gadaa* Gadayo Galgalo (1457-1465) after noting that the new religion was harmful to their society and culture (Inf: Borbor Bule).

The *Gadaa* system organises the Oromo society into groups or sets (about 7-12) that assume different responsibilities in the society every eight years. These *Gadaa* grades involve 1. *Dabballee*, 2. *Foollee* or *Gaammee Xixiqqaa*, 3. *Qondaala* or *Gaammee Gurguddaa*, 4. *Kuusaa*, 5. *Raabaa Doorii* (*Raabaa Xixiqqaa* and *Raabaa Gurguddaa*), 6. *Gadaa*, 7. Yuba I, 8. Yuba II, 9. Yuba III, 10. Yuba IV, 11. *Gadamoojjii* and 12. *Jaarsa*. In the *Gadaa* system everybody has a social role. Even the *Dabballee* and *Jaarsa* have special roles to play in the Oromo society. The *Dabballee* (0-8 years of age) are required to grow their hair for eight years. The Oromo treat the *Dabballee* as girls and put cowry shells on their hair in order to protect them from evil eyes. When the *Dabballee* reach the *Gaammee Xixiqqaa* (junior *Gaammee*) grade, their heads will be shaved. *Gaammee Xixiqqaa* are expected to look after livestock without any further role of political participation. After eight years they enter the grade of *Gaammee Gurguddaa* (senior *Gaammee*). These children will move to different parts of Borena and participate in the *Nyachisaa* ceremony. The Borena slaughter bulls for them. After this ceremony, the *Adulaa* (the six *Gadaa* Councillors) will be proclaimed before their father’s *Gadaa* class. The councillors have to pass through two more grades (about 21 years-8 years of the *Kuusaa* grade plus 13 years [8+5] years of the senior warrior *Raabaa* grade) of testing before entering the *Gadaa* grade and taking over the responsibility

of leading the Borena people (see below). During this time, they live and perform rituals together. In other parts of Oromo lands the period before the *Gadaa* grade may have been longer normally by 4 years (Paul de Salviac, cited in Legesse, 2000:227).

Upon completion of the third grade, *Gaammee Gurguddaa* will enter *Kuusaa* grade, where they serve as junior warriors, and participate in raids and formal military campaigns through the leadership of the older *Gadaa* class. The fifth grade is known as *Raabaa*. In the first part of this grade the group is known as *Raabaa Xixiqqaa*. Although *Raabaa Xixiqqaa* can marry, they are not allowed to have children. They have the responsibility to defend their country against external aggression. Having completed the first part of the fifth grade, in the fortieth year of the *Gadaa* cycle, they perform the fatherhood ceremony. Subsequently, they will be allowed to raise children. Then, they enter the senior warrior grade (*Doorii*) which lasts five years before entering the six grade. They are known as *Raabaa Gurguddaa*. During this period they are required to sharpen their knowledge, which will enable them to lead the Oromo people. It is worth noting that in the past the children of this group are given to surrogate parents (the Wata people) to allow the fathers to fulfil their duties without looking after their families. My informants said that this practice is no more applicable in Borena, because of political and cultural changes.

Doorii will be followed by the *Gadaa* grade where the councillors who have proved their leadership ability assume power. The pan-Borena assembly can remove those officials who failed to fulfil their duties. Those who assume power have all the laws and customs in hand for a period of eight years. The *Gadaa* stage is very important for them. “It was at this stage that every ‘reigning set’ left its mark on the nation through its political and ritual leadership” (Mohammed Hassen, 1994:13). What is interesting is that the children who have participated in the *Gadaa* grades are under obligation to learn, respect the Borena culture and lead the Borena people.

The *Abbaa Gadaa* or *Abbaa Bokkuu* in different parts of Oromo lands is the leader of the *Gadaa* in power or “bearer of the symbol of authority” respectively. The representatives of the whole nation elect him. All male members of the society who are of age and of *Gadaa* grade are allowed to elect and to be elected. The Borena Oromo select *Gadaa* officials on the basis of wisdom, bravery, health and physical fitness. To be elected as a *Gadaa* official one has to have knowledge and leadership qualities. These qualities are proved when the children pass through different *Gadaa* grades. The Borena people say that *Waaqa* (God) advises *Abbaa Gadaa*. The Borena people further say that even *Waaqa* cannot go before *Abbaa Gadaa*. This shows that *Abbaa Gadaa* is the most respected person in the Oromo society. However, his peers treat him as the first among equals. As Legesse has noted, “[t]he ethical foundation of Oromo democracy bars him from flaunting his high status” (2000:215). In some cases, when the son of the previous *Abbaa Gadaa* proves to be strong,

knowledgeable and wise, the Borena people will select him as the new *Abbaa Gadaa Fiixee* (apical councillor). Otherwise, everybody has the chance to be elected as the new *Abbaa Gadaa* depending on his achievement.

The seat of the *Gadaa* government is located at the residence of *Abbaa Gadaa*. The office of the government is the shade of the *odaa* (the holy sycamore tree), which is the source of peace and the centre of religion. When the previous *Abbaa Gadaa* completes his period he will give *Baalli*, (the feather of an ostrich)—the symbol of power transition in the Borena society—to the new *Abbaa Gadaa*. In other parts of Oromia *Bokkuu* (sceptre) is the symbol of power. However, the *Bokkuu* is a junior character who is the ritual officiant of the *gada* class whereas *Abbaa Gadaa* is the leader of the *Gadaa* class in Borena (Legesse, 2000:131).

The transition between the old leadership to the new one is smooth. The Oromo prevented power from becoming absolute and from falling into the hands of men who stand at the head of political-military hierarchies by creating a complex system of checks and balances. The Oromo accomplish this by balancing the power of one *luba* (*gadaa* class) against another, one half of the society against the other (Legesse, 2000). The attempt to extend the term of office beyond the fixed term of eight years on the part of the *Gadaa* leaders violates the basic laws of the Oromo constitution. In the Oromo constitution, the laws govern the activities of the people, and leaders are accountable to the national assembly. According to Legesse, the Oromo constitution “runs parallel to the Magna Carta, the foundation of British constitutional thought” although the latter “is a very primitive document compared to the Oromo constitution” (2000:258-259). In 13th century Britain, King John was forced by the barons of England to accept the principle that he should obey the law, otherwise the people had the right to force him to give up the throne, if necessary, by an act of insurrection (George Burton Adams, cited in Legesse, 2000:260).

The southern Borena is divided into two systems of moieties—Sabbo and Gona, from which the six members of the Borena *Adulaa* (Borena council) are elected. Gona has fourteen clans whereas the Sabbo has three clans. There are three different councils that make up the *Gadaa* assembly (*ya'a Harboora*), namely *Hayyuu Adulaa* (the senior council), *Hayyuu Garbaa* (the junior council) and *Hayyuu Meedhicha* (the lateral council). The lateral council has two deputy *Abbaa Gadaas* (*konotooma*). Three members of the *luba* (generational class) are elected from each moiety. There are three itinerant *Gadaa* villages in Borena including Harboora which is the *angafa* (elder) and from which the *Abbaa Gadaa fiixee* (the final authority) comes; the Konitu and Hawatu clans have also their own *Abbaa Gadaa* in their respective villages.

Children who are born when their generation-set has already passed through the whole series of grades cannot participate in the *Gadaa* council. This is because the position of one's father rather than one's age is the basis of the formation of generation sets (Marco Bassi, 1994:20). If the

individual is born when his generation set is in the first grade, *dabballee*, he will undergo the *Gadaa* grades. The Borena oral historian, Borbor Bule, estimated that only 15-25 % of new-born children have the chance to undergo the *Gadaa* grades. However, their clan can elect others as the *Hayyuu Garbaa* and *Hayyuu Meedhicha*. The *Hayyuu Garbaa* are required to help the *Adulaa* in administration.

Different clans and lineages in Borena also select their respective *makkala* (assistants), *jalaba* (senior volunteers) and *torbi* (recruits) to serve the *Gadaa* assembly. The *makkala* are expected to economically support the *Gadaa* officials, and take care of their family and cattle. They also serve as messengers for the *Gadaa* councillors. Each *hayyuu* has five or more *makkala* from his respective clan. All clans are required to supply labour force to the *Gadaa* assembly. Those who fail to do so will be forced to give such services or their cattle will be taken away by senior messengers. "In extreme cases, where the recruits put forward by their clans have refused to serve, the *jalaba* may even take their wives, children, and possessions away as an added inducement" (Legesse, 2000:70). The *Gadaa* officials are also given 30 or more cattle and mules by their respective clans. This is because the *Gadaa* officials are the servants and the guardians of the Borena people.

Children who were born in the same span of eight years are called *Hariyyaa* (age group of Borena men). They select a leader called *dambala* and support one another during wedding ceremonies and other social and economic activities (Inf: Borbor Bule). They also elect regimental leaders (*Abbaa Cibiraa* [regimental chief] or *Abbaa Arccumtee* [baton chief]) who are supposed to lead them in war (Legesse, 2000:106). The age organisation (*Hariyyaa*) "is not universally present in Oromo society but appears to have been re-invented in Borana after the great migration in the 16th century" (Legesse, 2000:105).

During the 31st *Abba Gadaa*, Dawe Gobo (1697-1705) the Borena revised the *Gadaa* laws. The *Gumii Gayo* assembly (the assembly of the multitude) was introduced during this period. What is interesting is that the Borena Oromo formulated laws for all creatures. For the Oromo a strict code of morality extends beyond the enclave of humans to include nonhuman species.

In Borena, there have been two assemblies namely, the *Gumii Gayo* Assembly and *Gumii eelaa Dallo*. The *Gumii Gayo* assembly takes place at the well of Gayo, in Arero, every eight years, whose purpose is to review the old laws and introduce new laws to tackle ecological, socio-economic and political changes. It takes place at the end of the first four years of the new *Gadaa* council. The *Gumii Gayo* assembly in Borena and the *Caffee* in central Oromia and Arsi, and the *Hatt'is* in Eastern Oromo are comparable (Legesse, 2000). The *Gadaa* councillors (*hayyuu*), representatives of different sections of the society and other interested individuals participate in the *Gumii Gayo* assembly. Despite the fact that every Borena in Kenya and Ethiopia is free to attend this assembly and bring various issues to the attention of the pre-*Gumii* meetings, only the

active and retired *Gadaa* leaders and members of *Gadaa* assemblies participate in legislative debate. The duration of the pre-*Gumii* meetings may extend to one month. Pre-*Gumii* meetings examine the issues to be presented to the *Gumii*. Although the assembly is the highest authority and has the mandate to discuss various problems of the Borena society, it is required to settle very serious problems which could not be solved at various levels of administration. For instance,

the loss of land can only be confirmed at the assembly of *Gumii Gayo*. Without this authority land may not be disposed or sold. The communities of *Dheda* or the *Madda* have user and management rights but lack judicial rights to dispose land (Oba, 1998:64).

It is only the *Gumii Gayo* assembly which can replace the *Abbaa Gadaa* who committed mistakes by new *Abbaa Gadaa*. Accordingly, the *Gumii Gayo* assembly has the power to remove *Gadaa* officials who have violated legal or moral standards from office, and bar all their descendants from holding the *Gadaa* office. The assembly can also curse the *Gadaa* officials who have committed mistakes and have failed to accept its decision. This type of curse is believed to result in the death of the person. Halake Doyo, the *Abbaa Gadaa* in Borena, died after the *Gumii* cursed him (see Legesse, 2000:205). There are cases when the *Gadaa* officials ask the assembly and their own clan for forgiveness. The *Gumii* has also the special role to declare war.

In the *Gadaa* system, there has been a traditional court system. In the first place, elders are required to settle the conflict between the opposing groups. If they cannot do so, the case will be referred to *Jalaba* (the representative of the different clans). If the latter fails to solve the conflict, the *Hayyuu* will see the case. Unsolved cases can be referred to *Raabaa*, a group which consists of individuals who are about to enter the *Gadaa* period, and *Abbaa Gadaa* respectively. *Abbaa Gadaas* can resolve conflicts between members of their own *luba*, or between different *luba*. The *Qaalluu* leaders can also mediate the conflict between moieties, clans and lineages. All unresolved conflicts will be referred to the *Gumii Gayo* assembly, which gives final decisions. What has been discussed so far thus shows that the Oromo people have relied on participatory democratic principles to handle different issues.

The protracted wars among the Oromo, the expansion of trade and the need to protect commercial interests, internal economic transformations and subsequent social changes, the coming of new beliefs and religions (Islam and Christianity), and the intermittent confrontation between the Oromo and Abyssinians gradually weakened the *Gadaa* system. The rivalry among the Oromo rulers did not allow them to form a common front against a common enemy that was to ruin all of them (Mohammed Hassen, 1994:197).

In the first half of the nineteenth century, the emergence of the *abbaa lafa* (hereditary landlord), *mootii* (king), *abbaa qorro* (governor), trade chiefs, and market administrators reduced the egalitarian aspects of the *gada* to religious rituals (Asafa, 1993:23).

The *Abbaa Duulaas* (fathers of war) used this opportunity to stay on their post for a much longer period than that 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 Abyssinians succeeded in their southward expansion owing to European firearms and the various Oromo leaders who fought for the interest of Emperor Menelik II (1889-1913). Consequently, the Abyssinian rulers created the modern state of Ethiopia by combining historical Abyssinia and the southern regions of the present day Ethiopia. The Abyssinians established the *neftenya-gabbar* vertical relationships in the Oromo lands. *Neftenya* literally means “rifle holder”. “*Gabbar*” refers to allocated tenants who were forced to pay tribute. The conquered peoples and their land belonged to the victorious soldiers or settlers, the Abyssinian royal families, nobility, the Orthodox Church, and the state. Up to two-thirds of the Oromo land was expropriated by the Abyssinians. 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. The new rulers despised the Oromo and other conquered peoples and their culture. They attempted to distort the true history of the Oromo people. Equally saddening is the fact that some European scholars supported this invented history and questioned the contribution of the Oromo people to human culture. Among others, Edward Ullendorf, a leading British linguist, forwarded the following:

The Gallas [Oromo] had nothing to contribute to the civilization of Ethiopia; they possessed no material or intellectual culture, and their social organization was at a far lower stage of development than that of the population among whom they settled (1960:76).

The annexation of the Oromo by Abyssinians in the last century has been interpreted in various ways. Some scholars characterised it as the Abyssinian colonisation of southern regions (see Mekuria Bulcha, 1988; Bonnie Holcomb and Sisai Ibssa, 1990; Assafa, 1993; Gemetchu, 1993; Legesse, 2000). Others argue that Abyssinian conquest of southern regions was simply a feudal expansion and not a colonial undertaking (see Andreas

Eshete, 1970). There is no consensus among Ethiopian and non-Ethiopian scholars about the nature of the Ethiopian state. A full discussion of this issue goes far beyond the scope of this study.

What is interesting is that the Oromo environmental ethic has been influenced and shaped by modern religions—Christianity and Islam. It has also been influenced by Abyssinian and other indigenous people's 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. In particular, the Oromo culture had been influenced by the kingdoms of Bale, Fattager, Hadiya and Dawaro in the sixteenth century. The Oromo used the strategy of *Moggaasa* (adoption) by which they considered the conquered groups their relatives. One form of this institution is that the *Abbaa Gadaa* adopted the non-Oromo or Oromo on behalf of his clan. 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. But

[w]hat is fascinating about the Oromo culture is, that despite their exposure to other cultures, all the Oromo communities found in East and Northeast Africa retain the essential features of their ancient religious and philosophical system of thought (Gemetchu, 1996: 93).

This chapter has shown that the historical reconstruction of the chronology, distribution and movement of the Oromo over the country in the last 400 years by Abyssinians and their foreign allies is largely guesswork, and relies on incorrect evidence. The Oromo people are not foreign to Africa.

They have developed an indigenous democratic system over the years. Their political system is based on the interrelationship between various institutions, namely the generational system, the moiety organisation, the *Gumii* (the national assembly) and the age organisation ("the warriors"). Some of the major principles of Oromo democracy involve the following: the premise that laws stand above all human beings; the principle of accountability: the role of confession and penalty; subordination of warriors to deliberative assemblies; man-made laws (for the Oromo human laws are a product of human deliberation, not a gift of God, although they are based on divine laws); supreme authority of the general assembly; government by councils and assemblies; limitation of office to a single term; a period of testing: time gap between election and investiture; use of history as precedent and ethical guide; hereditary and elective leadership (the *Qaalluu* leaders are hereditary whereas the *Gadaa* leaders are replaced every eight years); principle of balanced opposition; distribution of power across generations (power sharing between generations is guaranteed by balancing the power of one group against

another) and the like. In his recent book (2000:197-236), Legesse has discussed these and other related principles of Oromo democracy in detail.

The interesting point is that the *Gadaa* system allows most people to participate in various activities at different stages of their life. Unlike Western democracies, it distributes power across generations and age groups. Age and generation groups of the Oromo participate in the affairs of their group during their childhood, adulthood and old age. However, the young and the elderly do not seem to be favoured by Western democracies. It is also worth reiterating that the Oromo include nonhumans within the realm of law.

The preceding discussion has further shown that although the Abyssinian rulers were able to marginalise the Oromo traditions in different parts of Oromia, the *Gadaa* system is a living tradition in Borena.

CHAPTER III

REVIEW OF THE LITERATURE

This chapter is designed to review the various published works on indigenous knowledge and on Western conceptions of the environment. These issues are addressed in an attempt to clarify what has been achieved in recent research on indigenous environmental knowledge, and how the natural environment has been conceptualised in the Western tradition. I will discuss the views of some Western environmental ethicists in subsequent chapters.

3.1. INDIGENOUS KNOWLEDGE: PAST AND PRESENT

There are two clearly demarcated views on traditional environmental knowledge, each of which advances its own arguments for and against. On the one hand, some scholars have approached indigenous knowledge cautiously and questioned its validity. The fundamental ecological insights of peasant farmers and other indigenous people have been identified with backwardness and a primitive mentality.

Many Western philosophers and historians asserted that the Africans are inferior to the white people and have nothing to contribute to civilisation. Among others, in the second edition of his *Essays, Moral and Political* (1742) David Hume added the following racist footnote to his essay "Of National Characters":

I am apt to suspect the Negroes and in general all the other species of men (for there are four or five different kinds) to be naturally inferior to the whites. There never was a civilized nation of any other complexion than white, nor even any individual eminent either in action or speculation. No ingenious manufacturers amongst them, no arts, no sciences. On the other hand, the most rude and barbarous of the whites, such as the ancient GERMANS, the present TARTARS, have still something eminent about them, in their valor, form of government, or some other particular. Such a uniform and constant difference could not happen in so many countries and ages, if nature had not made an original distinction betwixt these breeds of men. Not to mention our colonies, there are NEGRO slaves dispersed all over EUROPE, of which none ever discovered any symptoms of ingenuity, tho' low people, without education, will start up amongst us, and distinguish themselves in every profession (quoted in Isaac Kramnick, 1995:629).

Following Hume, many European philosophers and anthropologists have continued to speculate about the “savage” and “inferior” nature of the African and “the African mind.” Like Hume, Immanuel Kant advanced the pecking order of races and asserted that Africans are inherently inferior to the white people. He said that the white people are on the top, followed by the yellow and the Negro and at the bottom there are the Native Americans or red race (Christian M Neugebauer, 1991:251). The criterion of this racial order is skin colour. According to Kant, the non-whites are incapable of moral maturity, since they lack talent, which is a gift of nature. Kant suggests that racially mixed marriage among different races must be strictly forbidden, for the intermarriage of races would result in contamination of races (for details see Neugebauer, 1991). Thus, if Kant were asked whether Africans could develop environmental science and ethics, he would have answered the question in the negative, because he believed that the non-European peoples are devoid of ethical principles, and lack adequate self-consciousness and rational will. Kant’s characterisations of non-European “races” and cultures are based on explorers, missionaries, seekers after wealth and fame, colonisers and their travelogues (Emmanuel Chukwudi Eze, 1997:129), and Hume’s view. Kant, who talked about universal moral maxims, was not willing to criticise travel books although he knew that the travel literature and information about non-European people was wrong. What he said in his review of the second part of John Gottfried Herder’s “Ideas for a Philosophy of the History of Mankind” shows that he deliberately defended the erroneous account of the history of non-European people.

Working with a mass of descriptions dealing with different lands, it is possible to prove, if one cares to do so ... that [native] Americans and Negroes are relatively inferior races in their intellectual capacities, but on the other hand, according to reports just as plausible, that their natural potentialities are on the same level as those of any other inhabitants of the planet (quoted in Tsenay Serequeberhan, 1997:153).

In spite of this view, he consistently promoted his original view about non-Europeans. Subsequently, his philosophical anthropology, which he was allowed by the state to teach students (Eze, 1997:129), and geography were used to justify the superior/inferior classification of human “races” notwithstanding his moral teaching that emphasises that an action is morally right if one can will that at the same time it will become a universal law and all should follow.

Similarly, George Wilhelm Friedrich Hegel (1956) argued that the Negro mind cannot contemplate anything, for it lacked reason. For Hegel, Africa is a country of cannibals, a static continent without any sign of development. It is filled with lawlessness, fetishism and cannibalism—

waiting for European soldiers and missionaries to conquer it and impose order and morality (see Hegel, 1956). He emphasised that “savage” Africans have not created anything historical, philosophical, and had made no contribution to human civilisation. They exhibit the natural man in his completely wild and untamed state. Even if he recognises that Egyptians were versed in all branches of knowledge, such as the industrial, scientific and religious, he stated that Egypt does not belong to the African spirit (1956:99).

Most nineteenth- and twentieth-century European anthropologists, missionaries, and historians defended the ideas conceptualised by Hume, Kant and Hegel. The French philosopher and sociologist Lévy-Bruhl, and the English anthropologist E E Evans-Pritchard and their followers report that the “African mind” is “pre-logical,” “mystical,” and “irrational.” They wielded Western scientific and religious concepts and regarded African beliefs and practices as worthless.

In this connection, Peter Winch (1967) criticised, in my view correctly, Evans-Pritchard who used the achievements and methods of science to understand the African Azande. He said that Evans-Pritchard seemed to argue that European beliefs about reality are right because they depend on scientific approaches whereas the Azande’s beliefs are wrong because they use magical ideas.

On the other hand, sharing the views of Kant and his followers and colonial anthropologists, Hugh Trevor-Roper, the Regius Professor of Modern History at Oxford University, portrayed Africa as a continent with no culture or history of its own. He writes:

[p]erhaps, in the future, there will be some African history to teach. But at present there is none, or very little: there is only the history of the Europeans in Africa. The rest is largely darkness, like the history of pre-European, Pre-Columbian America. And darkness is not a subject for history (1965:9).

Trollope also finds “[n]o approach to the civilisation of his white fellow creatures whom he [the African] imitates as a monkey does a man” (quoted in Basil Davidson, 1970:XIV). Therefore, many writers have assumed that the Africans lack history and failed to raise themselves much above the level of beasts (Davidson, 1970:XIV). They believe that Europeans can civilise the non-Europeans through colonisation and other measures. The fact of the matter is that the above outlined philosophical, anthropological and historical speculation about non-European countries helped European powers to fulfil their political and economic interests by colonising these countries. They imposed their own policies and world views on the colonised people.

In the 1940s and 1950s, the colonial conservationist in Africa imposed unpopular conservation measures on the African farmer and

pastoralist without paying due attention to the dynamics of indigenous farming and livestock management practices. That is why the colonial conservation measures were demolished by African farmers immediately following the end of colonialism (see Michael Stocking, 1985).

The irony is that the conservation policies of post-colonial African governments are similar to the policies of colonial powers. Governments largely control forests. A case in point is that in most countries in South Africa some forest areas have been managed by government as no-go areas since the colonial era. Local communities (men, women, boys and girls) were denied access to forest products available in such areas, such as grass, fuelwood, mushrooms and timber amongst others (M W Shaba, 1999:211). Moreover, French foresters have influenced West African forest fires prevention policies (Abdoulaye Kane, 1999:175).

However, what is obvious is that colonial administrators dismissed peasant farmers' conservation strategies as the result of a stultified conservation in the colonised countries (W M Adams, 1990:168-172). Nor have the policies of postcolonial African governments reduced the destruction of forests in Africa. The local communities reacted against public forestry institutions. They think that the government, but not the people, are the real owners of forests. Thus, they have engaged in deliberately burning the forests. Shaba reports that there is no serious concern for burning forests, in fact, torching the forest pleases people (1999:211). This shows that the neglect of indigenous knowledge has caused incalculable devastation of forests in Africa.

In spite of the drawbacks of colonialism in non-European countries, like European anthropologists and philosophers, many modern scientists and donors in the 20th century have considered development as the transfer of the technological fruits of science to developing countries. For instance, some modernisation theorists believe that all countries in the world are moving along the same track, and developing countries should participate in the development race, and catch up with the lead runners by avoiding old ways of living, patterns of work and modes of knowing, webs of loyalties and rules of governance (Wolfgang Sachs, 1995: 429-30). They believed that in the transition from "traditional" to "modern" forms of social organisation such as those in the West, the complex interactions between social change and economic development, mediated by politics, could be traced with some precision, using Western theories on progress.

The outcome of the practical interpretation of this advice was the avoidance of indigenous knowledge from the economic and environmental policies of developing countries. The people have not been consulted enough about their environment and development issues. Modern scientists and donors have tried to impose their own theories of what constitutes development on the rural poor (see Robert E Johannes, 1989; R Chambers, 1983; K S Amanor, 1994).

However, rather than alleviate developing countries from the shackles of backwardness and poverty, modernisation as practice led to further

subordination of these countries at the global economic level, and increased levels of poverty and deprivation.

What has been discussed so far confirms that various European scholars and development theorists do not seem to acknowledge the historical development of an indigenous environmental ethic in Africa and other countries. Instead, traditional knowledge has been viewed as primitive, unscientific, irrational, unsystematic, imprecise, pre-logical; it is looked at as being part of a romantic past, the major obstacle to development, superficial and often plain wrong (see R B Norgaard, 1984:874-875; Chambers, 1983:76; Paul Richards, 1989:51-52). Some writers further argue that traditional cultures are closed whereas scientifically oriented cultures are open. Traditional culture, they said, lacks any awareness of alternatives and maintains established theoretical tenets (see Robin Horton, 1996:206). Accordingly, many Western scholars think that "Western scientific rationality" and indigenous knowledge are contradictory. They argue that because Western culture is grounded in Judeo-Christian tradition, Western societies cannot follow the tradition of subsistence communities such as the American Indians. According to C Martin, for instance, "even if he [the American Indian] were capable of leading us we could not follow" (1978:188).

Currently, however, changes in attitude have begun. Many scholars who are in favour of indigenous knowledge have tried to study knowledge systems of rural dwellers and how these systems have been used to exploit the environment. They have challenged the view which denounces the role of indigenous knowledge, and claim that the world view of many African and other non-African societies and indigenous people has included an environmental ethic that can serve as the basis for modern environmental ethics. The knowledge of the local people has been given different names such as "ethnoscience" (C G Knight, 1974), "folk ecology" (see Richards, 1975; David Brokensha *et al.* [eds.], 1980), "indigenous technical knowledge (ITK)" (Chambers, 1983), "local knowledge" (D C Korten and N Uphoff, 1981), "indigenous ethic" (J Baird Callicott, 1982, 1994), "ethno-conservation" (David Pitt, 1985), "traditional ecological knowledge" (Johannes, 1989), "traditional environmental knowledge" (A L Dahl, 1989; Martha Johnson [ed.], 1992), "traditional land ethics" (C K Omari, 1990), "environmental ethics" (R P Peerenboom, 1991), "indigenous vision" (Geeti Sen [ed.], 1992), "indigenous local knowledge" (Oluwayomi David Atteh, 1992), and "indigenous knowledge systems" (D Michael Warren *et al.* [eds.], 1989 and 1995). In what follows, I will briefly review how various writers approach indigenous knowledge in Ethiopia, Africa and other parts of the World.

3.1.1. Indigenous Knowledge in Ethiopia

Ethiopian and non-Ethiopian scholars have studied different aspects of peasant farmers' knowledge in different parts of Ethiopia and

have shown that there has been an indigenous tradition of environmental concern and conservationism in Ethiopia (see Dessalegn Rahmato, 1990, 1991, 1992, 1994, 1998a and b; Tahal and Shawel Consultants, 1988; James McCann, 1987; Alemneh Dejene, 1990; Belay Tegene, 1992, 1998a and b). They reveal that Ethiopian peasant farmers, through continuous experiments on their environment, have managed to learn how to control weeds and insects, select crop varieties, classify vegetation types, and cope with climatic and environmental changes. Peasant farmers are capable of monitoring environmental degradation through traditional conservation practices. Ethiopian peasant farmers have also a well-established system of soil classification (see James McCann, 1987; Mesfin Woldemariam, 1991; Belay, 1992, 1998a and b). Ethiopian peasant farmers have adapted traditional crops and landraces over centuries of selection and use them to meet dynamic and changing needs (Melaku Worede *et al.*, 2000).

Peasant farmers have developed various strategies to cope with climatic changes. They conserve water resources and avoid unnecessary danger and crisis during dry seasons. Some peasant farmers in southern Ethiopia, for instance in Walayita (see Laeke Mariam Demissie, 2000), feed the leaves of *enset*, which has the power to retain water during the dry season, to their animals to quench thirst and serve as food. *Enset* is an important source of food for the people.

Some studies also show that the Oromo people ascribe important value to the natural environment (see Karl Eric Knutsson, 1967; Lambert Bartels, 1983; Jan Hultin, 1987, 1994). Aneesa Kassam and Gemetchu Megerssa (1994) argue that the Oromo have some of the finest principles and codes of behaviour towards nature. They stress that the Oromo maintain a perfect balance between nature and culture. They have further outlined how the Borena pastoralists protect the natural vegetation and manage pasturelands through a combination of different mechanisms (see also Gufu Oba, 1998). Religious attitudes, values and practices force peasant farmers to revere nature and natural places. As I have argued elsewhere (1997b), it is in the name of religion that peasant farmers preserve certain kinds of trees, animals, and sources of water. Therefore, traditional leadership and local religious institutions have contributed much to save the natural environment. As I will show later, the religious conception of the humanity-nature relationship reflects how the Oromo people harmonise themselves with nature.

Moreover, in many ethnic groups in southern Ethiopia (Kambata, Alaba, Sidama and others), a newly married person is required to plant and take care of at least one tree (Workineh, 1997a:280). In Walayita, a person is required to have a grass lawn and at least ten trees as sheds in order to secure a wife (Laeke Mariam, 2000).

Among others, the Amhara peasant farmers have also developed their own taboos and restrictions towards nature and natural resources. Environmental divination is practised in Amhara regions. "Each season is given one of the names of the Evangelists, and the order of change, which

follows the order of the Gospels, is considered to be eternally cyclical” (Dessalegn, 1990:39). Of the four seasons—Matthew, Mark, Luke and John—the people believe that the first is characterised by peace and stability, but the last three are followed by exhaustion of men through rebellion, hunger and war. Peasant farmers try to cope with the behaviours of consecutive seasons.

In general, peasant farmers are not only the receivers of new technology, they are also the initiators of development. According to Dessalegn,

[a] peasant community does not just give up and wait for death when confronted with a natural disaster or food crisis. The threat of imminent danger in fact triggers a heightened awareness and a spate of defensive activity in rural communities. Everything is done to anticipate, prepare for, withstand and finally withdraw from the ambit of crisis. These four ‘movements’ make up the totality of peasant survival strategies (1994:201-202).

3.1.2. Indigenous Knowledge in Africa

Various studies show that 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. Local ecological knowledge, according to various scholars, is dynamic and innovative, for it stems from prolonged and profound peasant experience (see Richards, 1975; 1989; Johannes, 1989; Chambers, 1983; Richard Evans Schultes, 1989; Omari, 1990; Atteh, 1992; M A M Salih, 1992; Ademola T Salau, 1992; Medani Mohamed Ahmed, 1994; Abdel Ghaffar M Ahmed; 1994; Yagoub Abdella Mohammed, 1994; Alison Ayers, 1995; James Fairhead and Melissa Leach, 1996; Felix Dakora, 1996).

Many Africans believe that land is not something we own. It does not belong to us; rather it belongs to God (Omari, 1990). Humans are not the masters in the universe. Instead they are the friends, the beneficiaries and the users although they are at the centre of the universe (John S Mbiti, 1996b).

African peasant farmers have a unique system of soil and water management. Among others, on the basis of his footprints on wet soil, a Nigerian peasant farmer

divided soil over a mile into seven micro types and named the type of crops and crop combinations that would do well in each. Analysis of soil samples taken from the seven sections confirmed the farmer’s intrinsic method of categorising soils to be sound (Atteh, 1992: 6-7).

Similarly, African pastoralists have developed sustainable modes of pasture management and sustainable modes of exploitation. After comparing indigenous knowledge on values attaching to grassland species, plant succession, and ideas about the causes for environmental change in two African pastoral societies (the Kenyan Pokot and the Namibian Himba), Michael Bollig and Anja Schulte said that these societies have developed fine-grained and complex knowledge of vegetation processes. They classify grasses according to their use value for livestock husbandry (Bollig and Schulte, 1999).

Many African people also use naturally accruing plant species as the source of traditional medicine (see M Akin Makinde, 1988; Salih, 1992; Norbert L Vecchiato, 1993; Isaac Mayeng, 1996).

Furthermore, many African societies have preserved wild animals through the system of totemism. Totemism is the practice of using the natural species or class of objects as symbols of the group. It reflects the existence of a special mystical relationship between human groups and natural objects such as animals, plants, and sometimes non-living things (James Peofles and Gaaik Baily, 1988:307). Totems can thus be anything: animals, plants or geographical features.

In some instances, members of the same clan have different totems. The Azande people said that some individuals attach themselves to some clan, other than their own during war, migration, domination, and the displacement and fractionalization of clans, and associate themselves with a new totem (Evans-Pritchard, 1971:55-56). On the other hand, among the Nuer, many lineages have the same totem (Evans-Pritchard, 1956). The Nuer are interested in the spirit rather than the totems, for the latter are in some manner emblems or representations of spirit (Evans-Pritchard, 1956).

There have been different reasons for the association of individuals with totems. Some individuals believed themselves to be descendants of their totem. For instance, among the Nuer people, “[t]he commonest aetiology is twin-birth of a man and a member of a natural species” (Evans-Pritchard, 1956:84). The Leng lineage of the Jinaca clan regard the lion as their totem because they believe that their ancestor Gilgil was born twin to a lion (Evans-Pritchard, 1956:64). Those who consider a lion as their totem tie up a goat in the bush for lions. They are said to have a “totemistic relationship to lions” (Evans-Pritchard, 1956:65).

On the other hand, a totemic relationship may be thought of to have come about “with regard to some class of objects through a man or a member of his family suffering any kind of misfortune” (Evans-Pritchard, 1956:87). The children of a person who was killed by the bite of a snake respect this species of snake.

Totem animals have special cultural values and associations and are given special attention. Members of each totemic group are required to abstain from harming, killing and eating their totems in any way. The respect is mutual and the totem is also expected to revere these clans and believed to expect they will do the same for it.

One may object that animals cannot agree to respect our interests as equal in moral importance to their own, and neither do they expect or demand such respect from us, because they lack the degree of rationality necessary for moral autonomy (Mary Anne Warren, 1983:119). In fact, wild animals do not expect full and equal rights or any rights at all, which are enjoyed by humans. The point is that the system of totemism may offer opportunities for the protection of wild animals.

Many lineages in Africa have their own totems. Evans-Pritchard (1971:50-67), for instance, listed 1888 clans and 127 totems for the Azande of the Sudan alone (excluding the Azande of the former Belgian Congo and French Equatorial Africa). Leopards are considered as deceased chiefs in some areas of Zaire (Jonathan S Adams and Thomas O McShane, 1992:33-34). There are similar practices in other African countries, for instance, in Kenya, in Tanzania, in Zimbabwe and the like (see Chris Tobayiwa and Peter Jackson, 1985; G W Burnett and Kamuyu wa Kang'ethe, 1994; Ali Tigani El-mahi, 1994).

Some African peasant farmers have also protected wild species when they are allowed to follow their indigenous management strategies. For instance, in Kaokoveld, in Namibia, a conservation officer named Garth Owen-Smith advised village headmen to assemble troops of auxiliary guards to act as neighbourhood watch organisations in order to protect wildlife in 1982. This proved to be successful. The people have benefited from this measure by selling crafts to visitors, and asking the visitors to pay tax (Raymond Bonner, cited in David Schmidt, 1997:332-333). In the same way, the Masai people in Kenya have hired their own wardens to protect animals outside the park after they were allowed to receive 25% of entrance fees since 1990 (Bonner, cited in Schmidt, 1997:333). Likewise, after the government of Zimbabwe allowed the Nyaminyami people to manage wildlife in their district, the number of wild animals has increased. They have the power to cull herds, to sell hunting permits or to set up tourist ventures through collective decisions. The money they receive from this activity is required to compensate peasant farmers when wild animals attack their domestic animals or destroy their crops (Bonner, cited in Schmidt, 1997:334). This does not mean that the people protect animals solely on utilitarian grounds. The point is that the imposition of law on them will lead to the destruction of animals. But incentives will facilitate indigenous wildlife management in Africa.

As Atteh persuasively observes, rural people's fields of knowledge include history, linguistics, economic science, social knowledge, politics and administration, communications, energy related technology, the physical environment of soils, water, and climate, biological entities such as plants, crops weeds, pests, domestic and wild animals and insects etc., medicine, taxonomic systems, systems of time, skills, artifacts, religion and a host of others (1992:6). Atteh further argues: "[i]n all these fields, each rural group has developed knowledge encompassing theory, concepts,

interrelations, factual data and attributive information, of a high degree of accuracy” (1992: 6).

Different groups employ methods such as linguistic symbols (terminologies), classification (taxonomies), and propositions (theories) to encode environmental information (Atteh, 1992). The operationalisation of this knowledge requires two levels. The first one is mental images of the environment. People’s perceptions of the environment are the basis of this mental image. Having observed the real world, individuals set up conceptual models of reality with the aim of interpreting their observations and thereby using them to set up hypotheses about future events which serve as the bases of their decisions about future activities. Individuals acquire locational information and attributive information that is of two types, namely descriptive information and evaluative information. The second is a non-verbalised ability and skill learned by experience; in other words, technology with which to deal with the environment (Atteh, 1992:4). To exploit the physical environment, the rural people use this technology.

3.1.3. Indigenous Knowledge in Other Parts of the World

Indigenous knowledge in various countries has been a widespread subject of discussion. H L Conklin (1957) and W C Clarke (1977) have explained how the Hanunoo tribe in the Philippines and the Bomagai-Angoiang people in Papua New Guinea developed detailed knowledge of their environment respectively. In his study of Hanunoo, Conklin (1957) found out that the local people had four different terms for describing the firmness of soil, nine colour categories to identify its properties, 10 basic and 30 derivative rock and mineral categories to describe topography and three different ways of categorising slopes.

Different tribes in India use drought-mitigation strategies, such as mixed cropping, sequential cropping, and strip cropping to protect the mixed and strip crops from erratic monsoonal rains and maintain soil fertility (see D Michael Warren and B Rajasekaran, 1995). In India, the *neem* (*Azadirachta indica juss*) tree has also been used by peasant farmers to ward off damage by pests. Peasant farmers’ experiments also suggest that it may serve as a material for increasing biological nitrogen fixation in wetland paddy fields (see Vandana Shiva *et al*, 1997:23). Local peasant farmers and pastoralists in different parts of developing countries have developed useful strategies of dryland management that are sustainable in the complex agro-ecological, socio-cultural, and economic conditions of small-scale and marginal farmers and pastoralists of the developing world (Warren and Rajasekaran, 1995:206).

Moreover, the indigenous peoples of Mexico, particularly the Lacandos, originally from Guatemala, who migrated into the Chiapas jungle approximately two centuries ago, “have acquired an understanding of the basic ecology of the floral and fauna”, and have used crop rotations

and traditional agroforestry methods of “slash and burn” (Teresa Kwiatkowska-Szatzscheider, 1997:273-274). The Lacandos see the natural world “as a force, a powerful and mysterious presence that shapes human life. This force is the bedrock of human contact with the Earth” (Kwiatkowska-Szatzscheider, 1997:275).

Also, some people learn their survival strategies from the behaviours and activities of animals. Traditional Inupiaq hunters, Eskimos who live on the arctic coast of Alaska, use the behaviour of ringed seals surfacing in open leads as a reliable way to forecast the weather. They said that

when seals raise [sic] chest-high in the water, snout pointed sky-ward, acting as if they’re in no hurry to go anywhere, it indicates stable weather. But if they surface briefly, head low, snout parallel to the water, and tend to show themselves only once, a storm may be approaching (Richard Nelson, 1993:206).

Nelson has reported that he has confirmed what the Eskimos had said through his own experiences with seals and storms through the course of winter (1993:206). Moreover, the Eskimos both learned about animals and from animals, particularly from the polar bears, how to hunt seals (Nelson, 1993:209).

Many people have developed positive attitudes towards wild animals. For instance, the Jains in India believe that it would be wrong to kill any living thing. They have the principle “[t]olerate living beings, do not kill them, though they eat your flesh and blood” (see John Passmore, 1974:122). Similarly, some of the Aboriginal peoples of Australia consider their totem as a clanmate. They believe that humans and their totems have the same flesh (Deborah Bird Rose, 1999:178).

Another important point is that many rural people in the world, for instance in China (Stephen Palos, 1972), India (Winin Pereira, 1992), and Europe, widely practise traditional medicine. Traditional systems of medicines cover 70 per cent of India’s health care needs (Shiva *et al*, 1997:21). It is also worth noting that over three-quarters of all plant-derived drugs were discovered because of their prior use in indigenous medicine (Anonymous, cited in Hope Shand, 1991). Traditional medicine involves both rational and psycho-therapeutic 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 (Jacques Barrau, 1966). Herbalists and traditional healers are able to know complex and complicated concepts of diseases and their treatment including psychiatry, gynaecology, pre and post-natal care, and both preventive and curative medicine (Atteh, 1992:12).

We also have to note that there has been a vast store of indigenous knowledge in Western and Eastern industrialised countries (T Banuri and

Apffel Maglin, 1993). In some respects Western views have been influenced by romanticism and mysticism that treat nature differently from the dominant Western tradition (Richard Routley, 1973:206). Oral traditions and indigenous knowledge are still important among some groups in Europe including the mountain Protestants in France and Italy, and the Gaelic-speaking Scottish islanders (see 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, quoted in Gerrit Huizer, 1994:62). In the Medieval period, the lower classes relied on “witch healers” as general medical practitioners. At that time, 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, tens of thousands of women were killed in the witchhunts. On the other hand, Passmore is of the opinion that

[i]n many parts of Europe, Christianity was a late arrival. And nowhere did it quite succeed in destroying, especially amongst peasant peoples, that older feeling that there were mysterious divine powers in rivers, trees and mountains. Compare Old Ekdal’s conviction in Ibsen’s *The Wild Duck*, first performed in 1884, that the forest will ‘take its revenge’ for being thinned (1974:10).

Furthermore, Ingeborg Svennevig (1997) has shown that the inhabitants around the Ballum meadows in Denmark and on the island of Texel in the Netherlands have their own local culture distinct from the national one. Svennevig remarks that these people have tried to preserve the Wadden Sea area on the basis of their local culture. “The local inhabitants,” Svennevig says, “loudly appreciate their forefathers as the true protectors of the Wadden Sea area” (1997:152).

Various studies have also been carried out about the environmental knowledge of Native Americans, Australian Aborigines, the Maori people in New Zealand and other people in different parts of the world. I will discuss more about the environmental knowledge and ethic of these people in a later chapter.

More recently, there has been international recognition of the importance of indigenous knowledge, for example, on the part of the International Union for the Conservation of Nature and Natural Resources, the International Biodiversity Convention, and the Agenda 21 Report of the UN Conference on Environment and Development (Shelton H 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 sustainably managing very complex ecological systems (WCED, 1987:114).

In brief, many scholars with varied backgrounds, and also international organisations, have suggested that indigenous knowledge is worth considering and using to tackle environmental problems. Most writers agree that indigenous peoples and peasant farmers who have developed wise procedures to protect their natural resources could be called the original environmentalists.

Whatever the content or orientation of the works dealing with the Oromo attitudes toward nature, two major elements are missing from their account. None of them seriously discuss the impact of Oromo environmental ethics on environmental protection and development. Secondly, no systematic study has been done in Ethiopia concerning the complementarity of indigenous and modern environmental ethics. It is intended that this work will address some of these and related issues.

3.2. WESTERN TRADITIONS AND THE NATURAL ENVIRONMENT

Although the philosophy of nature is at least as old as the presocratics, 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 (see Robin Attfield and Andrew 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).

The major theories of morality—whether virtue-based, utilitarian, contractarian or rights-based—have not paid sufficient attention to the fact that things other than human beings have a place in our moral thinking in their own right despite some creditable exceptions. The majority of Western philosophers have tried to show that humanity has a central place in the universe. Although the old Greek gods were essentially nature deities, such as Poseidon, god of the sea, and Zeus, god of lightning, and some trees were considered as sacred, in practice the Greeks did not pay sufficient attention to nature or to its implications (Victor Ferkiss, 1993:5). For Greek philosophers, environment is the object of thought and rational analysis. “Worship of nature became mere ritual, supposedly replaced with philosophical understanding” (J Donald Hughes, 1998:158).

On the other hand, the Romans regarded nature as one of their conquered provinces, for profit and economic benefit (Hughes, 1998). Although their religion was originally animistic, the basic concern of the

Romans was to find some way to make use of nature (Ferkiss, 1993:8). Subsequently they destroyed much of the natural environment. "Deforestation took place on a major scale, first in Italy, then in the outer provinces. Wildlife, especially exotic animals, were killed, in part to fuel the famous Roman circuses" (Ferkiss, 1993:9).

Even though traditional Greek religion did not endorse the view that man either was, or should seek to become, master of the world (Passmore, 1974:13), Aristotle had an anthropocentric attitude towards nonhuman creatures. He supported the basic attitude that man should rule over nature by stressing the idea that matter was associated with the feminine and was passive, while ideas were masculine and active (Ferkiss, 1993:6). He 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, 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 anthropocentrist thinker. He maintains that the irrational exists for the sake of the rational beings. In *Politics*, Aristotle asserts that

plants are for the sake of animals, and ... the other animals are for the sake of human beings, domestic ones both for using and eating, and most but not all wild ones for food and other kinds of support, so that clothes and the other tools may be got from them. If then nature makes nothing incomplete or pointless, it must have made all of them for the sake of human beings. That is why even the science of warfare, since hunting is a part of it, will in a way be a natural part of property acquisition. For this science ought to be used not only against wild beasts but also against those human beings who are unwilling to be ruled, but naturally suited for it, as this sort of warfare is naturally just (1998:14).

For Aristotle, therefore, nature is hierarchically arranged and plants have the purpose of serving animals and animals have the purpose of serving human beings. He placed the nonhuman at the bottom of a great chain of beings. Similarly, the Stoics believed that whatever exists was made for men owing to their rationality (Passmore, 1974:15).

However, Aristotle was the founder of biology. His biological works showed genuine interest in the natural world. Some of his biological writings seem less anthropocentric with respect to the natural world than his ethical and political works. In his *Parts of Animals*, Book I, chapter 5, 645a, Aristotle said that

in all natural things there is somewhat of the marvellous. There is a story which tells how some visitors once wished to meet Heraclitus, and when they entered and saw him in the kitchen, warming himself at the stove, they hesitated; but Heraclitus said, 'Come in; don't be afraid; there are gods even here.' In like manner, we ought not to hesitate nor to be abashed, but boldly to enter upon our researches concerning animals of every sort and kind, knowing that in not one of them is Nature or Beauty lacking (1968:99-101).

Some writers have considered Aristotle's biological writings as a possible source of ecological wisdom. For instance, John O'Neill (1993) maintains that a broadly Aristotelian account of well-being provides the best foundation for a satisfactory view of proper ethical concern for both nonhumans and future generations.

According to Lynn White Jr. (1994), the Judaeo-Christian traditions also emphasised the superiority of humans over other living creatures. White suggested that they regarded the natural world as an instrument for human use and welfare. He argues that biblical texts were interpreted in different ways. Christianity in the Latin West fostered an attitude of human arrogance toward nature. He adds, science and technology were shaped by Christian attitudes toward man's relation to nature. The book of Genesis certainly states that human beings are creatures of God and are made in God's image.

White's view has attracted the attention of various writers. Some of these writers have stated that White's interpretation of the bible is completely implausible. They have stressed that Christianity has not been exclusively negative to the natural environment. For instance, Clarence J Glacken (1967), Attfield (1994, 2001), Robert J Moore (1990) and Peter Harrison (1999) have tried to show that in certain respects Christianity has had positive impacts on the environment. According to Attfield, despite ugly episodes and depressing periods in history, in certain respects, Christianity "encapsulates beliefs supportive of environmentally sensitive attitudes and policies, and can be appealed to as such" (Attfield, 2001:109).

Nonetheless, 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). Though the early Hebrews had their sacred places: Sinai, where God gave the commandments to Moses, and Bethel, where Jacob had wrestled with the angel,

the dominant view in Judaism held that God the Creator is not be identified with His creation ... Since God is transcendent, He cannot be said to dwell in any spot on Earth in an ontological sense (J Donald Hughes and Jim Swan, 1998:164).

Hughes and Swan further stress that early Christians viewed the things of this world as transitory or as a barrier to salvation. But some writers disagreed with this interpretation (see below). Later Christians, according to Hughes and Swan, regarded only church structures and property as sacred. But nature is not supposed to contain sacred space (Hughes and Swan, 1998).

During the Renaissance, humanity was believed to have a special, almost divine, status in the order of things. As J Clarke rightly pointed out, the crumbling of the old Mediaeval Catholic order, the growth of capitalism and the opening up of the globe to European exploration and conquest led to the emergence of the spirit of human superiority and domination of nature in the Renaissance period (1993:75).

On the other hand, some rights theorists did not accept the view that uncultivated land has value. For instance, John Locke (1632-1704) argued that humans have certain basic rights in a “state of nature” that does not have government and civil society. For Locke, these rights involve a right to life, liberty and property. In particular, Locke argues that if a man mixes his labour with a natural object, then the product is his. Locke locates no value in uncultivated land before it is improved. He regarded wilderness land synonymous with waste (cited in Eugene C Hargrove, 1998). As Hargrove (1998) convincingly noted, an amoral or asocial attitude has resulted from Locke’s property theory. His theory provides the foundation for the land owner’s claim that underestimates the role of society in the management of his land, that nobody has the right to tell him what to do with his property (Hargrove, 1998:179).

The high place of humanity vis-à-vis nature is further emphasised by modern philosophy. Francis Bacon (1561-1626) gave an 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. He was in favour of the control of nature for human benefit.

Likewise, although René Descartes (1596-1650) proposed a different method for investigating nature, he suggested a practical philosophy that aimed at transforming nature through science-based technology. He rejected the belief that God created all things for humans. Descartes adopts the Stoic ingredient in Christianity that man can control nature because of his rationality (see Passmore, 1974:21). He identifies everything but the human mind as a mere machine, which men can manipulate. For him, all material beings are mindless. 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. “This is the attitude to nature which has dominated Western science: understanding through laws, transformation through technology” (Passmore, 1995:134). The rise of modern science heralds that nature is intelligible; it is governed by natural laws and can be understood by human beings without appealing to

supernatural forces. Nature was considered as a machine by followers of Descartes, but some scientists, particularly biologists such as John Ray (see Attfield, 1994:32) had different views. Ray rejected the view that everything was made for humans.

In this connection, the Enlightenment philosophy, which was developed in the eighteenth century, has encouraged humans to feel superior; it argued generally 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 passive and a great machine rather than as a great organism (see Vernon Pratt [with Jane Howarth and Emily Brady], 2000:22-27). This fostered the materialist and determinist philosophical climate which in turn accelerated the alienation of humans from the natural environment. However, some of the Enlightenment philosophers were humanitarians sympathetic to animals, as will be explained later.

Although Karl Marx's works contain some passages that support the unity of humans and nature, he promoted an anthropocentric attitude towards nature. In his early works, Karl Marx argued that mankind has developed from nature and in mutual interaction with nature. But man is alienated from his own nature and from external nature in capitalist society. Capitalism regards "nature" as an "other" to be exploited. He thought that this alienation of man from himself and the natural world would be resolved in the forthcoming communist society through the labour process. Thus, environmental problems would be solved by replacing capitalism with environmentally unalienated social order. In this connection, Donald C Lee maintains that Marx's thought is not homocentric or humanly chauvinistic, because Marx conceived of nature as man's body. Nature is not an "other." Marx understood the resurrection of nature as the resurrection of man as a fully natural, social, embodied, and sentient being (Lee, 1980).

Moreover, although John O'Neill (1994) states that there are central components of Marx's early thought inherited from Hegel which cannot be incorporated into a defensible ecological political theory, he recognises that some passages of Marx's early works reflect ecological concerns. In referring to nature as man's spiritual inorganic nature Marx stated that "plants, animals, stones, air, light, etc. theoretically form part of human consciousness, partly as objects of science and partly as objects of art" (quoted in O'Neill, 1994:27). Marx also believed that objects have their own inherent standards of beauty.

Further, Lawrence Wilde (2000) argues that Marx had a respectful attitude towards animals and nonhuman nature in general. Wilde stresses that although Marx showed the difference between humans and animals, he did not treat animals as inferior or deficient beings. Marx maintained that human beings begin to understand how they differ from other animals when they begin to produce their means of subsistence, although he

acknowledged that the germ of making a tool can be found in some of them (Marx, cited in Wilde, 2000:39, 40). Marx pointed out that humans consciously created the means of production whereas animals only produce what they immediately need for themselves or their young. Animals, he said, live under the domination of immediate physical need. He believed that animals have specific needs and capabilities, such as the need to hunt, roam, and to have companionship (Marx, cited in Wilde, 2000:45). In short, Marx said that “conscious life activity distinguishes man immediately from animal life activity” (quoted in Wilde, 2000:42).

According to Wilde, the translators who have suggested speciesist connotations obscured Marx’s view towards animals. Marx showed that capitalism brutally disregarded the shared needs of both animals and humans. Wilde reminds his readers that Marx used the words of Thomas Münzer, the leader of the German Peasants’ Revolt in the early sixteenth century in *On the Jewish Question*: “[t]he creatures, too, must become free” (Marx, cited in Wilde, 2000:37).

In spite of the positive points mentioned above, Marx considered nature as an instrument of man’s self-creation (McLellan, 1971:139). According to Marx, man’s growing mastery over nature will help him to move beyond the deification of nature and the traditional way of life. He states that the “great civilising influence of capital” lay in its rejection of the “deification of nature.” Accordingly, in *Grundrisse: Foundations of the Critique of Political Economy*, Marx stated that “nature becomes for the first time simply an object for mankind, purely a matter of utility” (quoted in Passmore, 1974:24). He advised human beings to conquer nature in accordance with their needs. He viewed technology as the human mode of dealing with nature. Although he showed how machines would come to dominate human beings instead of serving their ends, he paid little attention to the effects of technology on nature and nonhuman beings (Keekok Lee, 1989:184). In fact, in *The German Ideology* Marx stated that animals were prevented from fulfilling their essential needs by the development of modern production methods. He mentioned the effects of the pollution of a river (Marx, cited in Wilde, 2000:45-46).

Moreover, even though Marx rejected any dichotomy between humans and nature, and recognised nature as antecedent to man and as internally autonomous, like other humanists he argued that nature has no value outside labour. For him

[t]he material of nature alone, in so far as no human labour is embodied in it, in so far as it is mere material and exists independently of human labour, has no value, since value is only embodied labour (quoted in Philip Sarre, 1995:118).

Generally, Marxists support industrialism and the domination of nature as a potentially progressive expansion of human nature and the avenue toward the historical realisation of human freedom.

Val Routley (1981) also points out that the Marxian thesis of unity between man and nature—the doctrine that “man creates nature”—does not stress the interdependence of two distinct items, man and nature, “but rather the destruction of what is genuinely and purely nonhuman and its replacement by a transformed and humanized world” (1981:238). Nature is no more independent. She says that what Hegel attributed to God was attributed to man by Marx. This is, she says, a transposition characteristic of Enlightenment thought, which has had a negative impact on the environment.

In the twentieth century, strong tendencies to believe in human domination of nature continued, though they were far from universal. For example, positivism theorised about the domination of nature by humans. Positivism and existentialism agree that human beings are the source of values. For existentialism, nature is indifferent to human concerns. The French existentialist philosopher Jean-Paul Sartre (1905-1980) developed humanistic existentialism, which gives special place to humans in nature (1948). For him, nature has no value except that which we project on to it. He argues that individuals must be free.

Some writers also stress that the rise of capitalism and industrialisation strengthened human centred attitudes towards nature (Marshall, 1995:5; Peter Singer, 1993:267-68). Capitalism defined the land as a commodity. In Europe, the claims of the state were placed above those of the Church by nationalism whereas rising capitalism defined land as a commodity, subject to division and sale rather than as sacred (Hughes and Swan, 1998:165). As a matter of fact, capitalism and the political and scientific patterns of thinking (distanced, abstract, mechanistic, and hence exploitative) that come with it are widely considered as the causes of ecological destruction.

Although the dominant Western tradition has given high value to humans, there have been other attitudes in the West that have stressed that people should respect other creatures. The Bible and some Christian fathers and writers opposed cruelty to animals. Jeanne Kay for his part has stressed that the Hebrew Bible states that humans’ sin or arrogance causes environmental destruction. The Bible condemns the ruthless despoliation of nature. “These analyses scarcely support the theory that the roots of the modern environmental crisis rest in perspectives intrinsic to the Bible” (Kay, 1998:215). Kay further argues that the manifestation of God in a variety of natural settings in the Bible suggests a more nature-oriented Bible than is generally recognised. Kay points out that the heart of the ancient Jews’ relationship to nature lay in the biblical mandate to “choose life.”

Unlike White, Harrison maintains that the explicit connection between the exploitation of nature and the Genesis creation narratives became obvious only in the early modern period, not in the Middle Ages (1999:107). Harrison (1999) states that many Christians in the Middle Ages

considered the natural world as a source of moral lessons rather than as a barrier to salvation. They believed that it helps people's spiritual development. The natural world is important to satisfy material needs, and also spiritual and moral requirements of the human race. The aim of knowledge was not to bring nature under human control, but "to shed light on the meaning of nature and of the sacred page. Nature and scripture were both books, and their elucidation called for an interpretive science" (Harrison, 1999:91). According to Harrison, in the Middle Ages, "dominion over the Earth" was related to the exercise of control in the mind rather than in the natural world. The creation story was not considered as an ideology of the subordination of nature before the seventeenth century (for details see Harrison, 1999:96-97). According to Harrison, in the Middle Ages, human beings are the centre of the cosmos. But the loss of this centrality motivated modern people to conquer an Earth that is not truly submissive.

In fact, Harrison believes that seventeenth-century thinkers were interested in "improving" the natural world in order to retrieve a nature that had fallen into ruin on account of human transgressions. This is, he says, similar to the attempt of contemporary environmentalists who are interested in preserving or restoring the natural condition of the Earth.

One may reasonably doubt the soundness of this last conclusion. The level of environmental problems in the two periods is different. Also, the proposals and ideas of the seventeenth-century thinkers and contemporary environmentalists differ significantly. Another problem of Harrison's view is that he is very selective when he discusses the views of Western scholars. He does not clearly tell his readers how some Western anthropocentrists treated the natural environment.

Moreover, Sir Matthew Hale, a seventeenth-century Chief Justice of England, related for the first time the language of stewardship to nature, the animals, and the Earth. Man is required to limit the fiercer animals and protect the tame useful ones (Attfield, 2001:105-106). He believes that man should be the Viceroy of God, "his usufructuary of this inferior world to husband and order it, and enjoy the fruits thereof with sobriety, moderation and thankfulness" (John Black, quoted in Attfield, 2001:105). Hale's view is supportive of Harrison's account rather than White's.

The French eighteenth-century naturalist thinker, Count George Buffon (1707-1788) explained the interaction between humans and the physical environment. Buffon stated that although humans can use the Earth's forests, humans are expected to take care of the remaining forests (Ferkiss, 1993:56). Glacken also underscores that Montesquieu and Buffon showed an interest in nature and natural history (1967:713).

Romanticism also exhibited an appreciation of nature. A variety of Romantics protested against the reductionist, mechanistic and deterministic outlook of the Enlightenment (see Pratt, 2000:21-37). The Romantics in Germany and England characterised the mechanistic and materialistic outlook of the preceding period as too limited and too narrow in its vision. They state that science could not capture the mystery of nature. They

regarded nature as home, as mother, as healer and as teacher and inspiration. In particular, the German philosophers Johann Gottlieb Fichte (1762-1814) and Friedrich Von Schelling (1775-1854) developed comprehensive metaphysical systems that show the integration of matter and spirit. Fichte and his followers in Germany believe that the universe is in the making. Man is required to help it in cooperation with Spirit in civilising it (Passmore, 1974:34). As Pratt (2000:31) has noted, the Romantics gave a new authority to feeling; they regard it as “the guide to right behaviour.” “Instead of Descartes’ ‘I think, therefore I am,’ the Romantics said, ‘I feel, therefore I am’” (Ferkiss, 1993:57). For the Romantics, the natural world is alive and is not passive (Pratt, 2000).

The Romantics influenced some essayists including Englishmen John Ruskin and William Morris, and Americans Ralph Waldo Emerson (1803-1882) and Henry David Thoreau (1817-1862) who conceived nature not as a resource for economic purposes, but rather as a home which accommodated and enhanced our most spiritual aspirations. They were also among those who challenged the domination of humans over animals (see Clarke, 1993:131).

Although Herbert Spencer transformed Charles Darwin’s theory of natural selection into the doctrine of the “survival of the fittest,” Darwin’s discovery of evolution by natural selection (1859) emphasises the continuity between humanity and other species.

The American naturalist, John Muir (1838-1914), argues that a divine spirit flows through the whole of nature. He states that nature had rights of its own independent of humanity. He, thus, initiated the ideas of forestry conservation and national Parks in America (Muir, cited in Donald VanDeVeer and Christine Pierce, 1994b:95). Although he believed in intrinsic value and rights of all creatures, he publicly adopted an anthropocentric attitude towards nature. Muir and other nineteenth century preservationists in America valued nature for the sake of scientific research, for recreation, aesthetic enjoyment and spiritual inspiration.

Gifford Pinchot (1865-1914), a one time head of the US Forest Service and one of the leaders of the conservation movement, also tried to promote the conservation of wilderness, albeit for eventual human use. He supported the scientific management of national forests. He suggested that forestlands are to be conserved so that all citizens can wisely use and control them.

In brief, various Western philosophers and non-philosophers have conceptualised the natural environment in various ways. The dominant Western world view and social paradigm have maintained the isolation of humans from nature. It has had negative practical impact on the natural environments both in Europe and outside Europe. As Passmore (1974) has noted, the West was dominated by the Baconian-Cartesian approach, which does not recognise the intrinsic value of nature. This approach appeared first merely as an aspiration, eventually as an achievement. To put matters another way, conventional approaches to environmental issues have further

exacerbated ecological problems. In spite of this, not all Western traditions and thinkers have supported Western consumerism and the alienation of humans from natural environment. The evidence indicates that some Western thinkers have opposed the dominant tradition and emphasised the relationship between humans and the natural environment. Their teachings have had ecological concerns that are useful for modern environmental ethicists.

PART II
BASIC CONCEPTS

CHAPTER IV

THE STATE OF THE ENVIRONMENT IN ETHIOPIA

This chapter is partly a background chapter, relevant to later chapters on environmental ethics and partly concerns important social and political trends leading to environmental degradation in Ethiopia. It addresses questions relating to the causes and consequences of environmental degradation, the influence of government policies on indigenous knowledge and how peasant farmers and pastoralists perceive the present state of the environment. Essentially it shows that the neglect of systems of indigenous environmental ethics and science has had negative impacts on the natural environment in Ethiopia.

4.1. SOME CHARACTERISTIC ENVIRONMENTAL PROBLEMS

Environmental degradation has become a serious problem in Ethiopia. Although the degree of land deterioration differs from region to region, there is no part of the country which is not affected by environmental degradation. Overgrazing, overcultivation, and deforestation are considered as the major causes of environmental degradation in Ethiopia (see Alemneh Dejene, 1990:2-3, 19-21; Tadesse Berisso, 1995:139-155). But, environmental degradation is by no means an even process. Some areas are being affected harder than others. As some writers have rightly observed, environmental degradation is very serious in the northern highlands of Ethiopia owing to the dissected nature of the terrain, with nearly 70 per cent of the highlands having slopes in excess of 30 per cent, and highly erosive rain storms. "Highly erosive rain storms hit a landscape that has been stripped bare, with little mitigating cover to protect the soil from the bombardment of the rain drops" (Michael Ståhl, 1992:283). As a result, the yield of soil declines, leading to less vegetation. Besides, farming practices such as preparing fine tilth seed beds for small seed crops such as barely, wheat, *teff*, sorghum, and single cropping have enhanced soil erosion (Adrian P Wood, 1990:191; Tegegn Gebre Egziabher, 1995:283). Here, it is important to note that, as Alan Hoben (1995) has observed, estimates of soil erosion and nutrient loss in Ethiopia seem to be too high and unreliable. Various authors give contrasting figures (see for instance Ståhl, 1990:40; Adrian P Wood, 1990:188).

Compared to the northern highlands, landform is less rugged, and there is more vegetative cover, in the central and southern highlands of

Ethiopia. As a result, soil erosion is less severe in central and southern Ethiopia than in the north (Hoben, 1997:57).

Deforestation has also contributed to environmental degradation in Ethiopia. The major parts of the southern highlands were full of forest and woodlands at the turn of the century; but by 1950 about 40 % of these lands was covered by forests (Sutuma Waaqo, 1994:12). Various authors give different figures concerning the present forest area in the country. Heske (cited in Melaku Bekele, 1992:96) estimated that 8.1% of the total area of Ethiopia is covered by forest. F Breitenbach (cited in Melaku Bekele, 1992:96) on the other hand estimated that forest area covers 2.5% of the total area. Three West Ethiopian former provinces: Illuababorra, Kefa, and Welega contain half of the remaining forestland, and a quarter of the country's forestland is found in Illuababorra. It has been estimated that from 80,000 to 200,000 hectares of forest are lost every year (FDRE, 1997:1) owing to the clearance of forests for agricultural areas, the collection of fuelwood, the use of timber for construction, fences and furniture, and the uncontrolled grazing of livestock.

Moreover, the incessant civil war and the deployment of large military units in Ethiopia have contributed to the depletion of forests. For instance, Bahru Zewde has stated that military units in Wollo cut trees indiscriminately both for their own firewood needs and for the benefit of their mistresses (1998:106).

It is also worth noting that forest fire has caused a considerable loss of natural forests in Ethiopia (for details see Peter Lex 1986; Mengistu Woube, 1998; Zerihun Woldu and Sileshi Nemomissa; Ministry of Agriculture [MOA], 2000; Elleni Mocra, 2000). My informants have also confirmed that forest fire has had devastating impacts on animals and plants in their regions. The recent bush fires in different parts of the country have ruined the livelihoods of many honey farmers (MOA, 2000; Ayenew Haileselesie, 2000). Forest fire occurs frequently in different parts of the country even though there are no fully documented fire data in the country. Moreover, no serious policy has been formulated to control forest fires in Ethiopia. There have been no trained forest fire fighters.

4.2. DEBATES AND FURTHER CHARACTERISTIC ENVIRONMENTAL PROBLEMS

Population growth is often taken as one of the causes of environmental degradation in Ethiopia. But there is no universal agreement among scholars about the impact of population pressure on the environment. Some Ethiopian and non-Ethiopian scholars underscore that population growth has given a new dimension to the pressure on land owing to the partial control of epidemics and the relatively peaceful period of Haile Selassie's reign after the Second World War (see Ståhl, 1992:282).

Hoben, however, argues that those who consider population pressure as one of the major causes of environmental degradation are

promoting the neo-Malthusian environmental degradation narrative. He contends that this narrative is not new. It had a paramount role in east African soil conservation and forestry policy in Africa in the 1930s (Hoben, 1995:1013). He further argues that, in 1985, the major Western donors – World Food Programme (WFP), the European Economic Community (EEC), the United States and the Ethiopian government relied on this narrative to justify and institute a massive food-for-work programme (Environmental Reclamation) which was supposed to tackle the long-term, underlying cause of famine in Ethiopia. But all groups, he said, ignored the economic costs and benefits of the use of standardised environmental management “packages,” Ethiopia's distinctive physical and institutional environment, its agrarian reform programme in the 1970s and civil strife. As a matter of fact, the neo-Malthusian narrative and its supporting data have misrepresented the nature of degradation and the ways in which human activity is causing it (see Hoben, 1995 and 1997).

It is my contention that even if Hoben's observation about food-for-work is sound, population pressure has had a negative impact in some parts of the country. Recent studies have confirmed this trend (see Tegegn, 1995:29; Yibeltal Gebeyhu, 1995:57). In my present study, I have noted that many peasant farmers have been forced to cultivate steep slopes and marginal lands, and failed to maintain long fallow periods. Population growth increases demand for arable land, firewood and pasture and thereby accelerates environmental degradation.

As I have argued elsewhere (1997a), the growth of population does not necessarily or even characteristically lead to environmental degradation. Although population growth can be one factor in environmental degradation, it is not its major cause. Thus, my view is at variance with the conclusion of World Commission on Environment and Development (WCED) that regards population growth and poverty as “a major cause and effect of environmental problems” (1987).

Robin Attfield too rightly rejects the view that population growth is cancerous although he accepts that population growth is a real problem and may negatively affect other species (1998b). He states that important as policies promoting sustainable levels of population are, representing population growth as a cancer is misguided, and could engender indifference to suffering. He has further doubted Holmes Rolston's view (1996) that it is sometimes right to let people starve in order to save nature. According to Rolston,

[f]eeding people always seems humane, but, when we face up to what is really going on, by just feeding people, without attention to the larger social results, we could be feeding a kind of cancer (1996:259).

He further proclaims that natural values should not be sacrificed to cover human mistakes. He says that the “feeding people” gained by “sacrificing

nature” could not provide a lasting solution to a problem that needs to be solved at its roots (Rolston, 1998).

However, population growth should not be used as a justifying reason to let the present generation starve. It is important to consider the real causes of starvation rather than exclusively blaming population growth as the major factor of environmental crisis. In some cases, population growth may have positive effects on the environment.

In this connection it is important to note the contention of E Boserup (1965) that population growth is essential for the growth of output. Similarly, after studying the environmental conditions of the Machakos district in Kenya, Mary Tiffen *et al.* (1994) and others suggest that in order to change their crop intensity and techniques of production, and take measures to conserve their environmental resources, communities require a high level of population density. In the 1930s, colonial administrators conceived Machakos district, a semi-arid area of east central Kenya, as vulnerable to environmental degradation. Contrary to this expectation, today, the Machakos district has improved its environment and agricultural production despite its population being 5 times larger than it was in the 1930s. There are more trees in the area than 30 years ago. Therefore, some writers indicate that population and agricultural growth do not necessarily lead to resource degradation (see John English *et al.*, 1994:ix).

Further, James Fairhead and Melissa Leach (1996) have questioned the view that population growth has led to the degradation of forestlands in Kissidougou, in the savanna of “forest” Guinea. They have shown that people have created forest islands around their villages, and have enriched open savannas with more woody vegetation forms. Accordingly, population growth has increased forest cover. They have shown that the state used the false assumption that Kissidougou’s landscape was degraded to justify its action to take resource control from local inhabitants, and to apply its own policies. But this has provoked environmental problems. They stress that the instrumental effects of the degradation discourse on many aspects of Kissidougou’s life are negative.

The conventional literature on environmental degradation identifies peasant farmers as ignorant of the process of environmental degradation, and as agents responsible for environmental destruction. According to Kebede Tato and Hans 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 (1992: 6-7).

Government officials also viewed peasant farmers as the victim and the cause of environmental disaster (see Dessalegn Rahmato, 1998b).

But it should be underlined that the traditional land tenure system had been one of the major causes of environmental degradation, economic

inequality, and exploitation of peasant farmers by the landlords in Ethiopia. As Dessalegn has noted, the government is also responsible for environmental degradation (1998a:51). Before the February 1974 revolution, there were two forms of land tenure system: "owner cultivator" in the north and "tenancy" or the *gabbar* system in the south. While the people of Abyssinia in the north had inalienable rights to acquire their own *rist* which was inheritable, the majority of peasant farmers in the southern half of the country were *gabbars* or tenants of landlords, who acquired land through grants from the state following a vast expropriation of land (up to two-thirds) in many places in the second half of the nineteenth century. Tenant farmers in the south did not have any legal or political protection from arbitrary and sudden eviction. They were forced to give free service to the northern settlers and pay tributes in kind both to the northern settlers and the state. They were not encouraged to control soil erosion or conserve trees and water resources. On the contrary,

[w]hen they increased the value of the land by planting trees, digging ditches, etc. or raised the yield of their harvest, the landlord usually responded by increasing their rent (which amounted to 75 per cent of the harvest in some areas (P Koehn, 1982:255).

With regard to trees, the law did not clearly recognise security of tenure.

Even in the case of the peasant farmers of the northern part of the country, it should also be noted that the periodic reallocation of land, the scattered and changing composition of the parcels that constituted a household's holding, and the division and redistribution associated with inheritance in northern Ethiopia discouraged peasant farmers from investing in long-term improvements in land. As has been stated, environmental deterioration is higher in northern highlands than in the south.

Although successive Ethiopian governments have had negative impacts on indigenous knowledge, emperors and kings have tried to protect large forests in Ethiopia for environmental and economic reasons (for details see Melaku Bekele, 1992; John McCann, 1995; Dessalegn, 1998a; Workineh Kelbessa, 2001).

At the beginning of the 1970s the government issued legislation and established government bodies responsible for environmental protection. Despite the fact that the environmental record of the military government (1977-90) was disappointing, it established institutional structures to address environmental issues. It designed grand schemes such as state farms, forest plantations and irrigation projects without consulting the rural people. Policy makers hardly recognised the diversity of farming systems and agro-ecologies in the country. I have already discussed the environmental record of the military government elsewhere (see Workineh, 2001; see also Shibru Tedla and Kifle Lemma, 1999).

It is also worth noting that the villagisation and resettlement programmes of the military government led to destabilisation of peasant farmer life which had a destructive impact on agriculture, food production and the environment (see Beyene Dolicho, 1992; Tesfaye Tafesse, 1994). In all parts of the country, the resettlement and villagisation programmes of the Ethiopian military regime of the 1970s and 1980s inflicted incalculable damage on natural forests. For instance, recent resettlement schemes and mechanised farming aggravated forest fire in Gambela. As Mengistu noted, the military government transferred many thousands of people from the northern Ethiopian highlands to Gambela which increased the population in Gambela from about 50,000 in 1983, to 122, 800 in 1984 and to more than 174,000 in 1996 (Mengistu, 1998:276). About 300,000 refugees from the southern Sudan in 1988 and more than 65,000 in 1996 have also aggravated the situation. According to Mengistu, [b]etween 1984 and 1994, the local people and the government cleared and burnt 140,000 ha of natural forestland for the establishment of resettlement schemes and mechanised farms (1998:276). In Gambela, woody, grassy and bushy lands are replacing the previous forestlands, as a result (Mengistu, 1998).

In spite of the negative overtones of the state ownership of the land during the military regime, the current government has continued to adopt the same land policy. It has established a new environmental policy in order to promote sustainable social and economic development. It is expected to be cross-sectoral, integrative, and supportive of decentralised and local, especially community based, initiatives. The government promised to encourage genuine grassroots participation in environmental decision making (see FDRE, 1997). However, what should be noted is that there is no basic forest policy in the country.

Rural poverty has also aggravated environmental degradation. But I submit that rural poverty is not the major cause of environmental degradation but its effect. After all, peasant farmers who are dependent on nature for their survival do not continue to use the already degraded environment beyond its regeneration capacity through perversity but through necessity. The poor cannot sacrifice meeting their immediate consumption needs.

I have shown in this section that population growth, government policies and poverty have contributed to environmental degradation. In the next section, I present the bearing of my fieldwork on the state of the environment in Oromia.

4.3. THE BEARING OF INTERVIEW FINDINGS ON THE STATE OF THE ENVIRONMENT IN OROMIA

My informants who participated in recent interviews indicate similar factors that have been mentioned in the preceding discussion as causing environmental degradation. They stated that the causes of environmental degradation in the study sites involve population growth,

overcultivation, ploughing down slopes, clearance of forests to make way for agriculture, house construction, firewood gathering, sawmills, coffee plantations and human settlements of various sorts, logging, and charcoal making.

Almost all of my informants agree that government land policy, population growth and climatic change aggravate food insecurity. Otherwise, there is enough land to feed the number of people alive nowadays in the study sites. School dropouts and non-attenders are not entitled to obtain farmland because the present government outlawed the redistribution of land. They can only share the farmland of their fathers. It has also become difficult to depend on the livestock population owing to the scarcity of water and grass. Periodic drought has ravaged animals and vegetation, particularly in Borena.

The informants were further asked whether children are always a blessing, or only sometimes. They said that generally the Oromo people do not hate children. But, at present, the majority of the people, particularly the poor, do not want to have many children because of the scarcity of resources caused by humans and natural forces. The informants said that if one cannot bring up his or her children well and is not sure about his or her own survival there is no point in having many children. The fear of death has discouraged the rural poor from having many children. In some places, women have refused to sleep with their husbands. They have resisted the idea of taking modern medicine to control birth for they believe that this is against their culture and God who is responsible for all procreation. The informants have stressed that in the past very few women were fertile. At present, all women seem to be fertile, and have given birth to children through marriage and outside marriage. The informants have stressed that illegal births have contributed to unnecessary population growth. At the same time they have lamented that in the past women were not allowed to have a child outside marriage. According to the Oromo law,

girls should be virgins and virgins cannot conceive. A pregnant virgin is like the wife of a *raabaa* in that neither should conceive—indeed, according to their social status as declared by their hair style, neither is capable of conception. The children of each are bastards who can have no proper age-grade nor set, and hence can have no proper place in society and its rituals (Paul T W Baxter, 1978:176).

In the past, this law had significant role in controlling population growth.

On the other hand, the informants have stated that when resources are abundant and the climate is friendly, everybody wants to have many children, and is willing to take care of children who have nobody to support them. Some informants believe that those who have many children will stay alive longer than those who have no children. Various children will engage themselves in various activities, which are very useful for themselves and for their families (Infs: Borbor Jilo; Doyo; Jaldessa Jatani; Farisi). The

informants believe that if the climate improves and the government changes its policy, the present population can feed themselves.

It is worth noting that information concerning soil improvement and increase in forest cover has also been gathered on the basis of interviews. Very few informants in the study sites said that application of dung, increases in forest cover and fallowing are the main factors bringing soil improvement in both Illuababorra and Borena zones.

Very few informants said that forest cover has increased over time owing to multiplication and regeneration of forests and the protection of forests by government in their areas. In particular, my informants in Sagi and Baki Peasant Association, Illuababorra zone, have pointed out that natural forests in Tagata locality have increased in quantity and quality. Here, population pressure did not lead to deforestation (Infs: Ambachew; Galan, Shuma; Marga; Mengiste).

On the other hand, my informants in Borena have stated that the prohibition of forest fires has led to bush encroachment that is harmful for their livestock population. A previous study has also confirmed that the expansion of undesirable woody species (mainly *Acacia spp.* [several species of *Acacia*]) into the rangelands led to range degradation (OBAD, 1998:11). It is also worth noting that the government introduced ranches into Borena plateau two decades ago to promote a Western model of development (Gufu Oba, 1998:65). Nonetheless, the alienation of key grazing lands as ranches has aggravated the pressure on the remaining land and also increase in land speculation.

Moreover, the expansion of Somali clans and the allocation of communal rangelands to private investors have led to the shrinkage of grazing lands in Borena. When the Borena people moved out of the wet season into the dry season rangelands, the Somali groups occupied the wet season rangelands for good. The Borena pastoralists could not return to their land. During the assembly of the *Gumii Gayo* of 1996, the Borena people appealed to the Presidents of the Regional State of Oromia and the Federal State of Ethiopia in order to return their lands given to the Somalis by the government. However, there was no response from the government.

Some informants, particularly extension workers, state that the absence of a clear land policy is the major cause of environmental degradation. Sometimes the land is taken as the property of the government. At other times the land is considered as the property of the people. Following the nationalisation of the land by the military government in 1975, many peasant farmers and pastoralists destroyed a large proportion of the natural forests in the study sites. Peasant farmers thought that natural forests are free and can be exploited as much as they can. The study undertaken in the study regions showed that natural forests have been depleted over time. It was estimated by the Agricultural Bureau of Borena that about 40, 000 hectares of high mature forests had been cleared from 1986 to 1989 in Borena (Inf: Goshu). Some people from the south (Gedyo) became concentrated in Anfarara, Borena zone, at levels beyond the local

capacity to provide fuelwood for cooking, which resulted in environmental degradation from overharvesting and deforestation (Inf: Goshu). Forests covered 0.6 million hectares of Illuababorra twenty five years ago (Inf: Bekele Kafiyalew). It is estimated that about 11,000 hectares of forests are cleared every year in Illuababorra. During the military government in Illuababorra, There were five sawmills, which are partly responsible for deforestation. At present, these sawmills are required to restrict their activities to the quota determined by the government. Unlimited use of trees is forbidden (Inf: Bekele Kafiyalew). At present, there are 400,000 hectares of government forests in Illuababorra zone, particularly in Gaba Dedessa, Yayo, Saylam Gabra Dima and in Sibo Tolikobo. 500 hectares of community forests, planted by members of Peasant Associations, are also found in Illuababorra (Inf: Bekele Kafiyalew). In 1989, Biru Abebe estimated that there are about one hundred different kinds of trees, which are ten meters tall. *Waddeessa* constituted 40 per cent of these trees. In recent years, Metu district Agricultural Bureau assessed the state of forests and found that *Waddeessa* constitutes 5-10 per cent of the remaining trees (Inf: Tilahun).

My informants lamented that settlers from the northern part of the country have destroyed a considerable part of natural forests in Illuababorra. First, the Haile Selassie I government brought settlers from Wollo and settled them in Illuababorra. In 1984, the military government resettled many people from the northern part of the country in Illuababorra owing to drought in the north. These settlers have indiscriminately destroyed natural forests and coffee plantations. Millions of trees were cut down to build new homes. This has led to local climatic change and soil erosion. According to Bekele Kafiyalew, the resettlement programme has led to the destruction of 3000 hectares of virgin forests.

Bekele Kafiyalew further stated that about 2000 household heads of Region Three, Amhara Region, have settled in three districts of Illuababorra since 1998. They have controlled 2068.6 hectares of the land, and destroyed 366.85 hectares of forests. Bekele Kafiyalew also mentioned that about 66,000 peasant farmers of Region Three have moved to Welega zone, Western Oromia. Bekele Kafiyalew thinks that these peasant farmers came to Illuababorra and Welega because of the scarcity of farmland in Amhara region. He said that necessary legal measures would be taken to reclaim the land taken by force.

Far worse, the present land tenure policy in the country does not recognise the pastoral rights. The extension programmes of the highland areas have been applied to the pastoralists. The Military government organised Peasant Associations in pastoral areas where there were not many peasant farmers. During my fieldwork, the present government had not yet formulated laws, which are relevant to pastoral areas.

The informants were asked to compare the environmental records of the Haile Selassie, the military and the present governments. Many informants agree that forests were well protected during the imperial regime

even if the latter did not encourage peasant farmers to plant trees and improve the quality of the land. The *gabbar* system did not create an incentive for peasant farmers to promote innovation and improvement, and when peasant farmers improved the quality of the land and increased productivity, they were expected to pay more tax to the state and the landlords. The informants responded that there were more forests before the domination of the Amhara over the Oromo people. Melaku Bekele (1992) has also stated that the effect of long standing deforestation and decline in soil fertility in most parts of northern Ethiopia required a major population re-structuring and the conquest of the eastern, southern and the south western fertile regions of the present-day Ethiopia. It is also worth noting that during the Italian occupation, the Italians established sawmills in Negele Borena and exploited natural forests. They exported wood products to Asmara (Inf: Goshu). Although the Italians established a *Milizia Forestale* (Forest Militia) in Ethiopia in 1937 to supervise forest exploitation by the local people, stock-taking (inventory) and management of the forest, silvicultural work and reforestation and improvement of woods and forests (F Quaranta, 1939), their forestry programme left little mark in the country (Melaku Bekele, 1992:83).

Although the Derg encouraged peasant farmers to plant trees, the plantations did not have sustainability. Forests were destroyed because peasant farmers were forced to plant trees, and voluntary participation of peasant farmers was not given due attention. At present, peasant farmers cannot cut down big trees without the permission of the officials of the Peasant Association.

According to informants, environmental degradation has had negative consequences including climatic change, ecological imbalance, the spread of human and animal diseases, and increasing shortage of critical resources such as arable land and pastureland. It also involves air and water pollution, drought, reduction of genetic diversity, poverty, famine, migration of the people and animals, lack of construction materials, reduction in land productivity, reduction of fallow years, and so on. In the past, there were long rainy seasons in both Illuababorra and Borena. Particularly in Illuababorra, until about 1976, it was only from January 15 – 20 that the region lacked rain. At present, there is no rain from January to March. There has been no sufficient rain in Borena for the last six years. The informants lamented that the major cause of climatic change is deforestation. They underscored that the resettlement programme of the military government has aggravated the situation since 1985. Temperature has been increasing over time, and the volume of surface and underground waters has decreased in both Illuababorra and Borena. Some springs, wells and permanently flowing rivers have dried up. Drought has appeared every two years. In the past, drought appeared every ten years. Some peasant farmers and pastoralists have migrated to neighbouring districts in search of grass and water since 1995. For instance, about 14 Peasant Associations have migrated from Liben district to Adola and Wadara, Hagere Mariyam

and Odo Shakisso districts. Unfortunately, many animals died because they could not adapt to the new climate and environment.

Moreover, diseases such as malaria, diarrhoea, tuberculosis, trypanosomiasis, skin infections and other contagious diseases are rampant almost in all parts of the study sites. Previously, malaria was common only in Dollo, Malka Guba and Kiltu in Borena, and in lowland areas in Illuababorra (Infs: Goshu; Tilahun; Tache; Wariyo). New weeds, leaf blight and what the Illuababorra Oromo called *coleraa* (a disease which makes crops dry out) attack plants. Forty years ago peasant farmers in Illuababorra used to produce 18 quintals of maize per hectare. At present, peasant farmers only produce 12 quintals per hectare (Inf: Tilahun).

All this shows that the state of the land has dramatically changed over the years. The informants were asked what their ancestors of 100 years ago would think about the state of the land if they were alive. All of my informants said that they would blame the present generation for being culturally ignorant and for destroying the soil, lands, forests, and wildlife, which are the basis of their life. They have underlined that in the old days, trees were abundant; there was no serious disease, which threatened the health of animals and human beings; and every person could produce sufficient crops from a small piece of land. At present, most of the resources have been depleted. The informants have stressed that their ancestors could have advised the present generation how to get out of the present stalemate for they knew how to live peacefully with the natural environment. Some informants said that if their ancestors were alive, they would commit suicide for they could not lead a happy life on this degraded environment. They would not want to see the present state of the land.

The foregoing discussion has shown that soil erosion, deforestation, overcultivation, and overgrazing have contributed to environmental degradation. Inappropriate economic policies, inappropriate political decisions and actions of the state, poor infrastructure, and insecure land tenure have exacerbated the environmental crisis. Therefore, until and unless environmentally sound indigenous practices and beliefs are taken into account in averting further ecological crisis, the problems will get worse. This in turn requires the study of systems of indigenous environmental ethics and science, which will be the focus of discussion in subsequent chapters.

CHAPTER V

OROMO ECOTHEOLOGY

Many contemporary Catholic and Protestant theologians have tried to create a new theology of nature, which is conceived as “ecothology” that takes natural creation seriously (Victor Ferkiss, 1993). Susan Power Bratton holds that the Old Testament speaks of God’s continuous interaction with creation.

The concept of an ecothology, based on relationships between God and humankind, God and nature, and humankind and nature, therefore, has a foundation in the ancient writings and is by scriptural precedent a legitimate Christian concern (1986:68).

Similarly, R H Nelson has pointed out that environmentalism has failed to recognise the original inspiration of biblical models of stewardship and is unable to draw upon theological lessons learned over many centuries. According to Nelson a brand-new theology is not needed to address environmental issues. The reinterpretation of the messages of the Judeo-Christian tradition can offer both ample scope for environmentalism and firmer grounds for the development of an environmental ethic and a theology of environmental protection (Nelson, 1990:5).

Nelson has stressed that the very framework of environmental thought, that man is responsible for other creatures, is a biblical message that in turn reflects the biblical creation message that man alone among creatures was created in the image of God. Science does not convey this message. Nelson thus believes that ecothology is based on the Judeo-Christian traditions. In the same way, many writers label as ecothologists Christian theologians who have considered ecology as a central religious issue and tried to reinterpret biblical passages and church teachings in the aim of identifying traditions that support an ecologically sensitive theology (see Roger S Gottlieb, 1996; David Kinsley, 1995). Most ecothologists are of the opinion that a theological response is needed to address the dangers of the current ecological crisis. They have been searching positive elements from Christian traditions in order to build a new theology that helps us face the current crisis. According to Kinsley, instead of considering themselves revolutionaries who are determined to overthrow Christianity, most ecothologists see themselves as reformers who would call the church back to its basic principles (1995:164).

On the other hand, the religions of American Indians, and Eastern philosophies and religions have influenced contemporary ecotheologians. Contemporary Catholic theologian, John Carmody, for instance, maintains that in addition to the lesson that can be derived from American Indians

the omnipresence of ... transcendental revelation forces us to take Asian religious experience more seriously than classical Christian theology did. For example, Hindu, Buddhist, and Taoist philosophies all offer rich reflections on nature that Christian theologians have yet to appropriate (Carmody quoted in Ferkiss, 1993:186).

David G Hallman (1994) on his part states that the emerging ecotheology is based on feminist theology and insights from the traditions of indigenous peoples that break open the conceptual prison that endorses human supremacy among the species. He further states that ecotheology can help humans rediscover scripture.

This chapter similarly aims to show that Oromo ecotheology that teaches a positive relationship between God, humanity and nonhuman creation has the capacity, which it already fulfils in part, to address environmental problems in Oromia, and could, if taken seriously, influence modern environmental ethicists and contemporary ecotheologians. Although I do acknowledge that some features of theology in Europe are missing from Oromo belief system, I consider it ecotheology for it has much in common with and is complementary to the newly emerging ecotheology. Oromo ecotheology is mainly concerned with the nature of God, spirits, beliefs and the relationship between God and humans, and between humans and the natural environment. Attempts are made to show whether indigenous religious beliefs can make a great deal of difference for the health of the environment. The chapter is divided into two sections. The first section addresses how the Oromo people perceive the Supreme Being and creation. The second section addresses the question of how the *Qaalluu* institution has influenced an Oromo understanding of the natural environment. It explores how the practices of the indigenous Oromo *Qaalluu* institution have been distorted and given different roles and meanings as we move from Borena to other parts of Oromia.

5.1. BELIEF IN THE SUPREME BEING

An indigenous Oromo has a belief in the existence of a Supreme Being who is believed to be responsible for the whole of creation. The Oromo use the concept "*Waaqa*" to refer to the Supreme Being. There is only one *Waaqa* (God). The Oromo conception of the creator differs from modern religions, such as Christianity and Islam, for although *Waaqa* is conceived as one, His manifestations are many. The many aspects of *Waaqa* are considered as *Ayyaana*. I will discuss the meaning and role of

this concept at a later stage in the argument. The Muslim Oromo and others also use the word “*Rabbi*” 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). It should be noted that the word *Uumaa* also refers to the created physical world. *Waaqa* is *Hunda beekaa* (omniscient). He has knowledge of everything; He is all-wise, all-knowing, all-seeing and all-hearing. *Waaqa* is *hundaa tolaa* (omnibenevolent). *Waaqa* is kind. In Oromo culture, “God is a kindly figure, not the angry and vindictive God of Judeo-Christian tradition” (Asmarom Legesse, 1973:45). *Waaqa* is *hunda danda’aa* (omnipotent). Nothing is impossible with *Waaqa*. *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 (see Workineh Kelbessa, 2001).

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. *Waaqa* is the self-existing Being. He is immortal. In other words, He is ever-living. The Oromo thus had the concept of the monotheistic supreme God from time immemorial although their conception of God is quite distinct from the Western one. The Oromo conception of *Waaqa* illustrates that C J Momoh’s generalisation of the African notion of God is unfounded. “There is nothing to feel ashamed about the fact that our notion of the Supreme God was extremely generated on account of our colonial exposure” (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 is 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 (1996:64).

The absence of proverbs, said Momoh, is a clear indication of the absence of the concept of God in traditional Africa (1996:67).

However, as has been stated earlier, the Oromo believe in one Supreme Being – *Waaqa*. The Oromo use many interesting proverbs in His honour. Unless otherwise stated, all proverbs in this study were gathered from the study sites. Among others, “*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.” “Harka dhiqatan garaan jaalata Dhuga dubbatan Waaqni jaalata”–“When you wash your hands the stomach likes, when you speak the truth God likes” (Obsaa Tegegn, 1993:32). “Harki Rabbi namaan qabe batti hinqabu”–“A hand God touches you with has no harm” (Obsaa, 1993:32). This implies that with God human beings are on the safe side. “Dubbiin Rabbi suuta”–“God’s judgment comes slowly” (Abdurahman Mohamed Korram, 1972:114).

G W Burnett and wa Kang’ethe Kamuyu also state that God is not introduced to Africa from outside, and their point is equally relevant to the Oromo as to Bantu peoples.

European travellers in East Africa, filled with preconceived notions, struggling themselves to stay alive, making ephemeral and often hostile contacts with numerous people, and lacking the language to explore esoteric theological matters, failed to perceive the one God that pervades all Bantu thought. Nevertheless, virtually every missionary who spent any substantial time with the Bantu came to recognize, and not always gratefully, the Bantu’s fundamental monotheism (1994:149).

Some writers indicated that the Oromo also talked about *Waaqa diimaa* (the red *Waaqa*). Lambert Bartels writes,

for the sake of completeness ... people sometimes also speak of ‘*Waaqa dema* – the light-coloured *Waaqa*’ (or ‘the red *Waaqa*’) in contrast to ‘*Waaqa gurraacha* – the dark coloured *Waaqa*’ (1983:107).

Daniel Ayanna also states that the black god is regarded as the guardian and protector whereas the “red” aspect of God is considered to be the aspect of *Waaqa* which is there to punish men in case of wrongdoing (1984:106; see also R A Tippet, 1970:153).

My informants in Ambo (see Workineh, 2001), Illuababorra and Borena regions said that the concept of “the red *Waaqa*” is nonexistent in their belief. They associate the colour black with *Waaqa*. In fact, they mentioned that *biduu* (the rainbow) has three colours, one of which is red. *Biduu* is believed to be the belt of *Waaqa*. It should be noted that some of my informants state that they do not know the colour 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 Gamta in his *Oromo English Dictionary* defines *Waaqa* as God and sky (1989:586). Mudee Mahdi Haamid (1995:330) defines *Waaqa* as the creator of human beings. J

Ludolphus (1982) stated that *Waaqa* for the Oromo means “the Heaven” which governs the world. Enrico Cerulli (1922) viewed *Waaqa* both as heaven and as God. Daniel also wrote that through his interviews he has found out that there are three meanings of *Waaqa*. The concept *Waaqa* could be used to refer to the expanse of the sky as seen from the Earth, a Supreme Being and still it could be understood as to mean the heaven, as the abode of the Supreme Being (Daniel, 1984:105).

As I have stated else where (Workineh, 2001), the definition of *Waaqa* as a sky God does not seem to be plausible. The phrase “sky God” does not represent the early Oromo view of *Waaqa*. The Oromo in the study sites 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 He was sitting on the ground wearing a cotton blanket. While many animals exhibited great respect to *Waaqa*, and thanked Him for His kind management of their affairs, a goat stepped on Him. It was after *Waaqa* cursed the goat that its tail was lifted up. A mule is also said to have kicked *Waaqa* because He did not stop raining. The mule then became sterile because of its misbehaviour. One oral tradition also holds that a house built in the name of *Waaqa* caught fire in the distant past. When all animals brought water to extinguish fire, *Ududde* (a pigeon-like bird) brought dry *tuufoo* (daisy like plant) which would help the fire burn more strongly. *Waaqa* then cursed it. Since that day all wild animals and birds have not allowed *Ududde* to drink water (Inf: Legese Mamo).

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. Some informants underlined that *Waaqa* lies above the seven skies although they could not name these seven skies (Infs: Ambachew, Legese Mamo). The sky is thus one among the particular manifestations of *Waaqa*. Some informants underscored that although they could not identify the exact location of *Waaqa*, they show the palms of their hands to the face of the sun in supplication. They think that *Waaqa* is everywhere. *Waaqa* is not only imprisoned in the sky but also *Waaqa* is always with us and is quite accessible although we don't see Him. He can be called upon any time and anywhere since He is omnipresent (Infs: Abdullatif; Huka Garse). Likewise the Akans of Ghana “say that if you wish to say something to God, tell it to the wind” (W Emmanuel 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 (Joseph Bokaye Danquah, 1995:101). In most cases, European writers tend to use their own concepts in their anthropological study of the African people. In addition to the above creation story, the following folktale also shows that the concept “sky God” is a recent phenomenon.

A long time ago there was a certain group of people, which had the power to predict the future. Unfortunately, all members of this group died but one young man. One day the emperor asked the young man to come to his palace and inform him about the coming year. This call gave the young man a hard time because he did not inherit the knowledge of his forefathers and his father. On his way to the palace, he met *Waaqa* who stood at the side of the road like a human being. *Waaqa* asked him where he was going. The young man told *Waaqa* that he was required to meet the emperor so as to inform him what will happen in the future although he has nothing to tell. *Waaqa* asked him whether he could give him something if He told him about the future. The young man promised to share with Him the gifts, which would be given to him. *Waaqa* then told the young man that the coming year will be full of lying. The latter went to the palace, and informed the emperor the same thing. The emperor was very happy. He rewarded him. The young man did not want his advisor to know that he was rewarded. He thus asked his friends to hide the gifts and take them to his home, thus breaking his promise. On his way home he met his advisor. "Did you get anything?" asked the advisor. The young man replied that the emperor did not give him anything. Although *Waaqa* knew that he was lying, He allowed him to go home. After two years, the emperor again called the young man to see him, and asked the latter to tell him about the nature of the coming year. The young man regretted that although one knowledgeable man enabled him to save his life two years ago, he failed to keep his promise. He did not know how to approach the emperor. In any case he decided to see him. When he started his journey, he met *Waaqa* who appeared and behaved as a human being. *Waaqa* asked him what made him worried. The young man told Him his past history and his present problem. *Waaqa* asked him whether he would deceive him as he did before if He would help him to solve his problem. The young man said that he would never repeat the previous mistake. Subsequently *Waaqa* advised him to tell the emperor that the coming year would be disturbed by war. The young man went to the palace and did what he was told to do. The emperor rewarded him for his information. On his way home, *Waaqa* met him and asked him whether he received something from the emperor. The young man violently reacted against Him. He said that you could not ask him this question, and were not entitled to get anything. He attempted to kill *Waaqa* by a spear. *Waaqa* begged him to leave Him alone and go home with his gifts. After two years, the emperor ordered the young man to predict the future. The young man recalled that he broke his promise twice. He suspected that the emperor would kill him for he could not get anybody to seek advice from. On his way to the palace, he met *Waaqa* for the third time. The latter asked him what scared him. The young man told Him that in the recent past his life was saved, owing to the advice of two individuals whom he deceived and violently harassed. *Waaqa* asked him if he would be willing to share the gifts with him. The young man said that he would keep his promise. *Waaqa*, then, advised him to tell the emperor that the coming

year would be characterised by *Dhugaa*. He told the emperor this information. The emperor gave him slaves, clothes, a horse and other things in return. On his way home, he met *Waaqa*. He told Him how the emperor treated him, and allowed Him to take whatever He wanted. He underlined that it is because of His advice that he received all these things. *Waaqa* told the young man that “it was me whom you deceived, and tried to kill during your previous journeys. I am *Waaqa*. It was not you who did this. But it was time. You can go home with all your possessions. Peace will reign in the world and from now onwards, do not go to the palace. I will go to the sky” (Inf: Legese Chali).

Subsequently, the belief arose that *Waaqa* had become a sky God. This passage thus shows that belief in *Waaqa* as a “sky God” is a recent belief. *Waaqa* was not a sky God at the time of the talk. In other words, originally *Waaqa* was not remote to His creations. He existed among humans and the nonhuman creation.

This story also shows that *Waaqa* is tolerant. He could have killed the person who deceived him twice. He did not even accuse the person for committing morally wrong actions. This in turn reflects a certain kind of fatalism although it does not wholly represent the Oromo view of reality. The story shows that what has happened could not be influenced by human intervention. It is time that matters most, and what happened was willed by fate. To put matters another way, the value judgement that is implied is that everything depends on destiny.

However, 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? Most Oromo believe that above all things *Waaqa* stretched out the Earth, and created all other things. According to one Oromo creation story, *Waaqa* moulded the physical form of the first human being from the soil. Subsequently, He breathed His breath into this physical form. 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. In other words, when the physical body dies, the soul goes to *Waaqa*. This, then, is the answer of some Oromo to the question just presented.

Unlike some ethnic groups in Africa, the Oromo do not believe that the souls of departed ancestors retake 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 go to *Waaqa*. The Oromo understand death as a transitional stage after which the human being rejoins all his or her dead forefathers and foremothers in a place called *Iddoo-Dhugaa*, the “Place of Truth.” By contrast, among others, the Yoruba of Nigeria, for instance,

[s]trongly believe that the departed ancestors have different ways of returning to the living. One of the

commonest ways of doing this is for the soul to be reincarnated and to be born as a grand child to a child of the departed parents. It is believed that the ancestors choose to do this in consequence of their love for the family and of the world (Omosade F Awolalu, 1979:59).

In fact, the Oromo also pray to the *ekeraa* (ghost) of the dead. They prepare local thick bread, cheese with melted butter, local beer, and honey, and celebrate the *ekeraa* ritual in December every year. The Borena Oromo believe that after somebody has died his shadow becomes his ghost.

The Oromo believe that *Waaqa* created all human beings, and the latter are members of one human race. Some Oromo Elders had been in contact with Christian traditions and incorporated biblical beliefs into their oral literature. They believe that Adam is the first human being. At the beginning, *Waaqa* and Adam are believed to live in different places. *Waaqa* used to visit Adam several times. One day, *Waaqa* asked Adam whether he had any problem. Adam told *Waaqa* that his problem is loneliness. So *Waaqa* tore Adam's left side rib bone and breathed at it. As a result, Eve was created from a rib bone of Adam's left side. Subsequently, Adam and Eve begot about 30 children. The number of their children differs from informant to informant. After a long period of time, *Waaqa* asked Adam and Eve to show Him their children. They thought *Waaqa* would take some of their children, and hid 15 children and showed Him the remaining children. *Waaqa* blessed the latter and cursed the former. The former became devils, vultures, dogs, and wild animals. One may wonder why *Waaqa* did not forgive Adam and Eve. The informants told me that *Waaqa* indeed forgave them; He spared their children. He could have destroyed them. But He punished Adam and Eve. Muslim Oromo, on the other hand, said that *Waaqa* first created Adam. He then created Hawa from his left side rib.

This account of the myths of human origin seems to be influenced by the teaching of the Old Testament. There is no clear demarcation between the two.

The Oromo believe that *Waaqa* can change the destiny of human beings. He is the author of life and the determiner of destiny. He is capable of knowing actions of men. Everyone is expected to fulfil what is required of him/her, and failure to do so is punished as good deeds are rewarded. Individuals who live and act in accordance with *Waaqa*'s order will be happy, and the 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. 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. *Waaqa* created the poor person in order to control the rich person. The rich can be poor and the poor can be rich depending on his or her actions. There is the common saying "Deegan malee Rabbi hin beekan"—"Unless one becomes needy one may not know

(remember) God” (Abdurahman, 1972:114). This religious belief implies that the Oromo entertain change which brings unprecedented eventualities although this does not rule out the possibility that some events can be repeated in the process. This process reflects continuity in change.

This in turn further indicates that the Oromo are not exclusively blind fatalists. By working hard one can overcome his or her problems. They think tactics rather than force can help them to improve their lives and defeat their enemies.

However, some Oromo proverbs reflect fatalism. “Hirarni hirre hin qabu”—“Misfortune does not call for anger, as luck is not transferable” (Abdurahman, 1969:68). “Risqiin abbuma eeggatti”—“A man’s own fortune awaits himself.” That means, “[a] man gets only the things that God blesses him with” (Abdurahman, 1969:69). “Waan hirre hire”—“What God has given has already been given.” This implies that “[f]ate is predestined” (Abdurahman, 1972:114). In other words, this proverb has the message that God has decided everything that will happen, and that no human effort can change things. The evidence at our disposal, however, invalidates this belief. Many Oromo have influenced social and historical processes in accordance with their desires.

On the other hand, my best informant *Obboo* Borbor Bule has doubted the existence of *Waaqa*. If *Waaqa* is kind, he said, why did he allow many people to suffer without committing any mistakes? He has not saved innocent children from drought and famine. Useful culture is being replaced by harmful culture. If *Waaqa* had existed, He should have spoken once.

As has been stated earlier, the Oromo do not have a dualistic conception of reality. They believe that *Waaqa* and *Lafa* (Earth) are inseparable. The informants hold that *Waaqa* created human beings to live amicably together on the Earth. The Oromo consider the Earth as their mother and their ultimate abode. The first landing space of a new-born baby is the Earth, and when one grows old and dies, she or he is buried in the Earth. 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 does not forbid anybody to go and live on it. The Earth thus keeps life going. Nothing can be outside the Earth. The following proverb illustrates this. “Allaattiin hanga feete barartullee duuti isii lafuma” (BABO, 1996:325)—“The birds that flew in the air come and die upon the Earth.” 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. However, the Oromo are not interested in gender. They are specifying the fertility and creativity of the Earth.

I have serious doubt concerning Eike Haberland’s assertion that the Eastern Arsi Oromo believe that “lafti niitii Waaqaati”—“the Earth is

Waaqa's wife" (see Haberland, 1963:607). Bartels (1983:108) has said that the Western Matcha Oromo do not consider the Earth as *Waaqa's* wife. But some informants said that the Earth could be regarded as *Waaqa's* wife in the sense that it grows different things when it gets rain as woman can give birth to a child when she has sexual intercourse with her husband (Inf: Guyo Galgalo; Kampare Godana; Nura Bojilo). The link between *Waaqa* and the Earth has been expressed in certain myths of Oromo origin, in people's blessings, oaths, curses, rituals, proverbs and so forth.

Some informants argue that the land belongs to the living beings, for they use the resources of the land for survival. They maintain that dead persons have already left the land and couldn't claim any responsibility. They cannot benefit from the land. The living will hand it over to the next generation. When the land was asked to whom it belongs, it said that "I am the property of those living beings that stay on me" (Infs: Borbor Bule; Borbor Jilo). Others contend that the land is the private property of the dead; they were buried in the land, and nobody can force them to leave the land or to change their place. Human beings originated from the land and returned to it. The third group believes that the land belongs to all, living, dead and unborn included. The living beings get the necessities of life from the land. The dead were buried in the land. The unborn will be born on the land. 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 foreparents 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 (C K Omari, 1990:174).

Generally, the Oromo people believe that the present generation is under a moral obligation to preserve the land and hand it over to future generations. One of the bases of this obligation is the belief that a person should not endanger the prospects of future generations by destroying the land. One has to make sure that his or her lineage will continue to flourish in the future. The society condemns those who deprive their children and their children's children. The other important basis of obligation is that *Waaqa* will punish those who disregard the cosmic order and unnecessarily exploit the land and its resources. The land is a blessing and the source of survival. *Waaqa* allows humans and other creatures to use the land. Accordingly, the people should not ravage the actual purpose of *Waaqa* and the whole history and order of things. Thus, the Oromo people believe that if one does not look after the land, one is not only frustrating his own desire instrumentally to have good land in the future but one is also undermining future generations and the cosmic purpose.

It has been stated that *Waaqa* is the creator of all things in the world. The Oromo believe that all things are united and have different roles

and places in the universe. Human beings are not above other creatures and cannot despoil them as they wish. They are part of the natural world and are given a special place in the diversity of the cosmos; they are endowed with the intelligence that enables them to understand cosmic events. Thus, *Waaqa* requires them to care for other creatures and creation by acting in harmony with the cosmic whole. But the use of various animals and plants for food is not contrary to the cosmic purpose. As will be shown in later chapters, *Waaqa* allows humans to use various animals and plants without depleting their species. The violation of *Waaqa*'s expectation will lead to divine punishment.

The next section examines the role of the *Qaalluu* Institution in Oromo culture, which is relevant to the major arguments of this section.

5.2. THE QAALLUU INSTITUTION

The concept "*Qaalluu*" refers to both an institution and leaders who represent the institution. The *Qaalluu* leaders are custodians for all the institutions of the Oromo.

The *Qaalluu* institution has been changing in different parts of Oromia in response to modern religions and other external influences. The practices of the *Qaalluu* institution in the present day Borena are in some respects different from the practices of the *Qaalluu* institution in other parts of Oromia. Let me now examine how the *Qaalluu* institution is operating in the two regions.

The *Qaalluu* are the hereditary leaders of the kinship system in Borena. They are the most respected and senior persons who are responsible for rituals and the organisation of the election of *Gadaa* leaders in the past (from the 1890s to 1980). In the past, "[t]heir villages are the spiritual centers around which political debate is organized" (Legesse, 1973:44). At present, the *Gadaa* Councils are elected at the *Gadaa* centres. The *Qaalluu* leaders are concerned with blessing. They have also the role to adjudicate the major conflicting clans. Other individuals are required to protect them from cattle raiders and other enemies.

There are two senior *Qaalluu*, which represent the Sabbo and Gona moieties respectively, namely the *Qaalluu* of the Dayyu clan of the Karayyu and of the Oditu clan of the Fullelle submoiety in Borena. Other clans are not entitled to the office of the *Qaalluu*. But the office can be transferred from one lineage to another within the stated clans. There are also three junior *Qaalluu* of the Matari submoiety, such as the Karara, Kukku and Garjedda lineages of the Kallicha clan. The three Matari *Qaalluus* were given the status of *Qaalluu* by individuals. But the followers of these *Qaalluus* bring animals as gifts to them (Inf: Borbor Bule).

In Borena, there has been a link between the *Qaalluu* institution and the *Gadaa* system. On the one hand, after the Abyssinian occupation of the Oromo lands, the *Qaalluu* and the council of his lineage had the power to elect the principal heads of the Borena political system. On the other

hand, the *Gadaa* leaders anoint the *Qaalluu* when the transition of power is taken over by a new *Gadaa*, with a new *Abbaa Gadaa* and during the assembly of *Gumii Gayo* every eight years. As I have stated above, this is known as the *Muudaa* ceremony. Individuals who are interested can offer a gift to the *Qaalluu* for the *Qaalluu* are required to feed their guests including the *Gadaa* candidates and their supporters who come to the *Qaalluu* villages.

With the assistance of his clan and others, the Kallu hosts all the clan delegations for a period of about two months. All these delegations must be housed and fed. For this purpose Borana bring presents to the Kallu, usually in the form of livestock to be sacrificed for the occasion (Legesse, 1973: 48).

Those who have no cattle will bring an axe. This ceremony takes place in *Galma* (ceremonial hut for Borena celebrations and feasts), which is built by all Borena who come to attend this ceremony. The *Qaalluu* do not ask the people to give them money and other resources. The *Qaalluu* leaders chew the *qumbii* tree and bless the people by spitting on them. What is interesting is that both *Gadaa* and *Qaalluu* institutions accept the *Gumii*, the national assembly, as the highest authority of the land.

Contrary to the Borena tradition, both Abyssinian rulers Menelik II and Haile Selassie I forced the *Gadaa* leaders to hand over their power to the Oditu and Karayyu *Qaalluu* leaders for the simple reason that the *Qaalluu* institution and the Abyssinian political system have a similar feature: they are hereditary. The other reason was that when the Abyssinians tried to conquer the Borena people, the *Gadaa* leaders and the people tried to defend their land whereas the *Qaalluu* leaders accepted the Abyssinian soldiers without any resistance. The Karayyu *Qaalluu* sent five messengers to the Abyssinian warriors who were given a kilt by the latter (Infs: Borbor Jilo, Huka Garse). The *Qaalluu* leaders were given distinguished military titles, such as *Fitawrari* and *Dajjazmach* and a shiny black silk cape decorated with gold filigree by the Ethiopian government (Legesse, 1973:47). The *Qaalluu* leaders then became landlords. But there were no *Gadaa* officials who became landlords in Borena. My informants have underlined that since the arrival of Abyssinian rulers, the *Gadaa* officials and the *Qaalluu* leaders do not like one another.

The Borena Oromo reconsidered this issue during the *Gumii Gayo* assembly in 1980. The *Gadaa* leaders asked the assembly to restore their power. After deliberations the assembly endorsed the demands of the *Gadaa* leaders. Since this assembly the *Qaalluu* leaders have not elected the *Gadaa* officials. Their role is restricted to blessing. Before 1980, the *Qaalluu* leaders used to take bribes and choose *Gadaa* officials who were weak. They also used to make love with any married woman.

According to the Borena tradition, the *Gadaa* leaders govern the Borena society as a whole for a limited period of time whereas the *Qaalluu* leaders are hereditary religious leaders of half of Borena corresponding to the two moieties. Accordingly, the *Qaalluu* is senior in the ritual sphere whereas the *Abbaa Gadaa* is senior in the secular realm (Legesse, 2000:120).

There are certain rules that the *Qaalluu* leaders are expected to follow. They are not the political leaders of Borena and not allowed to bear arms, shed blood, defend themselves against wild animals, shave their hair or make laws. The *Qaalluu* are not expected to curse. They only bless. They are required to anoint their hair with butter. They do not kill any living thing. Circumcision of the *Qaalluu* is also forbidden. Furthermore, the *Qaalluu* is not allowed to till the land, or touch metals. They only hold the *orooroo* (ceremonial stick), and can look after livestock. The new *Qaalluu* is required to begin to wear *laduu* as a symbol of his status when he first marries a *Qaallittii* (the proper wife of the *Qaalluu*). This takes place after the death of the *Qaalluu*'s father. Also, the *Qaalluu* leaders are not allowed to eat the meat of wild animals, camel, or dirty meat, or drink the milk of camels. The other important point is that the *Qaalluu* and the *Qaallittii* are not allowed to go alone. Some individuals who will take care of them against all kinds of attack should follow them. One *Qaalluu* cannot go to the village of another *Qaalluu*. My informants did not explain the reason. They simply said it is our tradition (Infs: Godana Kose; Kura). The *Qaallittii* is not allowed to prepare food, or collect firewood. She has some other women to perform these duties. Thus, she does not know how to prepare food (Infs: Godana Kose; Kura). Moreover, the *Qaalluu* leaders can only appear as the honoured guests, not as active participants of the Gumi Gayo assembly.

In other parts of Oromia, some practices of the *Qaalluu* institution are quite different from those of Borena (for details see Workineh, 2001). Oral information gathered from Ambo and Illuababorra shows that the *Qaalluu* is believed to be a spiritual leader who has *Ayyaana* (spirit). The *Ayyaana* is attached to individual *Qaalluu* and speaks through his mouth during possession. Both are inseparable. The *Qaalluu* serves as an intermediary between the human and the *Ayyaana* (spirit). The Oromo identifies several *Ayyaanas*. Each lineage (*balbala*) has its own *Ayyaana*, and each clan (*lammii*) has its own *Ayyaana*. The *Qaalluu* is also known as the *Ayyaantuu* for s(he) has the *Ayyaana* of his/her lineage or clan. My informants in Illuababorra recalled that in the past the Oromo used to make a vow to offer money, a sheep, a hen, and a bull to their fathers' *Ayyaana* or to the *Ayyaana* of the *Qaalluu* if their vow is fulfilled. Devotees of some spirits vow before their spirits saying "if such and such a thing can be done for me, I will bring such and such a gift."

It seems that the association of the *Qaalluu* and *Ayyaana* came with the Abyssinian Orthodox Christianity (Inf: Gemetchu). The followers of the *Qaalluu* institution imitate the Orthodox Church even when they

build *Galma*. They do not build it like the traditional Oromo *Galma*. The non-Borena Oromo *Qaalluu* live and worship in this place. The believers visit *Galma* and dance, sing and beat drums like Christian priests 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. This imitation has resulted in the distortion of Oromo concepts over time.

The Oromo hold the belief that each *Ayyaana* is a manifestation of the one *Waaqa*. All created things in the universe are believed to have their own *Ayyaana*. Thus there are numerous *Ayyaanas*. The spirits act as intermediaries between human beings and *Waaqa*. As *Waaqa* created all things in the world, so also did He bring into being *Ayyaana* as His functionary. *Ayyaana* has no existence apart from *Waaqa*, and cannot create, hurt or kill anything. *Ayyaana* can only communicate the problems of humans to *Waaqa*. 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.

In Borena and other parts of Oromia, the role of a *Qaalluu* is similar to the role of a Bishop in the Christian world and of an Imam in the Muslim world. He or she is expected to respect traditional taboos and ritual observances and follow the truth and avoid sin.

Also the concept *Ayyaana* can be used to refer to a person's fate (see Bartels, 1983; Daniel, 1984). That someone is *ayyaantuu* may mean she or he is lucky. The Oromo also use the concept "*ayyaana*" to refer to a holiday. The days on which the Oromo perform traditional ceremonies are called *Ayyaana*.

Furthermore, some days have been assigned to some of the spirits and conceived as *Ayyaana*. The Oromo believe that every creation is created on a specific day that has its own *Ayyaana*. The person respects that *Ayyaana*. Gemetchu (1996) contends that the Oromo order the elements of their universe through *Ayyaana*. Primarily the concept "*Ayyaana*" is used to compute time. The issue of the relationship between the concepts "*Ayyaana*" and "time" is the subject of the next chapter.

The close examination of the concept "*Ayyaana*" indicates that it has unlimited meanings in Oromo culture, although some anthropologists and travellers have attempted to give fixed meanings for this concept (for the review of the works of these writers from 1844 to 1989 see Gemetchu, 1993).

The *Qaalluu* institution has had a positive impact on the environment. The Oromo perform prayer ceremonies beside permanently flowing rivers, by the side of big mountains, hills, and trees. This is because the Oromo believe that *Waaqa* likes these natural objects which are green and distinguished by their size or other impressive quality which has aesthetic appeal. In other words, these places are regarded as numinous. The land around the *Galma* and the natural resources on this land are viewed as sacred and are well protected.

In the recent past, the Oromo in Illuababorra used to revere *abdaarii* or *qoloo* trees, which are believed to be indwelt by spirits under which religious rituals are performed. An *Abdaarii* (*dakkii*) tree stands in harmony with roots, trunk, leaves and fruits. Sometimes *qoloo* can be located on mountains, which are believed to be the residents of *Ayyaana* (Infs: Ayele; Workineh Sayo). At present, *qoloo* trees, such as *hoomii*, *qilxuu*, *hambaabeessa*, *waddeessa* and others are well protected by some peasant farmers in Sage and Baki Peasant Association. In autumn, every year, the Illuababorra Oromo, in most cases women in the study sites, used to sit under *qoloo* trees and pray to *Waaqa* for rain, for protection from sickness and death, famine, snow, drought, and failure of crops, for gifts of longevity, children, prosperity, peace and for protection from evil spirits and wild animals. The Oromo are not worshipping the material symbols but the spirits of the symbols represented by trees. They proudly say that their Creator does not want to see the death or destruction of His creatures, and that is why He has come back with the rain of life. The Oromo anoint *qoloo* trees with butter and pour milk under these trees when a cow gives birth to an heir. This symbolises life. The Oromo build fences around these trees and no one can cut them down. According to tradition, if one cuts *qoloo* trees he or she will be harmed by devils. The Oromo believe that cutting sacred trees down is tantamount to the violation of the will of *Waaqa*. The recognition of the will of *Waaqa* is believed to be the basis of moral value.

The Oromo people are very much concerned about the health and peace of the environment and its inhabitants. They collectively pray and sacrifice different animals together for the peace of the people and the land. Blood here represents the life of the victim and indicates that the Oromo offer the life of the animal to *Waaqa* or spirit so that *Waaqa* will promote and preserve their life.

Through my fieldwork I have noted that the *Qaalluu* institution has totally disappeared in Illuababorra. At the same time, there are no *qoloo* trees in Kamise or in the area of Gumaro Abo Peasants Association, in Illuababorra. In particular, it is hardly possible to find elders, leave alone the *Qaalluu* leaders who are knowledgeable about this institution, in Kamise and Gumaro Abo peasants associations. I have been informed that after the expansion of Islam and Christianity, the *Qaalluu* leaders were criticised by the proponents of the new religions and eventually disappeared. The *Qaalluu* institution has begun to disappear since the Haile Selassie regime. During the Haile Selassie regime, a certain *Abbaa Rakot*, a Christian priest, came to Illuababorra and launched his devastating campaign against the *Qaalluu* institution. He tied his body with a chain. He propagated the message that the *Qaalluu* leaders are worshipping devils and should be avoided. He tried to praise the values of Orthodox Christianity. Muslims also regarded the *Qaalluu* institution as useless. The followers of both Islam and Christianity destroyed *abdaarii* trees. Some of my informants in Gumaro Abo, who have recently begun to follow the Pentecostal faith, asserted that *Ayyaana* and devils belong to the same

family. There is no use in Oromo traditional religion. They said that they believe only in God. However, the Oromo regard *abdaarii* trees as sacred which need respect and protection.

It seems that Islam rather than Christianity has had more destructive effects on the *Qaalluu* institution in Illuababorra. Almost all members of Kamise Peasant Association are Muslims and strongly oppose traditional Oromo religion. But most Oromo peasant farmers in Sagi and Baki Peasant Association are Christians who have been practising some of their traditional beliefs. In contrast to other Christians, this group still believes that *abdaarii* trees have religious values. They do not cut them down. The informants themselves argue that Christianity is more accommodative than Islam in Illuababorra. But in Welega, for instance, the Pentecostal faith has had more damaging impacts on Oromo religion than Islam (Inf: Solomon).

Compared to the Oromo people in Illuababorra, the Borena Oromo have maintained their ancient customs virtually intact. Although they are allowed to convert to modern religions, they are not allowed to change their indigenous names to Christian and Muslim names. If they do so, they will be excommunicated from Borena Oromo. In other words, they are no more Oromo. Very few urban inhabitants have adopted modern religions owing to the problem of burial places and other restrictions on them imposed by the followers of modern religions who are new comers to Borena land.

The discussion of Oromo religious beliefs and practices indicates that the *Qaalluu* are the religious leaders of the Oromo society. Unlike the *Gadaa* system, religious leadership is hereditary. The people maintain the status of the *Qaalluu* institution by appealing to a myth which refers to the divine or virgin origin of the *Qaalluu* leaders. This myth shows how the *Qaalluu* leaders are closer to *Waaqa* than other ordinary people. The *Qaalluu* leaders have acted as the morally responsible agents of the Oromo people. Some of their practices have important moral implications. Most probably because of their origin and leadership position, they are not allowed to kill any living creature. This conveys an important message for the younger population of the Oromo society. Some Oromo individuals have tried to associate themselves with the *Qaalluu* leaders and have performed similar practices. Interestingly enough, the *Qaalluu* leaders do not eat the meat of certain wild animals. If other individuals follow this tradition, it will undoubtedly enhance the preservation of wild animal species. Besides, the *Qaalluu* leaders have contributed to the peace of the society and the *Gadaa* democratic government. It has been shown that the *Qaalluu* leader is required to participate in the rites of passage in the *Gadaa* cycle. They resolve conflicts between various individuals and at times among the *Gadaa* officials. Moreover, the *Qaalluu* institution has fostered environmentally benign practices in Oromo society. The Oromo religion teaches that religious trees and the surrounding environment should be regarded as sacred and be treated always with due respect.

Furthermore, all created things are believed to have their own *Ayyaana* and special place in the universe. Humans cannot irresponsibly disturb the survival of *Waaqa's* creatures although they can use some creatures which are blessed by *Waaqa* for them. This traditional belief has an interesting implication for environmental ethics.

Moreover, the preceding discussion shows that the *Qaalluu* institution has been affected by internal and external influences. Although the original beliefs and practices are relatively intact in Borena, traditional beliefs have been changing in response to modern religious beliefs and other politically motivated distortions in other parts of Oromia. The disappearance of the *Qaalluu* institution in Illuababorra has had negative impacts on the environment. The followers of new religions have destroyed trees which have religious values, and have disregarded all environmentally friendly religious beliefs and practices. In fact, the *Qaalluu* leaders in Borena themselves had exploited their people by misusing their religious leadership when the Abyssinians conquered the Oromo lands. In spite of different interpretations of the *Qaalluu* institutions, the Oromo people in Borena and other areas use similar concepts and myths concerning the origin of the first *Qaalluu* leaders.

In short, in this chapter I have shown how the Oromo perceive the Supreme Being, the Earth, and the *Qaalluu* institution, and lead their life in accordance with their religious beliefs. The Oromo regard *Waaqa* as father, and the Earth as the caring mother of all. As I have argued at several points above, the values expressed in religious and *Gadaa* rituals shape their attitudes towards various species and the Earth. *Waaqa* is one and at the same time has different manifestations. *Ayyaana* mediates the relationship between *Waaqa* and human beings. There is a positive relationship between God and the Earth, humans and the natural environment. All creatures are essentially effected and affected by the harmonious relationship between *Waaqa* and the Earth. *Waaqa* is the creator of various creatures and is responsible for their existence. He requires humans to responsibly cohabit the Earth with other creatures. He loves diversity of species. If *Waaqa* withholds rain and the Earth stops supporting life, all creatures will disappear for good.

For the Oromo, the land is not simply a property to be exploited by humans without due respect and care. It is intrinsically valuable and requires respect and protection on the part of its inhabitants. If humans continuously despoil the land by breaking traditional rules and the cosmic purpose, it may not support all creatures indefinitely. The Oromo believe that the present generation has responsibility to pass on natural resources in good order to a future generation. That is why the Oromo are concerned with the health and peace of the environment and its inhabitants. They are aware that their health is affected by the environment in which they live. They depend on environmental resources to heal themselves. The Oromo consider certain ecological settings to be prone to infestation with evil things. Some other places are considered to be salubrious and sacred. The

Oromo people decorate *abdaarii* and other trees which have religious value on certain particular occasions with votive offerings. The Oromo always try to maintain a peaceful and healthy environment, and avoid evil things.

The Oromo traditional rules, which govern their relationship with the natural environment, are environmentally friendly. They involve practices that promote general welfare. Thus, Oromo ecotheology has ethical implications for environmental issues. It fosters ethical responsibility to the Earth and its inhabitants. Generally, it has had a positive effect on the environmental practices of the Oromo people. This study further suggests that it can be a possible source of ecological wisdom and provide longstanding practical strategies for ecologists and environmental ethicists. Oromo environmental values are encapsulated and encoded in beliefs about the Supreme Being, sacred trees and the *Qaalluu* institution. Thus, both environmental ethics and contemporary ecotheology may consider Oromo ecotheology as a possible ally.

CHAPTER VI

THE OROMO CONCEPTION OF DIVINATION AND TIME

This chapter deals with the Oromo understanding of time and divination. It aims to challenge some influential claims about the African understanding of time. It has two sections. The first section deals with Oromo beliefs and practices relating to divination. The Oromo practices and beliefs discussed in this section are related to the Oromo conception of time, and show how the Oromo envision their futures. The relationship between the Oromo and the surrounding world is partly shaped by divination. In some sense, Oromo practices are actually dictated by divination. They perform particular ceremonies/rituals/celebrations/practices on specific dates which are computed in relation to the movement of the heavenly bodies. They respect certain animals and trees, which are believed to be associated with a Supreme Being. Thus, a study of divination will help us to understand the Oromo conception of the environment and time, and thereby their environmental ethic. The second section discusses the Oromo conception of time more directly.

6.1. DIVINATION

The Oromo use different means to know the future and tackle future events. They practise divination by employing different means. Divination is not unique to the Oromo. "Men, all over the world, practise divination and devise various methods of doing this" (Omosade F Awolalu, 1979:121). Above all, the Oromo employ *Usa* or *Moora* (divination by observing or reading the entrails of sacrificial animals), and claim to predict future events in a person's life. One oral tradition among the Oromo holds that originally *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. Others said that non-Oromo ethnic groups who despise Oromo culture have fabricated this myth. In any case, the Oromo regard entrails as their sacred books. Only those who are trained male fortune-tellers can read the entrails of sacrificial animals, such as a bull, a cow, a ram, a he-goat and a calf. The entrails of horses, donkeys, camels and wild animals cannot be used to predict the future.

According to informants, *Usa* has two signs: *hidda* (root) and *xannacha* (lump). Entrails have a tendril of life, of spring, wealth, umbilical cord and other features. Fortune-tellers can count the roots of entrails and observe their position and can predict the beginning and ending of rain, whether some one would die or recover from illness, whether peace or war,

famine or prosperity will prevail in the future, the kind of person who will be born, the nature and future of animals, spirits' actions (what spirits are planning and what humans can do to forestall, propitiate and humour them), one's duration of life, and the behaviour of the natural environment. They can also identify what has already happened in the past. It should be noted that the concerned person sacrifices an animal and asks fortune-tellers to read for him. The people believe that unless fortune-tellers fail to correctly read them, entrails do not lie. Many informants agree that they are a reliable means of prediction. Although entrails are insignificant in the present day Illuababorra owing to the influence of Islam and Christianity and the disappearance of fortune-tellers, almost all the Borena Oromo trust entrails.

The Oromo also practise astrology and they use the positions of the stars, moon, and sun to predict the future. In fact, the Oromo calendar is founded on lunar rather than solar cycles. Recent archaeo-astronomic research gives the clue that the origin of the Oromo astronomic calendar can be traced back to the second century BC (B M Lynch and L M Robbins, and Laurance R Doyle, cited in Asmarom Legesse, 2000:81).

Although many writers have restricted the role of *ayyaana* to possession cult in their explanation, very few writers have explained the relationship between the concepts "*ayyaana*" and "time." But Enrico Cerulli (1992) is a notable exception. He noted that the Shewan Oromo call time-reckoning experts "*ayyaantuu*." Legesse (1973, 2000) is also aware of the link between the concepts "*ayyaantuu*" and "time." Gemetchu Megerssa (1993) discusses the connection between time and the concept "*ayyaana*" in detail. He stresses that the concept "*ayyaana*" carries as its core meaning the concept of "time." As Gemetchu convincingly states, the concept *Ayyaana* is the basis of the reckoning of time and the passage of history; the social structure; the authority and power structure; the system of the law, the kinship system; and the religious and economic institutions. It determines man's relationship to nature and to his fellowmen. It thus provides the cognitive framework according to which the natural laws governing the universe are incorporated into culture and society.

Time-reckoning experts observe the position of the stars during the night and inform the local people that summer is setting in or winter is coming. When certain stars or constellations are close to the Moon, they are commonly called as *dhaha ji'aa*. The Oromo time-reckoning experts can tell the time when the stars are found close to the moon. Since the *Qaalluu* has certain days on which certain rituals have to be performed, these days are supposed to be determined by experts who are under his authority. According to Legesse "[t]he Borana are unusual in that they seem to be the only people with a reasonably accurate calendar who ignore the sun" (1973:180). A Borena time-reckoning expert uses his memory to tell different seasons and the *Gadaa* period. If he fails to do so, he can determine different seasons by exploring the relative position of the stars and the moon. This leads Legesse to say, quite correctly, that the Oromo "schedule life-crisis ceremonies to a degree that would be inconceivable in

the most time-conscious Western cultures” (1973:179). My informants reported that there are seven stars whose position is paramount to predict the future. Legesse’s account corresponds with this information.

The seven stars or constellations he [a Borena time-reckoning expert] uses are Lami (Triangulum), Busan (Pleides), Bakalcha (Aldebaran), Algajima (Bellatrix), Arb Gaddu (central cluster of Orion), Urji Walla (Saiph), and Basa (Sirius). These seven stars and constellations are roughly in line. In six out of the twelve lunar months the seven constellations appear successively, in conjunction with the moon. During the remaining six months none of these six stars and constellations is visible at the rising of the moon (Legesse, 1973:181).

According to the Borena calendar, there are 27 *ayyaanas* in a month, namely *Areerii Duraa*, *Areerii Bal’oo*, *Adulaa Duraa*, *Adulaa Bal’oo*, *Garba Duraa*, *Garba Bal’aa*, *Garba Dullacha*, *Bittaa Duraa*, *Bittaa Bal’aa*, *Sorsa*, *Algaajima*, *Arba*, *Walla*, *Basaa Duraa*, *Basaa Bal’aa*, *Maganttii Carraa*, *Maganttii Jaarraa*, *Maganttii Biriitii*, *Salbaana duraa*, *Salbaana Bal’oo*, *Salbaana Dullacha*, *Gardaaduma*, *Sonsa*, *Rurruma*, *Lumaasa*, *Gidaada*, and *Ruuda*. Some of these days are blessed with good fortune but others are not (see Appendix Five). Although Gemetchu (1993) stated that the remaining three days are given a different set of names and are called *bollolitu*, *shanaataa* and *aggaga* and stand for the twenty-eighth, twenty-ninth and thirtieth days; my informants do not give special names for these dates. The information about 27 named days of the stellar cycle presented here largely relies on my interview with Borbor Bule.

I have noted that the list of names of some of the 27 days and patterns of behaviour and characterisation of the *ayyaanas*, as given by different informants, do not agree. In some cases the names differ, in others the features ascribed to them.

Despite the fact that each day is supposed to constitute the *ayyaana* of a particular human being or animal, the quality of this thing is also ascribed to other creatures which are born on that particular date. The Oromo attentively follow the days on which children are born because of the belief that these days have implications for the future existence of these children. But the birth date of girls does not influence their lives in the future because they do not belong to their family in the future. What matters for females is the wedding day. The Oromo males thus look for the best days for their marriage in order to avoid the bad features that are believed to be associated with certain days.

Legesse supplies a mathematical interpretation of the Oromo calendar.

These twenty-seven days of the month are permuted through the twelve months of the year, such that the beginning of each month successively recedes by approximately 2.5 days and completes the cycle of 29.5 days in one lunar year. The loss per month is equal to the difference between the two types of months, that is, the 27-day month (ceremonial) and the 29.5-day month (lunar) (1973:181).

Gemetchu does not seem to accept Legesse's view. He states that the problem is not a mathematical one (1993:140-141). The Oromo have managed to accommodate the three days by taking into account the unpredictability of the movement of the moon as it moves across the sky in its relation to certain stars over the entire twelve-month period. He says that the Oromo introduced the concept "*sagli*" in order to manage the unpredictable nature of the time process. The aim is to create consistency out of inconsistency. According to Gemetchu's informants,

sagli consists of the differences arising between the twenty-seven named days of the stellar cycle and the thirty (more precisely 29.5) days of the lunar cycle, observed through the *ba'ha* and reconciled through the strategy of the *dha'ha* (Gemetchu, 1993:140).

"*Baha*" is used to refer to the physical appearance of the moon, the stars and the Sun. Time-reckoning experts observe the position of the moon relative to a particular star. The word "*dhaha*" is used to refer to the pattern this conjunction creates, which is interpreted by the time-reckoner. The time-reckoner is required to check the cycle of the physical appearances of the heavenly bodies and the transitional periods between them against the twenty-seven *ayyaanas*. Although my informants stressed that time-reckoning experts try their best to adjust their strategy against the unpredictable nature of time, they did not mention the concept "*sagli*". Further research in other parts of Oromia may enable us to endorse the views of Gemetchu's informants.

Time-reckoning experts seriously follow the transition period around full moon between the waxing and the waning phase of the moon in order to correctly determine the day on which the next new moon will occur. According to informants, sometimes there can be a delay of the transition period by a day or more.

The Borena time-reckoning experts are required to adjust their reckoning strategy against particular stars in line with the different phases of the moon every six months. As Legesse (1973) stated, the different phases of the moon in relation to Triangulum are identified by time-reckoning experts during half of the year whereas during the other half of the year the new moon is identified in relation to a set of the above

mentioned seven different stars. The seven stars are invisible when the new moon is sighted although

in the middle of the month, one of the familiar stars comes into view again, and it is used in conjunction with the full moon and with successively declining stages of the waning moon each month (Legesse, 1973:186).

According to Legesse, time-reckoning experts use two points in the year to check the exact relationship between the calendar and astronomic events. One is the day of *Bitaa Qaraa* [*Bittaa duraa*], in the month of *Bitootessa* when one of the stars appears in conjunction with the new moon. The first night of the month of *Bitootessa* is a special day to make astronomic observations unless the cloud prevents the experts from doing so which requires the postponement of observation, and that in turn requires backward reckoning to the critical date. Secondly, time-reckoning experts can also look for the appearance of the full moon with the first of the star series (Triangulum) on the day of *Sonsa* in the month of *Birraa* (for details see Legesse, 1973:185-188).

The informants mentioned some examples to confirm that well trained time-reckoning experts tell the truth about future events. For instance, a certain *Abbaa* Jirma is a time-reckoning expert in Goba Peasant Association, Liben district. In 1991, he told his friends that the guerrilla forces would defeat the Ethiopian army. His friends characterised him as ignorant because they thought that the Ethiopian army had modern firearms that could enable it to destroy the rebels in no time. However, what *Abbaa* Jirma said became a reality. During my fieldwork in February 2000, my informant told me that *Abbaa* Jirma predicted that the Ethiopian Army would conquer the Eritrean army in the near future. Nobody accepted his view (Inf: Nura Yabicho). It is interesting to note that the Ethiopian army forced the Eritrean army to leave the disputable territories in June 2000. It even captured some places in Eritrea.

The Oromo in Illuababorra had time-reckoning experts in the past. But I have been told that Islam in particular resisted the practice of predicting the future on the observation of the positions of stars and moon. Owing to this and other reasons, time-reckoning experts are nonexistent in Illuababorra.

The Oromo also use solar cycles to talk about the future. Daytime begins and ends with the rising and setting of the sun respectively. When the sun appears through dark clouds the future is believed to be characterised by war. War is also expected when the sun appears to be red—(when it looks like blood).

Moreover, there were naturally knowledgeable persons who are believed to possess foreknowledge of future events in both Borena and Illuababorra. They are known as *Raaga* (prophets and men of wisdom). Ali Bode, Roro Ochuma, Golso Garba, Turu Chofa, Sibū Abare, Amu Arero,

and Arero Bosaro were historically well known prophets in Borena (Infs: Borbor Bule; Borbor Jilo; Malicha Jilo). A certain *Abbaa* Fayissa Olcha Jabal in Illuababorra (Inf: Ambachew) and Ali Bode and Arero Bosaro in Borena predicted the introduction of firearms and the coming of Abyssinians to Oromo land, the coming of bus, airplane, alcohol, jigger, drought and other unknown human and animal diseases. Arero Bosaro told the Borena people that three things would be barren in the future. Firstly, the women who favour modern perfumes will ignore *Qayaa* (a hole for incense in the floor of homes, used by the Oromo women). Secondly, a wise man will be harassed and forced to be quiet. Thirdly, the Earth will fail to grow grass, trees and crops owing to drought. These three things have already happened in Oromia. At present, it is hardly possible to find *Qayaa* in Oromia. Very few people are willing to listen to elders and wise men. Educated Oromo regard them as backward and ignorant. Drought is the order of the day, particularly in Borena (Infs: Borbor Bule; Didu).

Moreover, some oracles claim to reveal to the people what will happen in the future. These oracles are common in both Borena and Illuababorra. They 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 a person undertakes a journey, gets sick, or faces a life crisis, he or she consults the oracle, which gives him or her guidance as to what the future looks like, what dangers lie ahead and what can be done to avert undesirable events. The *Qaalluu* leaders who were in Illuababorra in the past and other parts of Oromia (see Workineh Kelbessa, 2001) but not in Borena also advise individuals to visit them and understand what to do in order to avoid their problems. Some informants say that the oracles are the instruments of the *Qaalluu* leaders. They advise people to offer money, animals, clothes, a bull and other gifts to the *Qaalluu* so that the *Ayyaana* [spirit] will solve their problem. The majority of my informants in the study sites, however, said that the *Xibaartuu* is a deceiver, and does not know anything. The advice of the *Xibaartuu* is groundless. The Borena Oromo said that oracles are newcomers and liars. The yarn spinners exploit the people by fabricating false stories.

What has been discussed so far reveals that the Oromo use prophets and time-reckoning experts to deal with the present problems and to prepare for the future. The following section will take a more specific look at the ways in which the Oromo people conceive time.

6.2. THE OROMO CONCEPTION OF TIME

As has been stated earlier, the Oromo have their own way of interpreting the seasons, and understanding the heavenly bodies. They have their own calendar. For the Oromo, time has a beginning. The Oromo believe that time started when the sun and the heavenly bodies started to move around the Earth. The Oromo divide the year into seasons, months

and days. The Oromo year is divided into twelve months of thirty days each, from which 27 days have their own *Ayyaana* (a special meaning and blessing to that day). There are different divisions of the day, namely *barraaqa* (about 5:00 AM), *ganama* (till about 7:00 AM), *diirama* (early morning, till about 10:00 AM), *waaree* (midday or noon, 12:00 AM), *saafaa* (1:00-3:00 PM), *saafaa xiqqaa* (5:00 PM), *galgala* (literally means coming home, both for animals and human beings, evening 6-8 PM), *waarii* (9:00 PM), *waaree dheertu* (11:00 PM), and *halkan guddoo* (night 12:00 PM) (Inf: Borbor Bule). The further division of the day is dictated by the various activities that take place within it. In many places *halkan* is used to refer to the night and dark part of the day whereas *guyya* is used to refer to the light part of the day.

Furthermore, a week consists of seven days. Although the day is perceived as cyclical, this cycle is never seen as being infinitely repeated. Rather, it is viewed as building up to form a higher cyclical level known as *torbaa*, literally meaning “the seven” (Inf: Gemetchu). Weeks do not necessarily have similar names of seven days, for each day of the month has a name.

There are four seasons of three months each. The names of these months differ from place to place. In Borena the months of *Gannaa* are *Guraandhala*, *Bitootessa*, and *Caamsaa*. This month has big rains. The Borena Oromo associate *Gannaa* with the night because of the prevalence of rain and thick, dark clouds in this season. It is cold and not favourable for travel from place to place. *Buufa*, *Wacabajjii*, and *Oborra Gudda* are the months of *Adoolessa* season. *Adoolessa* has moderate rain. *Oborra Diqqa*, *Birraa*, and *Ciqawwa* are the months of *Hagayya*, which have short rains. *Hagayya* is characterised as the morning of the New Year after the long night of *Gannaa*. The temperature gradually rises in *Hagayya*. People once again begin to enjoy life. They observe green crops, grasses and trees with sunshine. The *Bona* season consists of the months of *Sadaasa*, *Abraassaa* and *Ammajjii* (Inf: Borbor Bule). *Bona* is a dry season. On the other hand, *Obboo* Dabassaa Arero’s categorisation of months of different seasons differs from that of Borbor Bule and other informants. According to Dabassa, the months of *Gannaa* are *Amajjii*, *Guraandhala*, and *Bitootessa*. *Caamsaa*, *Buufa* and *Wacabajjii* constitute *Adoolessa* season. *Oborra Gudda*, *Oborra Diqqa* and *Birraa* are the months of *Hagayya*. *Ciqawwa*, *Sadaasa* and *Abraassaa* are the months of *Bona* season (Inf: Dabassa Arero). However, this may not be a significant divergence; compare the different views in Britain or America about whether March belongs to winter or spring.

The Oromo celebrate the annual feast called *ayyaana waggaa*, which marks the end of one year and the beginning of the next year. According to Gemetchu, five extra days are added to “the 360 day cycle (i.e. 12X30) and thereby adjusting to a solar year of 365 days” (1993:133). The people participate in five days of ritual cleansing; they bath together in a river. The lighting of a communal fire concludes this ritual. Gemetchu

further states that “[t]he Oromo did not recognize leap years, as the fractions were handled in monthly strategy of time calculation” (1993:134).

For the Oromo, time is also divided into periods of eight years or *Gadaa*. A new *Gadaa* period starts and ends when a new generation class, *luba*, enters the *Gadaa* grade. As has been stated earlier, the five successive *goggeessa* patrilineages are required to complete forty-year *Gadaa* cycle divided into five *Gadaa* grades, each covering eight years. According to Gemetchu, the nine cycles of forty years herald

the closure of the entire cycle known as *jaatama*. The term *jaatama* is the Oromo word for the number sixty, but when it is used technically by time reckoning experts, it refers to the end of a process, at all of these temporal levels, by which a qualitative change is marked (1993:100).

After the completion of one *jaatama* (360 years), the Oromo radically transform the entire social, political and economic life in another set of *jaatama* (Gemetchu, 1993:155). The important point here is that the *Gadaa* system has served as the major time regulator for scheduling rituals, assemblies, intertribal warfare and the peace process. In this case, then, environmental history can be constructed on the basis of the past record of the *Gadaa* grades.

According to informants, what has happened during one *Gadaa* period can have positive or negative influence on the present and future course of events. The process that reflects the belief that historical events will be repeated is called *dhacii*. As stated earlier, there are seven *Maqaabaas* cycles, which move over the five *goggeessa*. If a certain *Abbaa Gadaa* had good fortune during his period, which corresponds to one of these cycles, another *Abbaa Gadaa* is expected to have similar fortune when that cycle is repeated. This is predestined and the Borena know and expect it beforehand. To put matters another way, the Borena people believe that in some sense the previous events repeat themselves in the future. For the Borena Oromo, historical antecedents can have positive influence on the present course of events.

The informants cited historical evidence. During the *Abbaa Gadaa* of Liban Jaldessa (1889-1897), different diseases devastated the people and animals in Borena. *Moggisa* was the *maqaabaas* cycle at that time. Similar problems happened in Borena in 1951 during the *Abbaa Gadaa* of Guyo Boru (1945-1953). The name of the cycle was *Moggisa*. Furthermore, some unknown person(s) killed the previous *Abbaa Gadaa* Bule Dabassa (1929-1937) in 1941 during the *Abbaa Gadaa* of Aga Adi (1937-1945). His corpse was found after three days at the locality called Bulbul. The then-*maqaabaas* cycle was *Sabbaaqa*. Similarly, in 1993, during the *Abbaa Gadaa* of Boru Madha (1993-2001), the previous *Abbaa Gadaa* Boru Guyo (1985-1993) was killed in the forest and eaten by wild animals. His clothes were found after one month. *Sabbaaqa* is the name of the then-*maqaabaas*

cycle. A well known Borena oral historian Borbor Bule said that although originally, Ali Guracha Yaya, along with other people, created the laws of the *Gadaa* system, what has been happening during each period gives the impression that these laws were invented by God. Although what has been stated above is true, I have found it difficult to give rational grounds for this situation. My informants said that it is possible to avoid an enduring curse or disaster by performing traditional ceremonies, which can be suggested by the prophets. The Borena people do not believe that bad fortune is eternal and cannot be changed. Therefore, it would be wrong to argue that the Oromo are locked in an endless cycle of repetitive events. As has been stated earlier, the Oromo people have attempted to build a new future.

The physical appearance and conditions of both domestic and wild animals are important indications of future events. When a cow continuously moos by refusing to go out and graze, the dry season is believed to come soon, whereas when the cattle directly go to the field, peace will prevail in the future. When the cow moos during milking time, it is believed to herald the coming of the dry season. When domestic animals refuse to leave the river and sleep there after drinking the water, there will be no rain in the future. Also, when a cow defecates while sleeping, it heralds the dry season (Infs: Borbor Bule; Huka Tadacha; Kelo). If a cow moos several times in the presence of its calf, the premises of the owner of that cow are believed to be going to be destroyed (Infs: Abera; Desta). When a hyena howls eight times consecutively, the existing government is believed to be in crisis and will be replaced by a new one. My informant confirmed that he heard its voice in 1973 one year before the collapse of imperial regime in Ethiopia (Inf: Legese Mamo). When milking cows refuse to go home and try to find a bull, women are expected to be adulterous, whereas when castrated oxen try to rut with bulls or be in heat with others, old men are expected to be adulterous (Inf: Legese Mamo). The unusual destruction of crops by baboons, pigs, or rats is also an indication of famine in the future. People are thus advised to save crops for the future.

The Oromo in the study sites also make short-term decisions on the basis of the cries and movement of birds. Some individuals can understand the message of the cries of birds and interpret for others. The movement of *tumaaddisa* (woodpecker) is believed to indicate the appearance of bad and good events. When it moves to the right side of a person, it indicates that the person will face danger whereas when it moves to the left side of the person, it is believed to indicate a good luck omen (Inf: Nura Bogilo). When *Dhaatii Duulaa* (white birds of war), *foggii* birds and ants (Inf: Legesse Mamo) move together from one direction to another, war is expected in that direction. Moreover, *baaboo halloonaa* (mariboustock) move to the war front in order to eat corpses. The movement of a group of butterflies also implies migration. When they move northwards or southwards, a military confrontation between opposing forces will be expected. The informants reported that they saw these birds before the

outbreak of Ethio-Italian war (1936-41) (Infs: Ambachew; Bekele Gutama; Girsha; Tolassa).

In many places, it is a common practice to listen to cocks crowing and colobus monkeys chattering, and waking up persons early in the morning. Subsequently, the women prepare coffee and breakfast for their family. As the saying goes, “Indaanqoo tokko iyyitee, weennii lama korriiftee nigeesse yeroon nyaata yoo gadhee niitii malee, daggala mataan cabee makara sassaabame nigesse yeroon dhiiraa yoo gadhee ilmaa malee” – “Once a cock crows, and a colobus monkey growls twice, the time is ripe for eating unless the woman is a wicked person, just as once crops have been harvested, the young and able-bodied persons should be ready to defend their mother land unless they are wicked persons.” The untimely proliferation of ants in August and the cracking of whips and throwing of stones and root vegetables by children during the night indicate that there will be war in the future (Infs: Abera; Legese Mamo; Said Shana).

In some places the local people watch their shadows and measure the time of the day. When their shadows comes under their legs, it indicates that it is noon. Then, farmers in the field and cooks in the kitchen come to realise that it is the time of their lunch.

The Oromo also use the flowering and fruiting trees to anticipate the behaviour of the natural environment and the weather conditions. When many fruits drop from the newly sprouted trees, some trees unusually dry up, the boundaries of rivers dry up in spite of the presence of sufficient rainfall, some trees blossom before the usual time, solanaceous tubers are empty, and when grasses fail to grow well in spite of abundant rainfall, famines, disease and other problems are expected to come in the future (Infs: Abdullatif; Abdurhaman Hasan; Ayele; Legese Mamo). It is believed that when *gatamaa*, *ebicha*, *qaraaroo*, *bakkanniisa*, and *suddii* trees sprout well, honey is abundant but crops will be in short supply (Infs: Ambachew; Galan; Said Shana). When *hambaabessa*, *boggee*, *xaddacha*, *goraa*, or *liqixii* fruits well and other trees produce gum, the coming year will be characterised by prosperity and happiness (Infs: Abdurhaman Hasan; Boru; Galan; Guyo; Legese Mamo; Toba; Yabicho; Tache). When insects destroy a tender plant called *bosooqa* and the weevil spoils grains by feeding on them, the coming year will be full of prosperity (Infs: Legese Mamo; Said Shana). The observation of the features of trees to predict the future is not unique to the Oromo. Many societies have used this method. For instance, the Maori utilised the flowering and fruiting of trees, the dying-away of annual plants, the fall of leaves of deciduous trees in order to denote time (Elsdon Best, 1922:21).

What has been discussed so far shows that the Oromo people are not blind followers of nature. They have attempted to understand the secret of nature and avoid famine, war and other problems by employing different strategies. They keep historical records of all famines and droughts through oral literature. They have tried to discover the unknown and the future by considering the reactions of plants, animals and the natural environment to

both humanly induced change and natural change. The major goal of this effort is to maintain a positive relationship with the natural environment. They do not say that whatever has happened in the past is fated to happen in the present. They do not believe that there is no way of changing the future. The hunger and misfortunes which dominate one season are not taken as eternal. The Oromo believe that if they use their prolonged experience and work hard, they can avert devastating famine and war. The following proverbs show that one's fate is not eternal: "Baraa fi murxuxxee, gad jedhaniiti jala bahu"—"One can escape mean years and wooden missiles [a short stick similar to a boomerang] by bending down." This suggests that one can be successful through tactics rather than force. "Bara darbaa jiruu, qoonqoon waan hin jiree namarra keessi" (BABO, 1999:58)—"Even if a lean year can pass, a human being may be blamed for starvation." "Qabeenyi, fixeensa ganamaati" (BABO, 1999:407)—"Wealth is a morning dew." This means that like a dew, wealth can come and go. In fact, the Oromo believe that those who respect the order of *Waaqa* will be successful. 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 affect their future concerns.

However, the Oromo conception of history differs from the Western one. The unity and continuity between the past, the present and the future dimensions of time are given emphasis in the Oromo culture. In the West, the individually determined segments of time and the artificial distinctions made between the different levels of the past, the present and the future seem to be given special attention (Gemetchu, 1993:158-159).

Therefore, what some writers have argued about the African conception of time is unfounded concerning the Oromo people. John Mbiti (1969) argues that Africans do not have the concept of the distant future. For Mbiti, 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 traditional Africa, time is only a two-dimensional phenomenon, with a long past, or *Zamani*, and a present, or *Sasa*. He maintains that people are not interested in events that lie in the future beyond, at most, two years from now (Mbiti, 1996a:70).

In Africa, he adds, "[t]he future is virtually absent because events which lie in it have not taken place, they have not been realized and cannot, therefore constitute time" (Mbiti, 1996a:69). He argues that because of the fact that the future has not been experienced, it is not real. Alexis Kagame (1996) also argues that for Africans, time has to be experienced in order to be real.

However, as Kwame Gyekye (1996) noted, although time can be associated with change, process and events, one cannot deny the objective metaphysical existence of time even in the absence of changes, processes and events, and the Oromo are no different from the rest of humanity in recognising this. The concept "*nudura*" is used to refer to "future" in

Oromo. As Dismas A Masolo (1994) persuasively noted, Mbiti's view endorsed L Lévi-Bruhl's view (1923:123-24, 445-46) 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. But this view is also highly questionable. If we let this view stand, the Oromo could not have any concept of the future.

In order to empirically confirm the view that the Oromo are preoccupied with the future, the informants were asked to answer the question what they think we, the people now alive, owe to the people of the future. My informants have invariably stressed that the present generation should try to leave behind a healthy environment, abundant trees, cattle, grazing land, useful culture and knowledge for the future generation. They are, however, worried that human- and nature-induced climatic changes may not enable them to preserve resources for the future generation. They reiterated that drought and famine, particularly in Borena, are threatening the survival of the present generation and nonhuman species. They suggested that the present situation needs to be changed if the present generation is to owe something to the future generation.

When the informants were asked to mention for how long they want to live, they gave different figures and reasons. Some said that their existence depends on the will of God. If God allows them to live for many years, they will be very happy to live long. If God doesn't want them to live long, they do not care. Others want to die before they get weak and become unwanted burdens on their family. This group does not want to bother their families for long. Others said that if they have sufficient resources, they do not want to die at all. They want to escape from death as much as possible. Some elders have underlined that length of life had enabled them to speak with me about their culture. They said that this is more useful than eating fat meat. But they do not want to suffer from poverty. The interesting point is that this group praises life beyond their life span. Some others suggested 90, 100, 105, 120, 200, and 1000 years. This shows that the desire for the future is not uniform. All are concerned about their future ahead of two years.

Moreover, the Oromo's concern about ancestors and genealogical continuity shows that they are concerned with the future. They are concerned with the well-being of the present and future generations (see P T W Baxter, 1970:126). The father is required to give his new born child during the name giving ceremony *handhuuraa*, which the latter will use after he or she has grown up in the future. *Handhuuraa* literally means umbilical cord. In Oromo culture, after birth, the grand mother cuts the umbilical cord of a new child, and puts it aside in a good place until the day of the name giving ceremony. During the name giving ceremony, the father takes a piece of cord together with the hair of the child in a special small bowl and puts it on a heifer or a cow. The father will never reclaim this heifer. His child will use it in the future. This is another case that shows that

the Oromo are concerned with the future of their children beyond two years ahead notwithstanding Mbiti's view. Thus, Mbiti and his followers need to note that Africans are human beings and the concepts of the "present," the "past," and the "future" are basic.

What Mbiti said about progress is unrealistic concerning the Oromo of Ethiopia. He asserted that African people are indifferent to progress, and do not plan for the future and build castles in the air (1996a:74). This assertion depends on his conception of the nonexistence of the future. He seems to maintain that traditional Africans do not hope to live in a good way that is different from the present state of affairs.

In general, the Oromo people have both long and short range plans to improve their life. They rely on prophets, the reading of entrails, and regularly recurring phenomena, such as the independent movement of the heavenly bodies, namely those of the moon, of the sun and of the stars, the morning chattering of colobus monkey, the *Gadaa* system, the fruiting and flowering of trees, the movement of birds, certain signs of vegetation, the reaction of animals to environmental changes and other factors to predict the future and understand what happened in the past.

The *Gadaa* system, and different Oromo beliefs (praying for the health of the environment, divination, and revering sacred groves) and practices (for instance, planting trees and raising animals) show that in one way or another they are motivated by concern for future people. But what is the basis of Oromo obligations to future people? Before answering this question, I need to briefly show how various individuals and environmental ethicists forward different suggestions as the bases of obligations to future generations.

Some individuals may think that their present life loses meaning if they do not care for the environment for the benefit of their children and grandchildren. Their concern for future generations is thus motivated by the need for the survival of their successors. However, others who do not have children hold that their obligation to future generations has nothing to do with whether one has children or not; for them, children cannot be the basis of obligation for future generations.

Although Richard T De George (1979) recognises duties toward future persons, he denies that these duties correlate with the rights, now, of future persons. For him the rights of future generations can only be recognised when they come into existence in relation to what is available at that time (1979:95-96). Because future generations "do not now exist they can have no right to exist or to be produced. Now, they have no present rights at all" (De George, 1979:96). But this argument could not succeed in denying "passive rights" (e.g., the right not to be deprived of opportunities or not to be harmed, etc.) short of "active rights"—i.e. rights "to do such and such" (see Ernest Partridge, 2001:382).

On the other hand, Thomas Thompson (1981) maintains that we have no obligations to future people, because we are incapable of them, and "ought" presupposes "can."

Partridge (1981), however, rejects Thompson's position and argues that we should be concerned with future generations, and people lacking such concerns are to be pitied. Partridge argues that people have a psychological need to transcend their petty interests, and to identify with larger ideals, movements or causes; and caring for posterity is a central case of such self-transcendence. Self-transcendence, he says, enables those who care about future generations to avert narcissistic self-preoccupation and alienation, and to be healthy, happy and fulfilled persons. It is the result of normal processes of maturation and socialisation.

In response to those who maintain that we do not and, in principle cannot, know what future generations will need or value, and thus can make no provision for them, Partridge has further identified (in my view, persuasively) the following fundamental facts that we can know about future generations: (1) they will be humans, with well-known biotic requirements necessary to sustain their health; (2) future persons for whom we are responsible will be moral agents, which means that they will be sentient and self-conscious, having a sense of themselves and other persons as continuing beings capable of choosing among alternative futures, and of reasoning abstractly and thus of acting on principle; (3) if these future persons are to live and flourish, they must be sustained by a functioning ecosystem; and (4) they will require stable social institutions and a body of knowledge and skills that will allow them to meet and overcome cultural and natural crises that may occur during their lifetimes (see Partridge, 2001:385).

Derek Parfit (1984) for his part argues that morality is not wholly personal, and that there can be obligations with regard to whomever there will be in the future. He says that we cannot base our policy on the interests of particular individuals, because their identity is not yet settled. For him there is no moral justification for a "pure time preference" for nearer over further generations.

Meanwhile, Bryan G Norton (1991) maintains that we can all agree that the key thing is the obligation to future generations. He remarks that the objectives of environmental concern (including preservation of species, ecosystems and habitat) will be realised by discharging obligations to future human generations. He suggests that we don't have to worry about intrinsic value of nature. We need to concentrate on the interests of the future generations. He believes that obligations with regard to the non-immediate future make a substantive difference. It is not clear, however, whether the argument from human interests will justifiably show the protection of nonhuman interests. This may not be always the case.

Following Brian Barry (cited in Robin Attfield, 1999:81), Attfield for his part argues that current agents, to the extent that they have the necessary powers and resources, are under obligation to provide for the satisfaction of the basic needs of the future,

and to facilitate the development in the future of characteristic human capacities, and of the characteristic capacities of other species, to the extent that such satisfactions and development can foreseeably be facilitated (1999:81).

But he poses two conditions for these obligations to be fulfilled. First, the basic needs of both the present and the future generate comparable (and potentially conflicting) obligations,

and second that future-related obligations hold only where factors beyond present control (such as climate change or future decisions) are not likely to prevent these good states of affairs from coming about (1999:81-82).

He stresses that we cannot secure equal opportunities for future people, whereas we can make the greatest foreseeable differences to their situations. Therefore, there must be obligations with regard to future generations.

The Oromo view about future generations does not correspond with some of the views outlined above. As Partridge (2001) noted, serious philosophical attention to the issue of moral responsibility to future generations is a recent phenomenon. But the Oromo have developed moral principles that deal with future generations (both future human and nonhuman generations) and the preservation of the natural environment and its resources throughout their history. The view from the interest of one's children alone is unpromising for the Oromo people. The Oromo are not only concerned with the immediate interests of their own particular children but also with the welfare of future Oromo and other non-Oromo people. As has been stated earlier, for the Oromo, all people are created by *Waaqa* and have the right to exist. In other words, the concern for the future of all people in Oromo moral thought derives from the belief that humanity is a creation of God. The Oromo people believe that all people belong to one human race despite their different colours. They do not say that only the futures of their children and grandchildren matter because they are members of the family. They support the peaceful coexistence of different groups of people and nonhuman creatures. They believe that it would be wrong to destroy species as such. Unlike some environmental ethicists who hold the view that only obligations to future generations matter rather than the value of nonhuman creatures, the Oromo have deep concerns for both humans and nonhuman creatures, for both are created by *Waaqa*. The present generation is under an obligation to maintain the basis on which future generations depend for survival. This is crucial for Oromo environmental ethics.

Although the Oromo people do not exactly propagate self-transcendence, their ethical principle—*saffuu* and attitudes towards future

generations are partly close to Partridge's view though different in many respects. Their moral principle underlines that natural resources should not be overexploited beyond limit and the land should be protected for the benefit of both humans, including future human generations, and nonhuman species. The Oromo also share Partridge's view that we know enough about the welfare of future persons to act responsibly on their behalf, because like present persons, future persons are human beings and need a healthy environment and "will be bound by familiar moral categories of rights, responsibilities, and the demands of justice" (Partridge, 2001:385).

As I have shown in chapter four, owing to the ever-escalating environmental problems that threaten the survival of the present generation, some Oromo groups have decided not to bring children into existence, because they cannot fulfil the obligations they will have in connection with caring for the children they might produce. They constantly asked themselves the following question: where are the children and future generations going to grow the food that they will need for an expanding population if the fertile lands are turned into deserts? In this connection, these groups share the view held by Attfield that future-related obligations are influenced by some factors which are beyond the control of present generation.

PART III
ATTITUDES TO NATURE

CHAPTER VII

WESTERN AND OROMO ATTITUDES TOWARDS WILD ANIMALS

This chapter is designed to present a brief survey of the Western conception of wild animals and the Oromo attitudes towards wild animals. I will discuss the views of Western environmental ethicists more in chapter fourteen on indigenous and modern environmental ethics. This chapter is divided into three parts. In part one, I briefly discuss the views of some Western environmental ethicists about wild animals. In part two, I critically examine Oromo attitudes towards wild animals. I show how the Oromo attitudes towards wild animals differ from the Western one. Section three concludes the chapter.

7.1. WESTERN ATTITUDES TOWARDS WILD ANIMALS

The Western world view incorporates both anthropocentric and non-anthropocentric attitudes towards wild animals which have had different effects on Western practices. The concern for animal is mentioned in various philosophical and religious texts in the West. Among others, the Pythagorean tradition, and Empedocles of Acragas accorded moral standing to nonhuman beings (J Baird Callicott, 1980, note 1:312).

Besides, the Old Testament contains various passages which are sympathetic to animals, and emphasise the positive relationship between humans and animals. In particular, Psalm 104 shows that humans belong in the same category as other living things on the Earth (see John Austin Baker, 1975:88).

But the creation stories in Genesis show that man is distinct from other creation. Although the older story of Genesis 2 tells that humans and the animals are formed out of the dust of the ground, Genesis does not present birds and beasts as adequate companions and partners for man. Man is conceived as superior to the animals, for God created animals for man, and man confirmed his innate superiority by giving animals their names. In view of the fact that absolute sovereignty belongs to God, man was believed to have a relative authority and superiority over some other beings (Baker, 1975:89-90).

But what should not be overlooked is that the Old Testament contains various passages that praise nonhuman creatures and suggest that humans need to treat nature with respect. Hope for nature is explained in Isaiah 11. The vegetarianism of the creation (the dependence of animals on grass and of man on grains and fruits) in Genesis 1 is found in Isaiah 11 (vv. 6-7, 9a). The "Wisdom Literature" also contains proverbs about animals, weather, plant life, and the like (Baker, 1975:96).

Although the New Testament has relatively little to say about man's [human's] proper attitude to nature, the second generation of Christians developed a constructive attitude to nature (Baker, 1975). In spite of this, some of the basic attitudes of the Old Testament are included in the New Testament. People were encouraged by Jesus to have care and concern for animals (Luke 13:15; 154; Matthew 12:11 = Luke 14:5). Robin Attfield (2001) and Robert J Moore (1990) have stated that for Christians God expects humans to rescue stranded animals even on the Sabbath.

Jesus' teaching also includes God's concern for birds, plants, individual sparrows and for individual sheep. The different passages which contain Jesus' teaching show that God cares for each and every human, for humans are of greater value (Attfield, 2001:97) although animals have some value. According to Attfield, these passages also "presuppose that individual animals too have intrinsic value in the eyes of God, albeit less than Jesus' individual human hearers" (2001:97-98). Moreover, Attfield (1994) stresses that the New Testament opposed animal sacrifices. Although I have certain reservations as to whether Jesus and his followers really believed that animals have intrinsic value as modern ecocentrists conceptualise and defend this value, certainly I share Attfield's view that various passages of the New Testament support the conclusion that Jesus was concerned with animals.

According to Clarence J Glacken, biblical texts convey the message that man is a steward of God. Although man was made in God's image, he was not a part of nature in the way that plants and animals were (1967:168; see also Attfield; 2001:100).

Some of the fathers of the early church also showed concern for nonhuman creatures. For instance, the fourth century Cappadocians Basil the Great, his brother Gregory of Nyssa, their sister Macrina, and their friend Gregory of Nazianzus believed that God is responsible for the creation of the diversity of nature. According to Basil, both animals and humanity benefit from the grasses (Attfield, 2001:101).

Furthermore, Francis of Assisi (1182-1226) believes in the goodness of creation in all its diversity. He shows his concern for birds, fish and flowers by preaching to them (Glacken, 1967:214-216). According to White, Saint Francis of Assisi attempted to "set up a democracy of all God's creatures" (1994:51). He considered all creatures as brothers and sisters. White proclaims that Saint Francis rebelled against the typical Western Christian theology (1994:51).

In short, there was a humanitarian movement which involved thinkers who were sympathetic to animals in the West during the patristic and medieval periods. As Glacken (1967) and Attfield (1994, 2001) have shown, there is ample evidence, drawn from these periods, which shows a concern for the animal world, at the normative level, in the West. As Attfield (1994) has stated, in my view correctly, it would be wrong to confine concern in Europe for nonhuman animals, at the level of *theory*, to recent centuries.

However, some Western scholars have disagreed with ancient and medieval thinkers and religious beliefs and developed anthropocentric attitudes towards wildlife. They believe that humans are metaphysically special and can use wildlife to satisfy their desires (see, for example, Thomas Aquinas, 1964 and 1999; Descartes, 1999; Immanuel Kant, 1930).

On the other hand, some writers, such as John Ray, Linnaeus, and William Paley, implicitly rejected the belief that everything was made for humankind (see Attfield, 1994:29).

Moreover, since the early eighteenth century, some Europeans including Jeremy Bentham, John Stuart Mill and Henry S Salt have argued that sentient beings including nonhuman animals have moral standing because they are capable of experiencing pleasure and pain (see Tom Regan and Peter Singer, 1976).

There is also some evidence, as in Ernest Hemingway's novel *Green Hills of Africa* (1954), that some Western hunters selectively killed male animals in Africa. By contrast, other writers have found some cases which support the view that various Western hunters indiscriminately wiped out wild animals in Africa (for details see Jonathan S Adams and Thomas O McShane, 1992).

More recently, modern Western environmental ethicists have tried to address the relationship between humans and nonhuman creatures. Peter Singer (1986, 1993) argues that the equal interests of all sentient animals, human or otherwise, should be given equal consideration. Singer considers sentience, the capacity to have conscious experiences such as pain or pleasure, as the criterion for moral status. He thinks that nonconscious life lacks intrinsic value. Accordingly, worms, molluscs, plants, rivers, rocks, lakes, mountains and other parts of nature are not included in the community of morally equal beings. Tom Regan, meanwhile, states that both animals and humans have a right to life. An entity is intrinsically valuable if and only if it is capable of being a subject of a life, that is to say, possessing memory, beliefs and desires as well as other mental states. But to experience mental states, it is not necessary to possess language at all (Regan, 1983). Singer and Regan have demanded equal moral consideration on behalf of animals although Singer insists that equal moral consideration does not necessarily imply equal treatment. Nonetheless, Singer and Regan seem to maintain a hierarchical or class system (Keekok Lee, 1997:401).

Bernard E Rollin for his part thinks that animals have rights and interests. Rollin lamented that animal-using industries have not paid attention to the welfare of animals. Regulation is required to decrease animal suffering. The new social ethic is concerned with preventing, mitigating, ameliorating, and redressing suffering and pain that animals used in society experience (Rollin, 1998:402).

Moreover, William Stephens (1999) advises humans to adopt vegetarianism as a good alternative to help feed the hungry, preserve the environment, resist sexist oppression, save sentient animals and be kind to our colons. People, particularly meat eaters, are advised to abstain from

eating intensively raised, grain-fed birds and mammals. A person who values compassion, humility, and integrity is asked to work towards a meatless diet. Although Stephen's proposal seems idealistic and utopian, it is a timely call for consumers of affluent, industrial nations to change their way of life. Otherwise, they will face serious environmental problems in the near future. They cannot afford to maintain excessive consumerism. In fact, I do not advise people to totally boycott eating all beef, pork, lamb, poultry, fish, seafood, eggs, and dairy products. People, particularly in developing countries, may not survive by totally avoiding these products without their economies being modified first. Whether or not we accept the principles of vegetarianism, we have to think about how to feed humanity. But it is important to gradually reduce meat production.

By and large, there is a wide range of attitudes relating to wild animals in the West. Western attitudes towards wildlife suggest and encourage the conservation of wildlife sometimes with respect to human interests, and sometimes with respect to the interests of nonhuman creatures, and sometimes with respect to both human and nonhuman interests. Although some individuals treated animals as machines, there always has been concern, at least theoretically, for animals for at least two thousand years in the West. In the Old Testament, humans are regarded as part of creation alongside other creatures. As Attfield has convincingly stated, "Western attitudes to nonhuman animals, then, have been ambivalent, and far from uniformly despotic, though not uniformly gentle" (1994:40). In what follows, I will discuss Oromo attitudes towards wild animals.

7.2. OROMO ATTITUDES TOWARDS WILD ANIMALS

7.2.1. The Use of Wild Animals in Oromo Society

For the Oromo, wild animals are a source of meat, hides and ivory. The oral information I gathered from the study sites reveals that wild animals contribute little directly to the daily living requirements of individual Oromo people. The Oromo hunt very few wild animals for food, and those mostly during famines and festivals. The Oromo do not eat animals with uncloven hooves and no separated toes, and animals which have teeth from the lower and upper jaws. These animals and human beings are believed to have similar features.

The Wata hunter-gatherers in Borena eat the meat of elephant, pig, warthog, bear, porcupine, aardvark, *horofee*, and hippopotamus in addition to animals which are the sources of food for the Borena people. The informants state that originally *Waaqa* said to Wata "I bless and make whatever you eat nutritious for you." That is why they eat various wild animals without discrimination. The Masanger people in Illuababorra also eat colobus monkey and python. Some Oromo who live among the Masanger people have begun to eat colobus monkey (Inf: Bekele Gutama).

Food culture is thus being changed owing to the influence of other cultural groups in the study sites.

In short, famine, acculturation, modern education, medical concerns, the rise of a new religious sect, and various economic reasons account for the growing acceptance of some wild animals as food.

The Oromo hunt wild animals for various reasons. For instance, in the past, many Oromo used to believe in the killing of wild animals as a token of heroism and strength. The killers had the reputation of being heroic and strong.

Yet hunting for self-realisation has ceased to be significant at the present time in Ethiopia. In addition to cultural change among the Oromo and other people in the country, successive Ethiopian governments have established laws to regulate hunting practices since 1909 (see J C Hillman, 1993). Similarly, the Borena Oromo outlawed the attempt to kill a person as a test of masculinity in 1969 (Inf: Borbor Bule). Moreover, the *Gumii Gayo* assembly outlawed any kind of hunting in the Borena lands during its 36th assembly in 1988 (Golloo Huqaa, nd:56).

The Oromo approach to wild animals is different from that of the West. What is interesting is that the Oromo people have the view that there are cases where a species becomes extinct because of natural environmental change and human activity. The Oromo in Borena and Illuababorra hold that the destruction of a whole species, even when it has no resource value, is morally wrong. They refrain from needless destruction of female and young animals. They believe that female wild animals attract uncastrated male wild animals, which in turn leads to the reproduction of wild animals, and serves as an alternative source of meat.

In particular, killing the pregnant wild animal and the female wild animal with its calf, killing a wild animal which is in labour and killing wild animals which are in heat violates the Oromo traditional law and culture. If one restrains from killing such animals, he or she will be blessed even by *Waaqa*, leave alone by human beings.

The Oromo, thus, largely kill male wild animals. They can identify the difference between female and male animals by observing their physical appearance. To put it another way, the Oromo kill wild animals selectively, not indiscriminately. They are determined to protect the reproductive capacity of wild animals.

The Oromo do not have any keen interest to destroy even those wild animals which destroy their crops, such as baboon, monkey, warthog, pig, porcupine, boar and others that attack domestic animals, such as leopard, fox, hyena and lion. As I have argued elsewhere (Workineh Kelbessa, 1997b), the Oromo peasant farmers use various preventive measures to deter the predator from returning. For the Oromo, human beings are not free to destroy the creations of *Waaqa*. The elimination of all types of wild animals means the destruction of human beings through famine and drought.

The interview data included one piece of concrete evidence. Once upon a time, baboons had multiplied and disturbed the people in Yayo locality in Illuababorra zone. They destroyed crops and made life very difficult for the people. The people then decided to chase away the baboons from their locality. After a while the area was hit by serious famine for seven years. All crops were ruined. The people were wondering how to explain the cause of the present famine. After reading an animal's entrails, a prophet told the people how to solve this serious problem. He advised them to bring baboons back by performing traditional reconciliation ceremony. The people were advised to ask the baboons for forgiveness by splashing *maraacaa* and asking them to eat their crops. He also advised them to sow crops on the border of their farmland specifically for baboons. The people then did what they were told to do. The baboons returned to Yayo after one year. Since then the Yayo people have never faced serious famine (Infs: Bekele Gijo; Lemma).

The story about these baboons is not a simple story as appears to be the case. It has a deeper meaning and implications for environmental ethics. It reflects the special attitudes that the Oromo people have developed towards wild animals over the years. Those who drove the baboons away did not know that the absence of wild animals can affect the survival of human beings. The prophets and other elders, however, had this knowledge which passed down from generation to generation through traditional narratives. The indigenous Oromo view towards wild animals goes beyond the needs of consumption. Their effort to conserve various species is not merely incidental. Their attitude towards wild animals is informed by their religious beliefs and social laws, which have been consciously formulated by their forefathers. Right from the very beginning the Oromo *Gadaa* assembly formulated the law that the number of wild animals could be reduced but no species should disappear for good (Inf: Borbor Bule). If a hyena does not howl in the night, the Oromo say, it is *falfala* (something contrary to the culture and the law of nature). The Borena Oromo say "sidi gossa tokko egi dhabani gost cuffa hindhabanti" (Inf: Borbor Bule), which can be translated as "if one species which is the creation of God disappears for good, all other species will disappear."

The informants said that the prosperity of the people depends on the peaceful coexistence of wild animals and human beings. Rightly reflecting the Oromo law of wild animals, my informants agree that it is preferable to reduce the number of harmful wild animals, particularly wolf, lion, hyena, baboon, fox, rather than annihilating them. *Waaqa* will punish those who completely killed his creation. There is the saying that when you kill wild animals, leave two of them: female and male. When you cut branches of trees leave one branch. The Oromo believe that it would be wrong to eliminate any species created by *Waaqa*. On the other hand, almost all of my informants suggest that useful wild animals need to be multiplied. The people will resort to these animals in the time of famine. Thus, they do not want to reduce their number. The value judgement

involved here is that it would be wrong to eliminate animal species. To destroy a species is tantamount to endangering the health of the environment. The other related moral principle is that it is always right to preserve diversity. This in turn ensures the continued existence of all species. The more diversity, the better.

Similarly, the Bantu people in Africa are not interested in killing wild animals. G W Burnett and Kamuyu wa Kang'ethe have stated that the Bantu people's resolution of their hostility towards wildlife is different from that of European settlers.

While Europeans killed wildlife in number and without mercy, the Bantu built a structure that attempted to minimize association between humans and wildlife, and if this effort failed, the problem reverted to society except in cases of immediate self-defense (1994:157).

Unlike anthropocentrists, the Oromo do not consider animals as mere resources that can be exploited any time without exception. They are expected to respect the rights of animals given to them by the creator. Wild animals, as species, have the right to exist whether they are useful or not.

Some informants in Illuababorra said that although in the past the Oromo did not kill young and female wild animals, nowadays those hunters who do not know traditional Oromo culture indiscriminately kill all wild animals. Killing female and young animals would not reduce the repute of the killer (Infs: Amanu Guta; Bekele Gutama; Galan; Galata; Legese Chali; Mohammed Elias). Thus, the current positions of some individuals differ from the traditional Oromo practice even though other peasant farmers maintain the indigenous position in Illuababorra. There was a disagreement among informants who participated in focus group discussion 3 and 10 in Illuababorra and in focus group 6 in Borena on this issue. Some informants said that they were not aware of some of the traditions discussed above. In this connection, it is worth noting that some peasant farmers harshly treat even certain domestic animals, especially dogs and donkeys, which are very useful to human beings, leave alone wild animals.

However, the Borena have "*seera gollaa*" (the laws for donkeys, horses and mules) along with other domestic animals in order to control the mistreatment of animals by humans. "*Gollaa*" is the enclosure for horses, donkeys and camels. The *Gumii Gayo* assembly formulated these laws. According to the Borena law, if the owner of a donkey beat or wounded it with a spear or other instruments, he would be forced to pay 3 cattle to the *Hayyuu* (representative) of the clan. When the owner loads a pregnant donkey too heavily which results in abortion, he will pay 15 cattle. The clan members use these head of cattle to solve various problems. In some cases the wrong doer is asked to take care of these cattle until the need to use them arises. If the owner admits his mistake and asks his clans for forgiveness, the clan members may return one or two head of cattle to him.

When the donkey belongs to somebody else, the owner is entitled to receive these cattle (Inf: Dabassa). According to the Borena law, those who stole a bull or a cow and slaughtered it for food would be fined 30 head of cattle. These cattle are given to the owner of the bull or the cow. Moreover, mounting a pregnant horse without giving the animal time to graze may lead to abortion. If so, the owner would pay 90 cattle. Accordingly, when someone kills a horse, he will be fined 90 head of cattle. Similarly, when one kills a human being, he is forced to pay 90 head of cattle to the relatives of the victim (Infs: Borbor Bule; Dabassa).

For the Borena Oromo, although human beings and horses do not have similar metaphysical status, they have equal legal rights. Horses have the right to drink water any time. It is immoral to prevent any horse from drinking water whether it belongs to the owner of the well or not. Horses have had an important role during war and peacetime in the history of the Oromo people and have been given an important place among domestic animals. Generally, the important moral principle is that it is wrong to unnecessarily exploit domestic animals and thereby cause them unnecessary suffering that may endanger their life. If the animal is wrongfully killed or injured, his or her owner's family should receive more cattle in excess of the purchase price of the animal. Thus, the Borena Oromo inculcate the kind treatment of domestic animals by individuals. Those who violate the rights of animals are subject to punishment. Certainly this law minimises human cruelty to animals in Borena.

This suggests that the original Oromo view towards the natural environment, or at least towards animals, has been changing as we move from Borena to the rest of Oromia, probably because of contacts with other societies.

The other reason which influences the Oromo in Illuababorra to revere some wild animals is the belief that wild animals, such as lion and *Mardhataa* (a kind of snake believed to bleat; probably it is a rattle snake) (Tilahun Gamta, 1989:449), bear a grudge against individuals who have killed some of their relatives and cursed them without any reason. It is believed that these animals can destroy one's crops, house, domestic animals and oneself if one has annoyed them. It is only through a traditional reconciliation process that peace can prevail.

What has been attempted above was to explain that wild animals have economic and social values. I have argued that the Oromo have developed laws, which avoid total annihilation of wild animals. They favour discriminatory hunting practice and recognise the rights of animals to exist along with other creatures. They have further adopted the moral principle that humans have special moral responsibility for domestic animals. Domestic animals should not be severely maltreated. They should be allowed to graze healthily and continue to exist. In the following section, I will specifically discuss how religious beliefs have influenced Oromo attitudes towards wild animals.

7.2.2. Religious Beliefs and Wild Animals

The Oromo show respect for some wild animals on religious grounds. They refrain from killing those animals which are found in sacred places and other places of worship, for they believe that they come to God to save their life from all sorts of threats. The Borena Oromo said that these animals are *wayyuu* who fled to *wayyuu*. *Wayyuu* is a person invested with blessing authority in the Borena society and is considered to be a man of God. The place where ceremonies are made is also called *wayyuu*. It is a place of peace, blessing and respect. They may kill these animals in other places.

Here it is worth mentioning that in many parts of the world wild animals survive around religious institutions. For instance, Nigel S Cooper reports that the great diversity of life is found in churchyards of England, for they offer wildlife interesting habitats in exposed stone and old trees. Most importantly, fertilisers, herbicides, or ploughing and reseeded have not improved their grassland (1995:916). Cooper is of the opinion that the conservation movement can also benefit from the churchyards owing to their public profile.

In Oromo belief systems, a dappled gazelle, which has a blaze on its forehead and has a tonsure-like hairdo, a white small gazelle, animals which have one horn, animals which are called *Cattoo* – which have hairs on their head, and wild animals which have tufts on their back are not supposed to be killed for they are considered religious and the animals of *dachee* (Earth).

Wild animals that have abnormal colour are regarded as unusual. Hunting leaders are well aware of these animals and advise others not to kill them. It is believed that those who kill these animals cannot rescue themselves from danger. *Obboo* Bekele Gijo informed me that he became crippled after killing a dappled antelope. These religious beliefs express the value that certain wild animals have a special place in this world and should not be killed under any circumstances, because killing such animals will cause disorder for the society and possibly death for those who killed them.

Colobus monkey is another respected wild animal in the study sites. Many of my informants said that it is a religious animal and prays to *Waaqa* in the middle of the day and night. It growls early in the morning. It serves the rural people as an alarm clock to wake them in the morning. The Oromo also avoid killing *canaa*. *Canaa* does not destroy crops. Moreover, the Borena Oromo do not kill *arataa*. They believe that drought and war will follow the killing of this animal. *Arataa* is believed to be the sign of rain and wealth. *Arataa* is not usually seen in Borena. Many people do not know it (Inf: Borbor Bule). No English name exists for it.

As has been stated in the foregoing discussion, the other point which is related to religious beliefs is totemism. There is controversy about whether totemism is, strictly speaking, present in Oromia; but some closely similar practices are in any case present, as will be seen below. Some

Oromo lineages in different parts of Oromia revere different kinds of animals as their relatives. The lion is the totem of the people of Soboka Gadhafa lineage in *Qaasoo* Jibat forests in Ambo (see Workineh, 2001). These people belong to the family of lions and are called *Aboosaree Qaasoo*. They believe that a lion has a spirit and needs to be respected. There has been a traditional ritual in respect of a lion. The people gather together to honour their totem. They sacrifice animals as an offering to the deity of a lion. Lions stay with the people during this ceremony. The next morning, they go to their forests. They are expected to help *Aboosaree* in times of need or desperation. They are not supposed to attack either the people or their animals. In fact, when the people fail to offer gifts to a lion, it may attack the people and animals. This is still a living tradition in Jibat forests.

My informants in Illuababorra have also confirmed that *Aboosaree* people are found in Bure. A certain Abbaa Bure approaches and releases lions. Lions come to his place and stay with him. Finally, they return to their forests by his order (Inf: Legese Chali). The relatives of Diko Abbaa Challa in Cari locality (Inf: Bekele Gutama) and of Arfassa Gugssa in Gumaro (Infs: Galan; Marga) were called *Aboosaree* and followed the same procedure although this practice was discontinued after the death of the two persons.

As has been stated earlier, in Borena, the followers of the Oditu *Qaalluu* respect snakes owing to the myth of the virgin birth. The Oditu *Qaalluu* breeds a large number of snakes in a bag made from skin of animals, and releases them when he wants to do so. He usually sacrifices a domestic animal and gives tallow and butter to snakes. He can communicate with the snakes and order them to do whatever he wants. The Gona people consider these snakes as their relatives and the latter do not bite them.

The followers of the Karayyu of the Sabbo submoiety respect all *buutii* (puff adders). The Karayyu *Qaalluu* keeps puff adders in a bag in his house. When their number increases, he releases some of them. Puff adders eat tallow and butter. Individuals from the Mante clan of the Karayyu carry puff adders and go along with the *Qaalluu*. The person who carries puff adders is known as *wayyicha*.

Puff adders are believed to be revengeful. When one kills one of them, they attack the children, wife, and animals of the killer. They can invade the house of the killer. When a person from the Mante clan is forbidden to water his cattle from *eella*, he can send puff adders to spoil the water. He can also purify the spoiled water afterwards and order puff adders to leave the place. To purify the water, *buna qalaa* (the sacrificing or killing of the coffee) ceremony is needed. Although some individuals can kill snakes and puff adders, generally the Borena people do not want to kill them. But the followers of Pentecostal faith and Islam indiscriminately kill all kinds of snakes.

What has been stated above shows that the Gona and Sabbo moieties regard *boffa*-snakes and puff adders as their symbols respectively. They think that *boffa* and *buutii* are the two heads of the varieties of snakes. The Borena might have imposed the categories they made for themselves on nature. Or maybe they adopted these categories from nature.

Although it may not be considered as totemism, some insects and animal species had been identified as the symbols of purity or demons in Western culture too. Bees had a considerable place in Christian religion (see Elizabeth Atwood Lawrence, 1993). Owing to the fact that honey is produced by bees from the nectar they collect from flowers, it is believed to represent purity, fragrance, and beauty. "Flowers impart their own symbolic connotation of rebirth and immortality to the bees" (Lawrence, 1993:307). Beeswax had symbolic meaning in Christianity. Wax candles were believed to symbolise the virginal body of Christ whereas the wick signifies the soul and immortality of Christ and the light represents his divine person, (L W Clausen; H M Ransome, cited in Lawrence, 1993:308). The social structure and behaviour of bees also gave the ground to symbolise Christ as a honeybee (see Lawrence, 1993:309-310).

On the whole, economic, social and moral concerns, fear and religious beliefs have influenced the Oromo view of wild animals. The respondents were asked why they revere the species of their own choice. The major reasons for respecting wild animals are religion, environmental friendliness, income generation and future concern.

On the other hand, some informants have expressed that they do not respect any species. Some of them said that their religion, for example Islam or Pentecostalism, does not allow them to respect wild animals. Others stated that the reason for not respecting wild animals is that they are harmful. Also, very few informants maintain that some wild animals are their enemies.

In short, the zoological classification and utilisation of wild animals do not simply rely on the satisfaction of their needs, even though certain anthropologists, whom Brent Berlin and Elois Ann Berlin designate "utilitarian-adaptationists," would have us believe that indigenous people are exclusively utilitarians. Neither do they exclusively depend on their own intellectual requirements, as Claude Lévi-Strauss (1966) believed to be the case. The Oromo recognise the existence of various wild animals which do not have immediate practical significance (be it as a diet, a ritual animal or for hunting purposes), and which do not cause harm to them. These ethically constrained relations of the Oromo with some animals go beyond purely selfish motives or practical needs and fear of retribution. Generally, most Oromo recognise the inherent value of animal species although some people who have been influenced by modern religions and education do not recognise this at all.

The intellectual need of the Oromo is not the prime mover in the recognition and classification of animals. As Brent Berlin and Elois Ann Berlin convincingly noted, functional assessment presupposes the presence

of various animals and their observation by human beings. Indigenous people's constant interaction with their environment enabled them to "come to act as codifiers of its inherent value" (1983:324). To some extent, indigenous and scientific systems of classification are similar, although modern scientists rely upon evolutionary theory "to explain explicitly the similarities and differences so readily obvious to the careful observer" (Berlin and Berlin, 1983:324). Both systems identify and codify the natural entities that reveal themselves to human beings.

Finally, I would argue that Oromo indigenous wildlife management, if carefully revived, can promote diversity of species which is in turn essential to maintain biological stability and stability of economic production dependent on biological resources in Ethiopia. However, I am not suggesting that we have to appropriate all functionally false beliefs indiscriminately, because they work so well. Instead, what is important is a critical appropriation of indigenous systems of wildlife management. After studying the positive aspects of other peoples in the country, the Ethiopian government could thus combine indigenous and modern systems of wildlife management with the consent of the people. To do this, indigenous wildlife management systems need to be incorporated into the development and educational programmes of the regional and federal governments in the country. Incorporation of indigenous knowledge and lore into the curriculum will undoubtedly contribute to the wise management of wildlife resources. However, the imposition of modern systems of wildlife management on the people without consultation will further aggravate the extinction of various animal species.

There has been a debate on the relationship between biological diversity and stability. Aldo Leopold (1966) and his followers argue that diversity promotes stability. Both diversity and stability are good and valuable. In 1970s, however, on the basis of empirical biology, some writers stressed that diversity and stability do not always go together. In some cases biodiversity does not promote stability. One can maintain biological stability with very few species (Kristin Shrader-Frechette, 1994). Others think that there is no connection between biological diversity and stability. But Bryan G Norton (1987) holds the view that there is a connection between the two. I would argue that diversity may or may not promote stability. What must be clear is that if species are extinguished altogether, there will be no stability. Hence, the adoption of indigenous wildlife management can promote biological and economic stability.

7.3. CONCLUSION

I have attempted in this chapter to outline how Western writers and the Oromo people conceive wild animals. There have been both anthropocentric and non-anthropocentric attitudes towards wild animals in the West. Like the Oromo religion, the biblical texts have principles which show the positive relationship between humans and nature although they

have not been strictly followed by Western governments and technicians in dealing with nonhuman species. There has been a humanitarian movement all along in the history of the West which opposed cruelty to animals. If the Westerners had applied theories which praise nonhuman species and some of the principles of biblical texts to wildlife management practices, they could have brought a difference to the preservation of the diversity of species in the West and non-Western countries. It has been stated that more recently, certain environmental ethicists have argued that moral rules should be extended to include the rights of animals. Some environmental ethicists have suggested the liberation of animals from human beings. Some Western thinkers, however, consider animals as mere resources to be exploited by humans. For them animals do not have any rights and interests.

I have maintained that for the Oromo, wild animals have economic, social, religious and natural value. Animal species have economic value because they are consumed as major sources of dietary protein and medicine; they are the sources of hides, ivory and water vessels. They also serve as decorations and status symbols.

The Oromo have developed discriminatory hunting practices to avoid depletion of breeding stocks. Like some environmental ethicists, they hold the belief that animals have the right to continued existence, and it is unnatural to destroy the whole species as such. Generally the Oromo have no desire to eliminate wild animals or stop life processes. They show kindness not only to higher animals but also to tiny ants and any other creature. They understand that wild animals are living creatures capable of feeling pain. But unlike anthropocentrists, the Oromo do not regard wild and domestic animals as mere resources that can be exploited without restriction. Neither do they believe that it is totally wrong to use wild animals. Wild species may be hunted when there is sufficient reason to do so, but not extinguished. They have, thus, developed judicious use and conservation of the Earth's resources of their area. Unwise exploitation of animals and any other species may lead to the extinction of certain species.

Moreover, it has been shown that the Oromo people have developed interest in heterogeneity and diversity of animals. Some species serve as the indicators of war, peace and time. However, the Oromo distinguish not only animal species which have direct economic or religious value but also species of apparently no utility. Accordingly, the Oromo value diversity of species, a value which is shared by Aquinas and other environmental ethicists who think that it is wrong to diminish animal species. Also, fear of dangerous animals also indirectly contributes to their continued existence.

The Oromo hold the belief that *Waaqa* gave a special value to certain animals and birds. These animals and birds are regarded as possessing spiritual qualities and close association with *Waaqa*. They have assumed symbolic roles within the Oromo religion. *Boffa* was perceived as a creature which gave birth to the first *Qaalluu* of Oditu. Snakes are considered as the symbols of regeneration and continuity in Borena owing

to their biological and behavioural traits that have been perceived by the people over the years. Puff adders in Borena, lions in Ambo and Illuababorra, *mardhataa* in Illuababorra and other animals as well are believed to cooperate with those clans or individuals who respect them and refrain from interfering with their life. Some animals and birds are born with unique colour or marks on their body quite apart from their species and considered as the special animals of the Earth. It is believed that because of their spiritual nature, all these animals should never be killed. Subsequently, positive affiliation with some animals has been enhanced by the symbolising process and thereby has contributed to their preservation. Animal symbolism is also common in Europe and other parts of the world although the interpretations and associated values differ from the Oromo. Christians in Europe, as has been mentioned, regard bees as the symbols of immortal souls.

What is distinctive to the Oromo tradition is that their beliefs and practices have contributed much more to the preservation of animal species than the Western beliefs and practices. In other words, Oromo practices with respect to wildlife management incorporate Oromo values and beliefs more than Western practices incorporate Western traditional values. In Oromo society it is not only a group of individuals who have positive attitudes towards nonhuman species but also the society at large, because there have been laws that have been shared by all members of the society. The *Gadaa* system has been one of the most important instruments used by the Oromo people to formulate and maintain the laws that govern humans' relationship with other species. This is still a living tradition in Borena. It is true that the number of wild animals is being reduced by natural causes, such as drought, and other human induced causes including the rise of new religions, external influences, indiscriminate hunting by some irresponsible persons, and the disturbance of habitats of wild animals in different parts of Oromia. But in the West, it was mostly only some individuals (for instance, writers and religious leaders) who have been concerned with the rights of animals rather than the government and all members of Western society. The other important point is that unlike Descartes and his followers, the Oromo do not consider animals as machines. Linked to this, Oromo values do not endorse animal experimentation. Moreover, unlike some Western hunters, the Oromo hunters do not destroy the reproductive capacities of wild animals. As I show later, the Borena Oromo leave water behind around wells for wild animals to drink during the night. No hunter is allowed to go to the water points and exterminate wild animals.

CHAPTER VIII

THE PLACE OF FORESTS IN WESTERN ENVIRONMENTAL ETHICS AND OROMO CULTURE

People in the world have many different attitudes towards forests. Indeed we might reasonably ask whether the views of Oromo peasant farmers and pastoralists differ from or correspond with the views of modern environmental ethicists. This chapter will present a brief account of the attitudes of some modern environmental ethicists towards forests and the place of forests in Oromo society. The chapter is divided into three parts. Part one examines the place of forests in Western environmental ethics. Part two examines indigenous Oromo attitudes towards forests. My presentation of Oromo attitudes towards forests is largely based on the findings of the fieldwork in the study sites. Part three concludes the chapter.

8.1. THE PLACE OF FORESTS IN WESTERN ENVIRONMENTAL ETHICS

Various philosophers have attempted to show whether trees have moral standing and/or intrinsic value. In this section, I will briefly examine how some Western philosophers have dealt with this issue. In the nineteenth century America, Gifford Pinchot, one of the leaders of the conservation movement, emphasised the wise management of resources over a long period of time. For him, the reason for conservation of forests is not because of aesthetic reasons or because they are the abode of wild creatures but the making of prosperous homes (Samuel Hays, 1959:41-42).

John Muir, the leader of the preservationist movement and the founder of the Sierra Club, has put forward ideas somewhat different from Pinchot's. For him, the wilderness should be preserved for aesthetic and spiritual reasons. He thinks that nature provides an experience of the sacred or holy. For Muir, forests have aesthetic and amenity value whereas for Pinchot, forests have productive value.

However, both movements were anthropocentric. For both, the value of the natural environment lies in human use. Although one can find in the writings of Muir the idea that nature has value independent of human beings, he was primarily concerned with the interest of human beings. Muir and his followers suggested that forests should be protected because they have scientific, aesthetic, and spiritual values. This goes hand in hand with the principle of classical utilitarianism that things which are useful to human beings are good. If the fundamental reasons given for preserving habitats are those of human utility, one can label conservationists and preservationists both as anthropocentrists although the preservationists hold

the belief that the wilderness should be preserved not only for its human uses but for its own sake.

Kenneth Goodpaster (1978) argues that trees have interests and moral standing, because, he said, whatever has a good of its own and can be benefited in its own right is morally considerable. Accordingly all living organisms have moral standing. Trees tend to maintain and heal themselves. Therefore, Goodpaster has rejected the views of philosophers who considered sentience or conscious interests as a necessary condition of moral considerability.

Like Goodpaster, Robin Attfield thinks that plants have interests. The interest of non-sentient beings lies in their flourishing or their capacity for flourishing after the manner of their kind (Attfield, 1991). Attfield (1994) also writes about the good of trees and seems to endorse the statement in Genesis 1:11 that “[a]nd God saw that [the creation] was Good” (quoted in Attfield, 1994:170). He maintains that living creatures seem to have a value of their own. Accordingly, trees can be of intrinsic value. Joel Feinberg contends that things, which have no interests, cannot have value in their own right, but Attfield rejects his view that trees have no needs of their own. Feinberg gives as a reason that they are incapable of knowing satisfaction or frustration, pleasure or pain. He insists that “interests” logically presuppose desires or wants or aims, the equipment for which is not possessed by plants (Feinberg, 1974). However, Attfield argues that “[t]rees had needs before people existed, and cannot be supposed to have lost them” (1994:158). Attfield maintains that trees have moral standing; but they have slight moral significance only.

Holmes Rolston for his part argues that plants defend their lives. “Every organism has a *good-of-its-kind*; it defends its own kind as a *good kind*” (emphasis in original, Rolston, 1999b:122). Rolston (1988) suggests that we ought to preserve species, for they have intrinsic value.

Moreover, Holmes Rolston and James Coufal have pointed out that resource use that exploits the natural productivity of forests and redirects it to benefit human society should recognise how the commodity is related to the larger biotic community. “A holistic forest ethic affirms the forest as resource, but denies that it is only a resource” (Rolston and Coufal, 1991:36-37). Rolston and Coufal (1991:38) have pointed out that while multiple use is a commodity model, treating forests as resource, multiple value is a community model, respecting both human and forest communities and seeking an integrated appreciation and development of values provided by forests. The central questions of multiple use are, what is it good for? and what use does it have? On the other hand, the central questions of multiple value are, what values are present intrinsically (in the forests regardless of humans) as well as instrumentally (in forests used as human resources)? How can this richness be optimised? (Rolston and Coufal, 1991:38). Both human uses for recreation, timber, and watershed and beauty, integrity, and stability in the biotic community are sought to be optimised by the community model. Rolston and Coufal (1991:40) suggest,

in my view rightly, that the present code of SAF (Society of American Foresters) which favours loyalty to other persons, to an agency, to a company, should embrace loyalty to land—to the nation and its residents on their native landscapes, the human community entwined with the biotic community.

Christopher D Stone for his part has recalled that “[o]riginally each man had regard only for himself and those of a very narrow circle around him” (1994:112). According to the common law, natural objects do not have standing in their own right. They are considered as objects for man to conquer and master and use. The conservation of these objects is for the benefits of humans (Stone, 1994:116). Stone, however, has suggested that forests, oceans, rivers and other so-called ‘natural objects’ in the environment should be given legal rights (1994:113). But he did not mean that one should never cut down a tree. Stone underlines that the love and empathy for the environment can be generated if human beings perceive it as themselves. This in turn enables them to attribute rights to it. He recommends a guardianship approach to trees which is similar to what some people do with respect to incompetent human beings, such as the profoundly retarded and young people, because of the fact that trees cannot initiate proceedings on their own.

Environmental ethicists have forwarded various theories, which in one way or another demand change of the dominant Western attitude towards trees and forests. Some environmental ethicists argue that trees have intrinsic values. Others defend the position that trees have only derivative value.

8.2. THE PLACE OF FORESTS IN OROMO CULTURE

8.2.1. The Main Uses of Trees

For the Oromo and other people in developing countries, forests have been a major source of food, honey, fodder, fuel, fibre, timber, medicine, ritual objects, furniture, and dyes.

Both the Borena and Illuababorra Oromo use a wide variety of wild food plants. They use the leaves, fruits, roots and the gum of various plants. I have identified more than eighty such plants in the study sites. But I do not want to enumerate the names of these plants here as they may not interest philosophers.

Moreover, trees serve as the sources of genetic diversity, materials for construction, medicine, honey, charcoal, firewood, ritual objects, incense and of forage for livestock. Trees also protect soil erosion, influence climate, and provide shade for humans and animals. Thus, in terms of ethics, we can say that the preservation of forests is extremely important to the Oromo for almost an endless number of utilitarian reasons.

In the past, peasant farmers and pastoralists were not required to plant trees because of the existence of broad-leaved forests and other types

of trees. Extension workers reported that even in early 1990s, many peasant farmers were reluctant to plant trees partly because of the existence of natural forests and partly because of the absence of any clear land policy. Some peasant farmers thought that the land would be returned to the landlords. Others thought that the land could be sold or bought with its forests (Infs: Tilahun; Niguse).

The informants in the study sites give various reasons that have prevented many people from planting trees. The abundance of natural forests, lack of sufficient land and lack of seedlings are expressed as the main reasons for not planting trees in both zones. In addition, the Borena informants stressed that the seasonal movement of the household heads and lack of sufficient rain are the major factors that inhibit various individuals from planting trees around their homestead. On the other hand, the informants expressed that the major factors that have discouraged various people from planting trees around farmland are the fact that run-off from trees is harmful to crops and the fact that trees can be hiding places for harmful wild animals and birds. Besides the above mentioned factors, fear of the trees being stolen by thieves inhibit peasant farmers and pastoralists from planting trees elsewhere. Although some people could not plant trees, they nevertheless claim to value trees.

It is worth noting that the interview data show the basic difference between an agro-pastoral and a mixed economy. The pastoralists cannot settle in a specific area and properly protect their trees because of the fact that they are required to change their living places in order to cope with the changing climatic conditions. They need to move their cattle to new places in order to find good grass and water. Furthermore, lack of sufficient rain has discouraged them from planting trees. Some informants in Borena said that until recently they have not understood the value of planting trees for the reason that there have been abundant natural forests and they have sufficient domestic animals. They have stressed that the recent drought and its negative effects on natural forests and livestock have made them change their attitudes towards planting trees. In spite of this, they do value trees for various reasons. But what should be stated here is that for some individuals, this value only comes out in circumstances when trees are at risk. When trees are abundant, they do not do anything about them.

On the other hand, although the people of Illuababorra have not faced similar problems, they have the same values. But they have not shown them because of the fact that they have enough trees. Most Oromo believe that having enough trees around is valuable. As was confirmed during my fieldwork, there are abundant natural forests in Illuababorra, although they are being depleted. Unlike Borena, Illuababorra has sufficient rain, which can support human beings, plants and animals throughout the year.

The Oromo also protect trees for aesthetic reasons. Various informants indicated that trees have aesthetic value. The Oromo believe that some trees satisfy an aesthetic of the sublime and the beautiful. They say

that green nature is required for the health of eyes. Beautiful trees around one's homestead and in open fields also symbolise individual self-images and aspirations.

The Oromo attraction to the natural environment and recognition of the right of nonhuman creatures to exist captures what Edward O Wilson calls "biophilia." He defines biophilia as "the innate tendency to focus on life and life-like processes" (1984:1). Biophilia is "the innately emotional affiliation of human beings to other living organisms. Innate means hereditary and hence part of ultimate human nature" (Wilson, 1993:31). The biophilia hypothesis maintains that humans are dependent on nature not only for material and physical sustenance but also for aesthetic, intellectual, cognitive and spiritual meaning and satisfaction. According to Wilson, biophilia is mediated by a complex of learning rules. "The feelings molded by the learning rules fall along several emotional spectra: from attraction to aversion, from awe to indifference, from peacefulness to fear-driven anxiety" (1993:31). As has been stated, the Oromo believe that it is wrong to wipe out any living animal species or green trees, for God creates them. Wilson's view is implicitly reflected in this belief. Richard Nelson (1993:224) also makes similar observations. He says that the very core of traditional hunting-fishing-gathering cultures contains biophilia—a deep, pervasive, ubiquitous, all-embracing affinity with life, for they hold the belief that human and nonhuman life are connected.

What is interesting is that the Oromo do not consider trees as mere resources that can be used without limit. The use of trees and other resources is regulated by *saffuu*. There will be further discussion of the role of *saffuu* in chapter fourteen. One cannot take an axe and go out and chop down a tree. One just cannot be greedy because one gets the opportunity. A certain ethical rule should regulate it. Accordingly, one can only exploit nature provided that the use is reasonable and respectful. Likewise, one cannot endlessly exploit a member of the family, society or nature.

However, it must be stated that the gradual depletion of forests in Oromo lands shows that, like Europeans and other peoples in the world, the Oromo have negatively affected the natural environment, although they do not have any other option than exploiting it. But it would be wrong to equate the Oromo with rich capitalist countries who have many choices.

Another interesting point is that Oromo peasant farmers and pastoralists have their own indigenous forest fire management systems. They know the environmental and ecological functions performed by forests and recognise their importance for maintaining ecological stability and biodiversity. They have gradually developed the knowledge of the fire characteristics of forests, appropriate seasons of burning, and the degree of moisture in the forests. They are aware that topographical features of the land and its temperature, rainfall, soil type and soil moisture, availability of wood, grass and litter, wind direction and vegetation types determine the intensity and frequency of fires. They favour species which do not burn readily rather than easily burnable undergrowth species. They have

employed empirically tested methods of forest fire management. They collectively attack forest fire.

The Oromo concern for forest fire suggests that Rolston's proposal of letting the fires burn is not acceptable at least in Ethiopia. Although Rolston does not reject the importance of fire management, he argues that we need to let natural forest fire take its course.

Formerly, we put forest fires out; they seemed bad, destroying ecosystems, when lightning by chance happened to strike. We have learned that lightning and fire are vital parts of ecosystems health. Forests, if ready to burn, are in fact rejuvenated by fire (Rolston, 1994:99).

Rolston is of the opinion that a wilderness should be left as a natural laboratory (1994:99). For him it is unnatural to suppress forest fire.

The fire process involves fuel build-up over decades, ignition, and subsequent burning for days or weeks; any or all of the three may be natural or unnatural. Fire suppression is therefore unnatural, and can result in unnatural fuel build-up (1994:189).

If Ethiopia had accepted Rolston's advice, it would have lost its forestland in the south owing to the recent devastating fire, although it has not yet been clearly confirmed whether the source of ignition was natural. I would argue that strict forest fire management programmes should be in place to control forest fire in Ethiopia. Ethiopia cannot afford to let forest fire take its natural course. But it does not necessarily follow that there should be no forest fire, because peasant farmers in Ethiopia have practised controlled burning for centuries.

Therefore, peasant farmers and nomads living adjacent to natural forests and other citizens should be encouraged to improve indigenous fire management, replenish the destroyed forests, and should be trained to combat accidental outbreaks of fire in their vicinities. Besides, there is a need to monitor and evaluate fire risk, occurrence, extent and impact on resources and human health. The documentation of the numbers, kinds, locations and sizes of the areas burned, and of the causes and effects of these fires is important to protect against the possible danger of forest fire in the future.

By and large, forests generate a wide range of goods and services. They have contributed to the survival of the people. Different tree species are used for food, for different structural parts of the house and tools. Trees have also cultural, social and medicinal value. Peasant farmers and pastoralists have differently valued trees depending on their living conditions and environmental factors. In Illuababorra and to some degree in

Borena, the existence of natural forests and shortage of land are identified as the major reasons for not planting trees. In Borena, seasonal migration and drought are considered as the main problems that have affected tree planting. Some respondents in Borena have changed their attitudes towards trees following the disappearance of trees owing to climatic changes. This shows that people's values change when supplies begin to run low.

8.2.2. Sacred Groves

The Oromo have laws concerning trees. Certain trees are believed to have a special association with *Waaqa*. As G W Burnett and wa Kang'ethe Kamuyu state concerning some African ethnic groups, "why one individual would be mundane and another sacred remains mysterious, beyond the observation that social agreement and experience favoured some trees over others" (1994:158). In fact, the informants report that some trees are called sacred because of their physical appearance, size, colour, shade, function and location (for instance, around religious institutions where worship is conducted, sacrifice is offered and where libation of water and traditional beer is poured, springs are found). *Qoloo* or *Abdaarii* trees are held to be sacred and are believed to be inhabited by some powerful spirit. The people can cut these trees which are not selected as *qoloo*. The Borena people also identify "*korma korbessaa*" or *jiila* (celebration) trees under which they sacrifice a bull and a male goat in different parts of Borena. Women are excluded from the ceremony of *kormma korbessa*.

The Borena people worship *Waaqa* under *korma korbessa* trees. Each tree is known as the *qaallichaa* of so and so. This tree is considered to be holy and a place of blessing, peace and celebration. The Borena Oromo perform the ceremonies of *dhibaayyuu gadamoojjii* (the libation of *gadamoojjii*) under this tree. Libation can take place under holy trees, at the wells, at the grave, in the house and in other places. It would be wrong to bring spears and quarrel with one another under this tree. These trees cannot be felled unless special rites are performed (for instance, religious and naming ceremonies and the transfer of one age grade to another). When the enemies cut sacred trees, the Borena anoint them with butter. Then these trees will sprout. If the trees fail to sprout, the Borena Oromo think that something bad will happen to them (Inf: Nura Yabicho). The *Gadaa* officials sacrifice bulls under some trees which are not cut and are considered to be holy. The names of the new *hayyuus* are proclaimed under holy trees.

The Oromo also revere big trees that are used for shade for both animals and human beings. It would be wrong to cut down these trees. In particular, red *Qilxuu* (Sycamore) is symbolised as *Waaqa's* tree. The sound of big trees that are shattered violently when one chops them down is believed to be bad for those who cut them (Inf: Borbor Jilo). The Oromo's respect for big trees is further reflected in the tradition of giving tree names, for instance, *Dambii*, *Dhiqa*, *Fulleli*, *Garse*, *Harooressa*, *Karayyu*, *Ejersa*,

Urgeessaa, *Odaa* and *Xaddacha* to their children and clan. Moreover, there are certain lineages and clans that protect certain plant species. The Dambitu lineage protects *dambii* trees. One cannot cut this tree without the permission of Dambitu. Oditu respects *Odaa*. Without the permission of Hawatu, one cannot cut down *saphansaa* trees. Similarly, Karayyu in Borena protects *dakara* (Inf: Gemetchu).

Trees around the *Qaalluu* institution, wells, springs and other places of worship are respected trees. Cutting sacred trees is believed to result in annoying the spirits and may cause death. It would be wrong to use even dead branches of these trees. This practice makes Oromo ecotheology different from Christianity that does not regard trees as sacred. According to Lynn White Jr,

[t]he whole concept of the sacred grove is alien to Christianity and to the ethos of the West. For nearly 2 millennia Christian missionaries have been chopping down sacred groves, which are idolatrous because they assume spirit in nature (1994:50; see also John Passmore, 1974:9).

It should be noted that the followers of modern religion have been chopping down holy trees in Oromia. In Borena they have begun to cut holy trees since 1969 (Inf: Borbor Bule).

Equally important, planted trees on graves in Illuababorra in the past, and in Borena since time immemorial, are not supposed to be uprooted. No one is allowed to cut these trees. It was believed that burning or cutting these trees is equivalent to burning the bone of the deceased person. But because of the expansion of modern religions in these areas, the people discontinued this practice in Illuabaorra. The proponents of new religions and new comers have regarded it as uncivilised and useless, and have destroyed trees on graves.

The Borena Oromo, on the other hand, have a special convention with regard to graves. If the deceased had children, each son and daughter of the father and mother who has died is required to plant trees on the grave of their father or mother. Each of them also sets up a stone on the grave. The Borena believe that although the person is physically dead, he is still alive because his corpse is under the shade of a tree. The attempt to cut the trees on a grave is regarded as *qakee* (price or fine paid for a grave mistake or committed fault). Those who committed this would pay 30 cows. There is no need of planting trees on the graves of individuals who had no children. This is still being practised in Borena; it has survived the challenges of modern religions. I have personally observed these graves in different parts of Borena.

What should be stressed here is that the Oromo refrain from destroying trees owing to reasons both religious and non-religious. Many peasant farmers and pastoralists have been respecting and preserving

particularly naturally grown trees, which are selected as ritual trees for religious reasons.

In Oromo culture, some green grasses and trees are given special value. The green environment is the symbol and presage of fertility (germination and vegetation) and all good things. It is the source of life.

I have shown that some trees have a special value and place in Oromo culture because of their association with *Waaqa*, or because of their unique nature and size. The Oromo sacrifice animals under these trees and perform religious and cultural ceremonies. These trees and the surrounding areas serve as the centres of blessing, festivities, reconciliation, political debate and election. Individuals are not allowed to use firearms or disturb the peace of the people around these areas. It is believed that *Waaqa* created everything and blessed these trees. Thus, infringement of God's rules is believed to cause danger.

8.3. CONCLUSION

The Oromo protect trees for various reasons. The Oromo do not offer purely economic reasons to preserve trees. They admire forests and trees aesthetically, and protect some trees on the grounds of their majestic size, and their aesthetic appeal. Trees are the providers of recreational enjoyment and of aesthetic pleasure.

Moreover, the Oromo revere sacred trees, which have spiritual values. Cutting down sacred trees means to be against *Waaqa* and against Oromo religion. Trees, which have religious significance, remain untouched where the Oromo religious tradition is intact, particularly in Borena and in some localities in Illuababorra. It has been stated that some clans and individuals have been inspired by nature, and have named, respectively, their clan and their children after trees. These trees have symbolic value for the individuals and groups concerned, and are respected by the people. I have maintained that *saffuu* regulates the relationship between humans and trees. One has to follow certain accepted laws in order to cut trees down. *Saffuu* rids individuals of the greed for overexploitation of trees through ensuring that proper laws of using trees are upheld. Thus, religious beliefs and indigenous moral laws indirectly impose a system of ecological checks and balances. The lesson here is that we need to avoid needless exploitation of the Earth and its resources

For the Oromo, green trees and grasses symbolise fertility, abundance, and the continuity of generations. The Oromo rub ceremonial sticks to pronounce these values. Tobacco and coffee in Borena, and *coqorsa* and other wedding grasses in Illuababorra, import their symbolic connotation of the reproduction of couples. They convey the message that life depends on the green environment.

It has also been indicated that environmental ethicists have different attitudes towards forests. Some argue that forests have intrinsic value. Others defend the position that they can only have instrumental

value. Another group contends that although trees have moral standing, they do not have much moral significance.

The Oromo attitudes towards trees differ from the Western view of trees. In the West, trees are not considered as sacred and treated with special care. Unlike the Oromo, Western axemen feel no need of any rule governing their dealings with trees when they cut them down. The desacralisation of nature has left man free to exploit it without any restriction. Another important difference between the Oromo and the West is that the Oromo value green trees, mountains and springs. But,

[f]or the Graeco-Roman tradition enjoyable 'scenery' meant the olive grove, the cultivated field, the orchard, the carefully disposed villa or temple. Mountains and wildernesses were crude, unformed, inhuman, unperfected, not worth the attention of a cultivated man (Passmore, 1974:107).

Similarly, until recent times, the Americans had negative attitudes towards their forests. According to Joseph R Des Jardins,

[f]or much of American history, the forests and wilderness areas of this country represented a threat to be overcome, an enemy to be conquered. The images are common throughout the first four hundred years of European settlement of North America. Man against nature (2001:42).

But some Western environmental ethicists and environmentalists have developed different attitudes towards wilderness and mountains.

Unlike some environmental ethicists, the Oromo do not treat forests as mere resources to be used for human consumption. And unlike other environmental ethicists, they do not hold the belief that trees have interests. The Oromo practice of planting trees on graves is also different from the Western tradition. For the Oromo, such trees are a constant reminder of the deceased person. Christians in Ethiopia or in Western countries build a monument on a grave as a memorial, although some trees are grown around churchyards. While trees on graves can positively influence the local climate, inscribed stones cannot. Unlike among the Oromo, individuals are seldom named after trees out of love for trees in the West.

On the other hand, in some ways the Oromo view of forests corresponds with the views of some environmental ethicists. Like some modern environmental ethicists, the Oromo stress the danger of overexploitation of forests. Like anthropocentrists, they believe that trees should be protected because they have use value. Trees are important for both the present and future generations. Like environmental ethicists, they show concern for future generations. Like ecocentrists, the Oromo hold the

belief that it would be wrong to destroy all species as such, or to destroy any single species at all.

CHAPTER IX

INDIGENOUS WATER HARVESTING SYSTEMS AS SYSTEMS OF INDIGENOUS KNOWLEDGE AND PRACTICE

This chapter is divided into two sections. The first section discusses how pastoralists and peasant farmers in the two study sites have managed water resources over the years. The second section deals with indigenous water and range management systems particularly in Borena. The upshot of the argument in this chapter is that the Oromo people, and, in particular, the Borena Oromo, have advanced institutions of water and range management.

9.1. INDIGENOUS WATER MANAGEMENT SYSTEMS

The Oromo people regard water as the source of all life. The sources of water in the study sites involve springs, rivers, and wells. The people in the study sites have developed their own indigenous water management systems.

In Borena, livestock and water management are carried out according to traditional rules, and for this reason, peasant association officials hardly deal with these issues. Wells and ponds are the principal sources of water in Borena. Seventy-five well complexes are found in Borena (Gufu Oba, 1998:20). There are nine deep permanent *tula* wells which were dug by the ancient well diggers in Borena. These nine wells have different clusters of wells. There is no clear account about the origins of the *tula* wells in Borena. According to a well-known Borena oral historian, these wells were divided among different Borena clans during the *Abbaa Gadaa* of Goba Ala (1689-1697). But they dug some of these wells after this period (Inf: Borbor Bule). It is believed that the nine wells have chambers (*madda*) that connect them. One oral version indicates that the Suftu, one of the Oromo peoples who preceded the Borena people, excavated the *tula* wells in Borena and the Sofumar cave in Bale. The Maadille who succeeded the Suftu also expanded the well complexes of the Borena region (see Gemetchu Megerssa, 1993:135). N Cossins, on the other hand, writes:

[p]resent-day Borana opinion seems to be that these wells were dug by the Waradi (Galla) who now live in northern Kenya, and that when the Borana took control of the area in the sixteenth century, the Tulla wells were divided amongst the Borana clans and sub-clans, who then established trusteeship over particular wells (1983:8).

There have been three types of wells in Borena, namely *tula*, *adaadii* and spring fed wells that are located at the base of hill slopes or in lines up a hill slope. *Tula* is a permanent well carved out of rock and may have the depth of ten to thirty meters. The *tula* water will never be finished but could be decreased. The Borena people are required to prepare themselves to dig *tula* wells on a clan basis. But the experts need to be consulted before people excavate new wells, for the new well would affect the supply and flow of water between the existing wells. The preparation for excavating new wells is determined by the size of the wells. In some cases, members of a certain clan plan to slaughter about 100 oxen to eat while working, buy crops, and collect digging instruments. *Abbaa eella* (father of the well) is required to sacrifice the first ox. The preparation of a well may take several months or years.

The first person uses a *konfii* tree to initiate the digging. “*Konfii*” is also the name of the responsible person for a well. The *Konfii* also contributes the first animal to feed the work force. The *Konfii* (the person or the ancestor who initiated the digging) has property rights over the wells. The *Konfii* is also known as *abbaa eella* (the father of *eella*). At the same time, wells are the property of the sub-clan of the *Konfii* family, and maintenance and excavations are the responsibilities of the clan. The clan has hereditary rights to wells. An *Abbaa Herregaa* (well supervisor) who is to be elected by the clan manages the wells and supervises their daily use. The *Abbaa Herregaa* is required to establish watering rights for well users. The well users have the responsibility to build a fence around the wells, clean the wells and repair them at the request of the *Abbaa Herregaa*. The Borena people plant trees around the compounds of wells. They take great care to protect wells from flood and dirt during the rainy seasons. A well elder may supervise the well when the *Abbaa Herregaa* is not around. Moreover, the *Hayyuu* councillors control the proper use of wells. Accordingly,

the *gada* council, which is the judiciary council elected from the ruling age-set, may punish offenders by excluding them from specific wells. Total exclusion is the harshest punishment the council can execute and is very rare (Cossins, 1983:9).

A human chain that may involve 10-20 strong individuals draws up the water. The Borena Oromo employ dig out ramps in the wells that lead down to a service area the “*dargula*.” The Borena dig *fatcana* (the hole) near the well. The water is stored in a reservoir (*fatcana*) by a chain of people in the shaft or “*eella*,” and from there, others pour it into the *naanniga*, the water trough which is located in a *dargula* (watering area), a large excavated area, 2 to 10 meters below ground level. *Naanniga* is made from dirt. Some individuals also prepare it with cement. People and

domestic animals drink water from the mud trough, or “*naanniga*” that is different from the water source.

The Borena and their animals use water turn by turn. The people first fetch water for drinking from *naanniga* early morning. Then the Borena Oromo water *dhaanee* (camels and donkeys which have come for fetching water). They then water the following domestic animals in order: young calves, horses, cattle and donkeys, and camels. Goats are not allowed to drink from the same *naanniga* with other animals. They have a separate *naanniga* for they spoil the water and the cattle will refuse to drink this water. Dogs can drink water any time. The *Abbaa herregaa* comes first to water his cattle, for he does not have any wage or other benefit for his service. *Abbaa eella*, and *hayyuu* follow him respectively. Others water their cattle according to the programmes worked out by the *Abbaa herregaa* on the basis of their contribution to the excavation of wells. If *Abbaa herregaa* partially favours his relatives and changes the previous scheduled order, a new one will replace him. Some individuals are assigned to watch over the *naanniga* while animals drink water. They are expected to control and regulate the flow of cattle and other livestock from the head of the ramp down to the *dargula*. Others clean the *dargula* and access ramps from dirt and manure.

The labour cost of drawing water from *tula* wells is very high. Cossins has convincingly argued that the view of some writers who described the agriculturalists as having more work load than pastoral people conflicts with the situation in Borena. In Borena, “[m]en and women must work in the wells at least every third day, at a rate of work seldom exceeded by agriculturalists” (Cossins, 1983:50). Those who fail to supply labour to the well will be excluded from the group. The number of their livestock determines this participation.

The informants stress that the water should not be returned from *naanniga* to *tula*, for the Borena say that wild animals and birds are also entitled to drink water during the night. The Borena believe that as the creation of *Waaqa* wild animals have the right to drink water. Some informants stress that when wild animals drink water they will be happy and their stomachs bless God. If the Borena people do not retain the water inside *naanniga*, wild animals will enter the wells and spoil the water; they might die in the wells. Every morning the assigned individuals are required to clean the *naanniga*. They take out the water and dirt of the day and bring fresh soil and level the *naanniga* in order to make it smell nicely, and avoid possible diseases which may come from wild animals. The trough might have the smell or excrement of wild animals that have been there during the night.

The Borena people water their animals infrequently at certain intervals rather than on a daily basis. The cattle drink water once every three days. Sheep and goats drink water once every five days. Horses are expected to drink water once every two days. The Borena water camels once every seven or up to eleven to fourteen days. Intermittent watering

gives the opportunity to exploit grazing reserves further from water points and thereby encourages balanced rangeland utilisation. M J Nicholson has identified four advantages of 2- and 3-day watering. The first advantage is the exploitation of grazing resources further from water. He estimated that watering Borena cattle every three days could give a grazing radius nine times more than that available to cattle on a daily watering. Secondly, 30% of water resources and the labour that is required to raise this water from wells will be saved. Thirdly, although intake of dry-matter (DM) normally controls water intake, under 3-day watering, water intake dictates DM intake, resulting in fodder reserves being conserved. Fourthly, 2- and 3-day watering has the advantage of reducing the potential erosion in vicinity of water (see Nicholson, 1986:7). Furthermore, water saving (economy) would help more animals survive during prolonged dry periods (Zewdu Sisai, 1998:82).

Adaadii is a shallow lake with depth of 10 meters or less. It is excavated in sandy riverbeds that can dry up during the dry seasons. High rainfall may destroy *adaadii* wells. *Adaadii* wells are found in highlands. *Adaadii* wells do not have *fatcana*; the water goes directly from the well into the *naanniga* from which human beings and animals can drink it. But some *adaadii* wells which have large volumes of water have both *fatcana* and *naanniga* (Inf: Borbor Bule). The management of *adaadii* wells is similar to that of *tula* wells.

In Illuababorra, peasant farmers use rivers and springs. They construct fence around springs. Only human beings use these springs. Animals use rivers. Peasant farmers in Illuababorra do not collect rainwater into surface ponds. Water scarcity has never been a serious problem in this zone. However, owing to the recent reduction of rainfall in the region, many peasant farmers in the study sites have begun to dig their own private wells (*birii*) which may have a depth of 10-20 meters. Each well has its own well-prepared cover. The users carefully open the wells and draw the water using an empty tyre tied with a long rope. The third type of well includes spring-fed wells that are generally located at the base of hill slopes.

Moreover, the Oromo people have endeavoured to make intelligent and optimal use of water resources available to them. During the rainy seasons, the Borena dig *haro* (water pond) and store rainwater in it. Ponds may have a depth of 2-5 meters. Individuals who have excavated ponds own them. In most cases, ponds are used for human consumption. During the rainy season, the Borena Oromo also use *dambala* (big water pool). Gullies may contain water. *Dambala* has no rules to be followed by the people. It does not need *Abbaa herregaa*. People in the study sites also use seasonal rivers.

Some peasant farmers in Illuababorra also divert water from rivers. During the dry seasons they 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. Very few peasant farmers in Illuababorra have developed traditional irrigation systems. They grow coffee, horticultural crops and fruit trees.

There has also been government intervention since the 1960s. It introduced engine driven pumps in Borena although these were not sustainable. The informants reported that modern wells which were close to traditional wells caused the latter to dry. Moreover, government officials left the new wells without any protection. Nobody is responsible for these wells.

The other interesting point is that the Oromo people, particularly the Borena people, have improved water management systems in relation to the availability of rangelands. The next section addresses this issue.

9.2. INDIGENOUS WATER AND RANGE MANAGEMENT

In Borena, water is the tool for regulating range management. Access to permanent water is a prerequisite for animal husbandry.

The Borena people manage their resources at different levels. An *Ollaa* is a group of households; it is a village that may involve three to forty households. *Abbaa Ollaa* is the leader of *Ollaa*, and is responsible for the peace of the *Ollaa*. Each *Ollaa* is named after the first settler. The members of each *Ollaa* are required to manage cattle, grazing lands, water and other resources together. Their cattle graze together. A *Maddaa* consists of villages, which share water. A *Reeraa* involves a cluster of villages, which may involve three to ten *Ollaas*. The leader of *Reeraa* is *Abbaa Reeraa*, who is elected by the members of the villages. The *Gadaa* officials do not interfere in this election.

The Borena area has been divided into a number of grazing areas, each with a defined boundary and generally associated with one or more well-groups. In Borena, there are two range management systems. On the one hand, there are home-based (*warra*) herds in which the milch herds use the grazing lands surrounding the semi-sedentary encampments. On the other hand, there are mobile (*foora*) herds which involve males, dry or non-milking females, pregnant animals and the young. The second group uses the remote grazing lands. It is also true that someone who has many cattle may have cattle at home and in *foora* during the rainy season.

A group of villages identify grazing areas called *Dhedas*. A *Dheda* involves several *reeraas*. These villages utilise the same water resources during the dry season. They agree on areas to be reserved in the wet season for use in the dry season. In other words, to cope with drought, the pastoralists establish drought grazing reserves. One *Abbaa Ollaa* is recognised as *Abbaa Dheda* (father of the *Dheda*). The Borena have employed a rotational land use system, between the wet season, the dry season and the drought grazing rangelands. They feed their cattle good grasses. During the dry seasons, the Borena people travel long distances in search of more convenient sources for watering their stock. At the same

time, during the rainy seasons they move to areas that do not have wells, for their cattle can drink water from seasonal water pools. During the dry seasons they return to water points.

Moreover, particularly the Borena people have social security rules by which they help the poor members of the society. This social security system is known as *Buusa gonofaa* (feeding and restocking unfortunate members of the community). Clans can allocate someone's cattle to impoverished clan members. Even when a person tries to deceive them, they have the rule of supporting him for three consecutive times. When the person keeps on deceiving them, they stop helping him.

Indigenous water and range management in Borena makes ecologist Garrett Hardin's discussion of the "tragedy of the commons" (1968) questionable. Hardin noted that when a resource is unowned or owned in common, such as the grazing pasture open to all, there is no incentive for any individual to protect it. It is in every herdsman's self-interest to have his herd graze the pasture as much as possible and before any other herd. Every herdsman who acquires additional cattle gains the benefits of a larger herd, while the cost of overusing the pasture is borne by all members of the village. Inevitably, the consequence is an overgrazed pasture, and everyone loses. Indeed, the herdsman with foresight will anticipate that the pasture will become barren in the future, and this will give him additional incentive to overgraze. Refusing to add another cow to one's own herd does not change the incentive for every other herdsman to do so. But the situation in Borena falsifies Hardin's generalisation. The communities control and manage grazing pasture and other common property resources by establishing various local institutions.

The preceding discussion shows that the Oromo people emphasise the value of living and working together. The management of the resources requires the participation of all members of the community. The lesson that can be derived from this cooperation is that humans can only survive not as individuals but as family, as community and society. Even one family cannot survive by itself. It requires a community of families to survive. So we survive as a group and not as individuals.

What has been discussed in this chapter shows that indigenous water and range management systems have contributed to ecological balance. In particular, the Borena people have tried to maintain balanced interactions among livestock, pasture, water, and human needs. They have tried to save their lives and their animals in a very difficult environment. The rotation harvest strategy of the Borena pastoralists minimises the overharvesting of grasses and water. To put matters another way, a seasonal-round strategy has enabled the Borena people to adapt to the availability of resources. Resource availability of the environment determines the movement of pastoral communities. Proper and optimum utilisation of feed and water resources can maximise livestock productivity and thereby reduce poverty.

CHAPTER X

INDIGENOUS AGRICULTURAL KNOWLEDGE

In this chapter I look into the role of indigenous agricultural knowledge in Illuababorra and Borena. The chapter has three sections. In the first section, I discuss the significance of indigenous conservation practices. In section two, I examine the relationship between indigenous agricultural knowledge and biodiversity conservation. I show how peasant farmers and pastoralists conserve genetic resources that comprise crops and wild relatives of crops. In section three, I show how modern conservation methods have been introduced in Ethiopia, and have influenced indigenous agriculture and land use practices. Finally, I argue that peasant farmers and pastoralists have an important role in preserving biodiversity resources.

Agriculture is the principal economic activity in Illuababorra. However, it is a recent phenomenon in Borena. The Borena Oromo are largely cattle herders, although more recently, some families have begun to herd camels and small stock after learning the significance of camels from the Somali people. In fact, oral information indicates that there was crop cultivation in the lowlands Borena during the *Gadaa* of Morowa Abayi (1681-1689), although there is no evidence which shows its continuous existence in Borena. According to Gufu Oba, the settler soldiers (*Neftenya*) and the immigrant farmers began crop cultivation in Borena following the Abyssinian occupation of the Borena lands at the end of the nineteenth century (1998:54). The Borena people have begun to plough their land in 1969 during the *Abbaa Gadaa* of Goba Bule (1969-1977 (Inf: Huka Tadacha). The Borena Oromo have begun to plough the land owing to the reduction of livestock and the ensuing famine. This chapter, therefore, relies more on the oral information gathered in Illuababorra, although it makes use of the knowledge of Borena peasant farmers and pastoralists.

10.1. INDIGENOUS CONSERVATION PRACTICES

Peasant farmers in the study sites use various effective conservation methods including fallowing, crop rotation, contour ploughing, direct additions of nutrients in the form of application of ashes, mulches, residues, composting, arable-pasture rotation, contour ridging and furrows to raise the nutrient contents and organic matter and to improve both the physical and chemical fertility of the soils. Many peasant farmers have abandoned fallowing owing to population growth and environmental degradation. In the past, they used to allow the land to lie fallow for about three to five years. Although it is not widely used by peasant farmers, some have used intercropping, for instance maize and haricot beans, pea and beans in Illuababorra, and maize and haricot beans, maize and sorghum in Borena.

The Oromo peasant farmers also use animal manure and urine as important fertilisers. In contrast, developed countries regard manure as a problem, a waste that has to be disposed of. Animal manure and urine are often viewed as pollutants. The dung and urine of cattle, sheep, goat, horse and donkey is used in the study sites in this order of importance. The dung of cattle is considered to be the best. In the past, peasant farmers used to shift cattle pens from place to place with the intention of covering a large proportion of the land with dung. They now use the dung of sheep and goat to grow vegetables and sugar cane.

Moreover, peasant farmers in Illuababorra use the following crops as conservation measures in order of importance: bean, chick pea, and barley. During serious shortages of rainfall, peasant farmers use drought resistant crops such as sorghum, and fast growing species, such as kidney-bean, and red *xaafii*.

Some peasant farmers also practise agroforestry. In Illuababorra, they grow trees, coffee, papaya, ginger and various types of vegetables on the same unit of land around their homestead. Trees give shade for coffee, improve micro-climate and the local environment and soil fertility by fixing nitrogen. The organic materials, such as leaves from the trees, can enrich the top soil. Some trees may benefit peasant farmers by providing fruits, medicines, construction materials, fodder, fuelwood, and raw materials for thatching, weaving, rope-making, handicrafts and the like.

In short, peasant farmers have adopted a wide range of indigenous conservation practices based on their prolonged experience and informal experiments. If peasant farmers and natural resources professionals select among species, taking into account their various functions and employ agroforestry, the quality of the environment will be improved.

10.2. INDIGENOUS KNOWLEDGE AND BIODIVERSITY CONSERVATION

At the beginning of the twentieth century, people did not give sufficient attention to the value of biological diversity. David Ehrenfeld writes: “[v]aluing diversity would, I suspect, have been thought both presumptuous and a terrible waste of time” (1994:505). However, in the last part of the twentieth century, biological diversity has attracted the attention of various individuals.

It has become a kind of academic cottage industry, with dozens of us sitting at home at our word processors churning out economic, philosophical, and scientific reasons for or against keeping –diversity (Ehrenfeld, 1994:506).

Charles Zerner also writes: “[b]iological diversity is the metaphorical magnet that currently galvanizes the conservation, scientific,

and funding communities” (1996:72). Some of the reasons for this interest are the dominant economic realities of our time, technological development, consumerism, the increasing size of governmental, industrial, and agricultural enterprise—that are responsible for most of the loss of biological biodiversity (Ehrenfeld, 1994:506; see also Robin Attfield, 1999:133-151).

Biodiversity has numerous meanings. It has most often been used to describe the variety of life forms. Many writers and organisations have explained the nature and importance of biodiversity in various ways. Stephen Jay Gould has argued that species are almost always objective entities in nature. They are not “arbitrary units, constructed for human convenience in dividing continua” (1994:476). The recognition of this fact, he argues, may help us to better comprehend the justification for their preservation.

On the other hand, Paul M Wood has stated that the long term maintenance of biological resources presupposes biodiversity (1997:252). He maintains that firstly, the value of biodiversity lies in providing a source of actual and potential resources. Secondly, actual and potential resources are maintained by biodiversity, which provides the preconditions for adaptive evolution. He emphasises the ability of biological resources to adapt to changing environmental conditions over time, dependent on the fulfilment of the preconditions of biodiversity. Thirdly the value of biodiversity lies in being “a precondition for the maintenance of biodiversity in a self-augmenting (i.e. positive) feedback mechanism” (1997:257).

FAO and other international conventions have also recognised the role of biodiversity. In fact, the 1983 FAO International Undertaking on Plant Genetic Resources regarded genetic resources as a “heritage of mankind.” The view that chemical and genetic resources are a freely available global commons has recently changed in favour of stress on national sovereignty. In 1992, the Earth Summit in Rio stressed the importance of biodiversity and of national sovereignty over it (UNCED, 1992).

Some writers have given the following broad definition of biological diversity, which I have followed in this work:

[b]iological diversity encompasses all species of plants, animals, and micro-organisms and the ecosystems and ecological processes of which they are parts. It is an umbrella term for the degree of nature’s variety, including both the number and frequency of ecosystems, species or genes in a given assemblage. It is usually considered at three different levels: genetic diversity, species diversity, and ecosystem diversity (Jeffrey A McNeely *et al*, 1990:17).

These writers stress that these entities and processes are the physical manifestations of biodiversity. As I show below, peasant farmers, pastoralists and other cultural groups have preserved biological resources for centuries.

Biodiversity is a special concern of peasant farmers in Oromia in particular and in the world in general. Peasant farmers are close observers of the natural environment and of the species in it than are outsiders. Peasant farmers are very much interested in increasing the number of cultivar species and varieties of arable food crops so as to reduce agricultural risk related to factors such as crop pests and vagaries in the weather (see Workineh kelbessa, 2001).

Ethiopia is the home of various fauna and flora. Some of the major cereals like wheat, barley, certain legumes, various oil crops and coffee, which originated in Ethiopia, are found in great diversity. This is because of the high diversity in the agro-climatic conditions in Ethiopia and the contribution of peasant farmers who constitute about 85% of the Ethiopian people, who have literally created, developed and maintained various crops that have unique characteristics with the help of nature for millennia. Small farms, pastures and forests are full of various plants.

Peasant farmers in the study sites know a variety of crops, plants and animals and develop strategies to preserve diversity in crops, plants and animals and thereby conserve the integrity of ecosystems and species. They use different types of soils to produce the varieties of crops. A long history and tradition of using biological resources enables peasant farmers to maintain a wide range of the varieties of any given cultivar.

Biodiversity farming systems are the bases of long term food security for peasant farmers. Accordingly, the survival of peasant farmers depends on biodiversity conservation. Peasant farmers 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 (see Melaku Worede, 1992:90; Melaku Worede and Hailu Mekbib, 1993:81). This implies that peasant farmers have never stopped preserving heterogeneous populations of seed.

Pastoralists have also contributed to the diversification of various plants. There is one plant called *yahibinet* that can survive under the most stressful climatic conditions in very poor soil in Ogaden, eastern Ethiopia. It has multiple uses. It is highly nutritious and rich in protein content. The people in that area call it "famine plant." They mix it with rice and eat it. It can also be used for cosmetic purposes. Women use certain extracts of this plant to polish and colour their nails. Moreover, goats like the leaves of this plant (Inf: Melaku Worede). What must be noted here is that this plant is very useful to feed the people and animals.

What is interesting is that like pastoralists, peasant farmers have adopted the strategy of spreading risks across locations, time and the diversity of materials they use. They grow the same landrace in different

places. In other words, they enhance biodiversity in diverse geographical areas. In so doing, they spread their risks across locations. If something fails in one location, it will do well in another. They also spread risks across seasons. When a landrace does not work in one season, they go to the local market and exchange it with the variety that will grow well on their own location. The former one may grow well in other places in a more appropriate planting season. This exchange has created a system which has allowed the landrace to be grown on a wide range of locations.

One of my informants, Melaku Worede, has also confirmed that he has observed and documented this fact. He and his colleagues used this knowledge to develop their conservation strategy. Melaku underlined that we can draw a contour line where farmers spread their landraces across a region. If we follow that line, we can put this practice into a conservation strategy.

The finding of Melaku and his colleagues shows how scientists and peasant farmers can work together as partners benefiting from each other's knowledge. It will take the local community many years to maintain diversity and raise productivity. The intervention of scientists can speed up the process so that peasant farmers could achieve that goal sooner than they actually could. In this connection, it is worth noting that the Ethiopian Biodiversity Institute has conducted research in the areas of landrace production and management by involving peasant farmers who are capable of providing information on studies related to the ethnobotanical and socioeconomic aspects, as well as on the general biology of their surroundings. Their findings are encouraging (see Melaku Worede *et al*, 2000:150).

Peasant farmers also value the variety of crops, owing to the fact that if one variety fails to grow, they will use other varieties that have survived. In one location, certain types will dominate others, which will shelter under them and can be preserved in this way. In another place, the other variety will grow and combat the prevailing environment.

Furthermore, they have managed to maintain the continued co-existence of cultivated crop species and their wild relatives, "which often intercrossed thereby, generating new variations" (Melaku Worede, 1992:84). Intercropping and mixturing of crops can lead to accidental crosses that in turn promote rapid diversification.

This process of introgression is believed to be the origin of new types of *Brassica* species observed on farms where *B. carinata* (Ethiopian mustard) and *B. nigra* (Black mustard) are grown in mixtures (Melaku Worede, 1992:85).

Thus, biodiversity helps peasant farmers to avoid the loss of their landraces.

This does not mean that modern varieties have no value at all. But they have to be used in the right context under the right set of conditions. Peasant farmers should be given the right to decide which one they want at

a given point in time because they know their circumstances. If peasant farmers are not allowed to do so, their livelihood and food security will be jeopardised when the modern varieties fail to grow owing to climatic change. Nobody is against the idea of producing more crops in less space. But it is important to try to sustain that output over a stretch of time. Thus, it is important to strike a balance somewhere between yield on the one hand and the diversity needed to sustain that yield on the other.

In short, biodiversity knowledge in rural and indigenous communities is largely the result of collective innovation. The local people observe the characteristics of plants and animals. They share experiences and thereby improve their knowledge. Accordingly, biodiversity knowledge has a paramount role in locating various types of soils, trees and crops. One can thus argue that traditional knowledge can lead to the improvement of various species and the development of new drugs. Modern biochemists and biodiversity conservationists can thus derive benefit from the biochemical information developed by the rural poor.

10.3. MODERN CONSERVATION METHODS

The Ministry of Agriculture has introduced some conservation methods including the construction of soil bunds, terracing, reforestation, the building of check dams, and *fanya-juu* in Ethiopia. *Fanya-juu* is a Kenyan term designating a ditch with the dug-up soil piled up on the upper side of the slope to form a barrier against run-off. But as has been stated in chapter 4, these physical structures did not improve the fertility of the soil, for they were constructed poorly and without the consent of peasant farmers.

The Ministry of Agriculture has also emphasised the role of chemical fertilisation and the use of improved seeds. Successive Ethiopian governments have subsidised and promoted the application of inorganic fertilisers. The growth in use of inorganic fertilisers is in part due to declining fodder availability and livestock numbers.

Extension workers report that chemical fertilisers are liable to degrade the land. Chemical fertilisers do not improve the quality and quantity of crops. They simply elongate the height of various crops. According to the informants, after chemical fertilisers were applied to their land, the land turned out to have become unproductive and needed further application of chemical fertilisers to give good yields. Otherwise the land could not grow good crops and grass. Chemical fertilisers seem to suck the nutrients out of the soil and accelerate the decomposition of soil's organic matter. Some peasant farmers said that their land and chemical fertilisers are incompatible.

Modern agricultural practices simplify ecosystems and diminish the genetic diversity of crop species. In fact, as is the case in other developing countries, rapid population growth, overharvesting of natural resources, deforestation, destruction of habitats and ecosystems, climatic

changes, introduction of alien species, monoculture cropping, changes and development in agriculture or land use, poverty and misuse of chemical fertilisers have undermined biodiversity conservation in Ethiopia. In the study sites, traditional seed conservation activities are being eroded as new improved seeds are spread by the development agents. 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. The informants stated that newly introduced crops are susceptible to weevil and other pests. Moreover, when they try to grow modern crops under less optimal conditions which characterise various Ethiopian crops, these crops will not grow well. If they want to sustain them, peasant farmers have to apply many inputs such as chemical fertilisers, pesticides, herbicides and the like to their land. This need grows every year. Thus, many peasant farmers are reluctant to accept modern conservation practices which are imposed on them.

The foregoing discussion suggests that mutual dialogue between modern technicians and peasant farmers is needed to encourage the latter to use indigenous conservation practices. Tenure security is also needed. Without tenure security, peasant farmers will doubt the value of investing time and labour in conservation measures. Peasant farmers need long-term security in order to invest in the future of their environment. Individual rights to land ownership and equal access to production resources encourage landowners to improve their farms through natural resource conservation and better husbandry practices.

In general, peasant farmers have developed the time tested and very obvious strategy of spreading risks over locations and time that may not be very easily reached by the best modern population geneticists and ecologists using eco-geographic survey. Thus, indigenous agricultural knowledge can promote sustainable agriculture and poverty alleviation by reducing soil erosion. Practices based on indigenous knowledge are cheaper, easier to use and better suited to the situation of peasant farmers and pastoralists. They are based on local human and natural resources. Knowing how peasant farmers use locally available resources can help modern technicians to have a detailed understanding of the ecology of a site.

PART IV

**ENVIRONMENTAL ETHICS:
TRADITIONS AND PROGRESS**

CHAPTER XI

THE ROLE OF ORAL TRADITIONS IN OROMO ENVIRONMENTAL ETHICS AND RELATED ISSUES

This chapter looks into the role of oral traditions in Oromo environmental ethics and aims to present a preliminary account of the Oromo conception of power, knowledge and ethics. The chapter is divided into three sections. Section one provides a general picture of the nature and role of oral traditions. Section two specifically looks into the contribution of proverbs, myths and other related oral media to Oromo environmental knowledge. Section three deals with the relationship between power, knowledge and ethics in Oromia. But a detailed account of the theoretical debate about the meaning of power and the relationship between knowledge, power and ethics is beyond the scope of this work. Instead, it focuses on how power relations influence local resource use and management, how gender relations shape patterns of environmental management, and how, in the study sites, men use oral literature and moral rules in order to justify power relations and the inferiority of women. While “power” refers to the capacity to control both human and natural resources, “authority” suggests the right to exercise this function in a given society. This section thus shows that the interlinkage between power, knowledge and ethics has had both positive and negative effects on the generation, development and preservation of the Oromo environmental ethic. Finally, the chapter suggests that the present power relations in Oromia should be changed in the direction of just and environmentally sound development. I will briefly discuss how the relationship between power, knowledge and ethics works at the national and international levels in relation to environmental problems in chapter 14.

11.1. ORAL TRADITIONS

In general, the concept of ‘oral’ traditions developed in an attempt to understand the traditional cultures of non-literate peoples. While there is a great deal of discussion and debate within academic circles concerning the nature of ‘oral traditions’ (see Sophie B Oluwole 1999; Oluoch Samuel Imbo, 2002, etc.), for the purposes of this study, we can simply stipulate that oral traditions involve various elements that have been orally transmitted - wholly or partially, from generation to generation. Oral traditions are one of the sources of social, economic, environmental and philosophical knowledge in non-literate cultures. They are instrumental in people’s development of encyclopedic knowledge of social life, and the local flora and fauna in the course of the generations. On “oral tradition,”

the following is a revealing observation: “oral tradition is the great school of life, all aspects of which are covered and affected by it” (A Hampate Bá, 1981:168). Vine Deloria (1995:51) also states that oral tradition explains how people interact with the physical world and the important events of their historical journey. Therefore, oral traditions help non-literate people to acquire a wide range of knowledge of various aspects of human beings, their activities and the natural environment and its inhabitants, which no scientific treatise, textbook or journal can provide.

The new knowledge the human race is acquiring does not compensate for the knowledge spread only by direct oral transmission, which, once lost, cannot be regained or retransmitted: no book can teach what can be learned only in childhood if you lend an alert ear and eye to the song and flight of birds and if you can find someone who knows how to give them a specific name (Italo Calvino, quoted in Gary Paul Nabhan and Sara S Antoine, 1993:229).

Oral tradition has unique features that are not found in written literature. In oral tradition, the performer uses various visual resources to influence the audience. For instance, in many stories, the speaker’s gestures, expression, and mimicry can convey information. Besides a verbal evocation of mood, the dress, accoutrements, or observed bearing of the performer are crucial to convey messages to the audience (see Ruth Finnegan, 1970:5). Another interesting aspect of oral literature is that the audience actively participates in the actualisation and creation of a piece of oral literature. The members of the audience may give additional comments, question or criticise the performance (Finnegan, 1970:11). The impact of members of the audience on the performance and the significance of the actual occasion show one of the basic differences between oral and written literary pieces. Consider Plato’s observation in *Phaedrus*:

It is the same with written words [as with painting]. You would think they were speaking as if they were intelligent, but if you ask them about what they are saying and want to learn [more], they just go on saying one and the same thing forever (quoted in Finnegan, 1970:11).

In oral communication, both the sender, a person who speaks in proverbs, and a receiver, a person to whom one speaks in proverbs, are required to be present at the same time while the author of a written text entrusts his work to the public without worrying about its acceptance (Claude Sumner, 1999:12).

The transmission of oral tradition can be spontaneous or follow special methods and techniques. Some people use their own special systems and schools to transmit oral tradition (see François Dossou, 1997; Jan

Vansina, 1965). A case in point is schools of Bono-Mansu and of Rwanda (Vansina, 1965:31). A system of sanctions and rewards is also used to exercise control over the recital of traditions. Specialists control the people who are being trained to succeed in reciting tradition without committing any mistakes (Vansina, 1965:33). Some traditions may be a matter of esoteric knowledge that belongs to a particular group and can only be transmitted by this group to its heirs. On the other hand, mnemonic devices, such as material objects (the use of carved sticks and the like) which were passed on from one generation to the next, the landscape with its individual features, whether natural or man-made, and songs and drum rhythms, are used to facilitate careful preservation and accurate transmission of oral traditions (Vansina, 1965:36-39). "In other cases, a type of tradition which remained firmly engraved in people's memories was used in order to associate with it another tradition more easily forgotten" (Vansina, 1965:37).

However, some problems may appear in the course of transmission. Failure of memory and explanatory interpolations may lead to distortions. The method of transmission, the degree of control exercised over recital of the testimony, and the frequency with which the testimony is repeated are liable to different degrees of distortion in the process of transmission.

On the other hand, although infrequent repetition does not of itself preclude lapse of memory, it may bring about omissions and confusion (Vansina, 1965:43).

The importance of oral tradition is not unique to non-literate societies. It is also important in literate cultures. Oral traditions are the basis of many written sources, especially those of classical antiquity and of the early Middle Ages (Vansina, 1965). "The Old Testament was once oral tradition until it was written down. Sagas and eddas form part of the European oral tradition" (Deloria, 1995:51). Furthermore, as Finnegan has convincingly argued, an oral aspect is not entirely missing from a literate society, stressing

the interplay between the oral and the written—the constant interaction in any tradition between the written word and, at the least, the common diction of everyday speech (an interaction which may well be heightened by the spreading reliance on radio and television channels of transmission), as well as the largely oral forms like speeches, sermons, children's rhymes, satires depending in part on improvisation, or many current pop songs, all of which have both literary and oral elements—in view of all this it becomes clear that even in a fully literate culture oral formulations can play a real part, however unrecognized, in the literary scene as a whole (1970:19-20).

As has been stated earlier, oral traditions can be the source of critical views about humans and the natural environment. History reminds us that fragments, proverbs, and aphorisms have been sources of philosophy in Europe and India. Among others, Socrates and Buddha did not write any philosophical books. Likewise, fragments, proverbs, aphorisms, beliefs, customs, stories, folktales, rituals, folk-songs and social institutions are the main sources of African philosophy (see Kwame Gyekye, 1984:200; 1987:13; B E Oguah, 1984:51).

Myth is another source of moral value. In his discussion of Maori values, John Patterson has convincingly stressed the significance of myths and legends. Knowing about what one's ancestors did gives the opportunity to acquire the ethical precedents for one's behaviour (Patterson, 1992:81). Myth asserts moral imperatives in the form of laws and/or virtues that can be used by humans to perform the right action. It provides humans with resources for attributions of praise or blame (Loyal Rue, 1994:204-205).

Moreover, traditional songs can convey the historical development of a certain group of people. In many African countries, "composer-singers are the acknowledged historians of contemporary issues" (Charles Okumu, 1994:332). Songs can influence politicians to avoid socially harmful activities. Betty Wang, in her study of Chinese political songs, stresses that political songs are important to regulate and, wherever possible, to correct political excesses and malfunction in government (cited in Okumu, 1994:333).

The Oromo also convey their knowledge through a variety of oral media. They have used folktales, songs, riddles, and proverbs to entertain and instruct young children for centuries. "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 Ta'a, 1994:984), plus records of land heritage, moral principles, social and political life, God, knowledge of birds, animals, plants, geologic features and the relationship between human beings and the natural environment. These wide-ranging categories have enabled the Oromo to ensure broad and effective recognition of natural resources and maintain ecological knowledge. The Oromo elders have the knowledge of some aspects of environmental information which modern scientists may not supply. As a matter of fact, it is possible to reconstruct the environmental history of various localities in Oromia on the basis of historical events.

The Oromo transmit their history to the younger generation through the tradition of *argaa-dhageettii*. *Argaa* literally means "to see" whereas *dhageettii* means "that which is heard." *Argaa-dhageettii* refers to both past and present events. *Argaa* refers to that that has been witnessed in the past, that is being witnessed in the present and will be witnessed in the future. *Dhageettii* also refers to stories that are heard about events in the past and that will be heard about future events. Thus, sense experience is the source of knowledge. Accordingly, those who have "*argaa-dhageettii*" are experts in customs and traditions. They have been observing different

things and listening to elders and other knowledgeable persons. The Oromo also recognise the role of reason in acquiring knowledge. Although intelligence (*qarooma*) is believed to be innate, experience helps it to develop (Gemetchu Megerssa, 1993).

The Oromo give special attention to knowledge and wisdom. The following Oromo proverb underlines the place of knowledge in Oromo culture: “Dallaa ceekaa hin qabne 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 society without a knowledgeable person can easily be consumed by wild animals.” This proverb indicates that a society without knowledgeable persons can be easily destroyed. A knowledgeable person can advise his people how to defend their country, how to protect their culture and live peacefully with other people and nonhuman species. In short, what is conveyed through the above proverbs is that knowledge enables one to be the leader of one’s society and thereby save it from various enemies, including dangerous wild animals, by using his or her political, social, economic and religious knowledge.

Similarly, the Oromo use proverbs to underline the significance of wisdom as a general capacity. The Oromo sages make a distinction between knowledge and wisdom. Other ordinary individuals do not try to discover the means by which our knowledge is acquired, the extent of our knowledge, and the standards by which we can judge the reliability of knowledge-claims. But, like philosophers, some sages have attempted to determine the basis of knowledge, and the difference between knowledge and wisdom. “Knowledge” refers to understanding gained by experience. Wisdom is deeper than knowledge and shows individuals’ general capacity in using their knowledge and making decisions. A wise, reflective person is believed to have a deeper view of society and the natural environment than the average person. He or she can defend his or her position, and can provide alternative arguments to the dominant view. A wise person can formulate wise sayings whereas the unwise person can only make commonplace assertions. Wisdom is considered as a human attribute and a gift of God. This is indeed a philosophical distinction between knowledge and wisdom. The following proverb shows the role of a wise person. “Gamni dubbii dhufu beekaa, gowwaan dubbii darbee boo’a” (BABO, 1999:131)–“A wise person knows things that would come in the future, a foolish person cries about the past.” An intelligent individual can foresee what will happen in the future, whereas a foolish individual concentrates on what happened in the past. The latter does not make any preparation for the future. In other words, knowledge based purely on experience is past oriented whereas wisdom based critical reflection on past experience is future oriented and more useful than the former.

The Oromo tradition involves two levels of knowledge, which reflects the broad and narrow interpretations respectively: the knowledge of the *aadaa* (custom) and the knowledge of experts (Gemetchu, 1996:96). While the knowledge of ordinary men is common to all men alike, expert

knowledge, such as that of the *Hayyuu* (legal experts) and that of the *Wayyuu* (experts of the belief systems and moral values) shows specialist knowledge. Those who have specialised knowledge have had special training or an apprenticeship. Some individuals are reflective and act as the moral guides to their community. Some can reject or amend aspects of received conceptions.

Similarly, Henry Odera Oruka made a distinction between folk science and scientific sagacity. Folk science represents a common knowledge in a given community about themselves and the surrounding environment. It reflects people's ideas and beliefs about the land and the interconnections among its inhabitants. "This knowledge would be highly seasoned with myths and make-believe, but it would also have much empirical truth within it" (1997:270-271). Scientific sagacity, however, refers to a specialised environmental knowledge of wise men and women of the community. It is much finer and deeper knowledge of the environment than common knowledge held by the communities (Odera Oruka, 1997:271). This group may involve herbalists, midwives, hunters, rainmakers, readers of entrails, etc. In fact, the young generation can benefit from the teachings of both groups.

Odera Oruka (1991) labelled individualised critical reflection of sages as philosophic sagacity. According to Odera Oruka, in the strict sense, insight and ethical inspiration are at least two abilities of a sage. A sage employs his insight "for the ethical betterment of his (her) community" (Odera Oruka, 1996:184).

Relatedly, there are some independent indigenous environmental ethicists who can subject the traditional beliefs of their societies to critical scrutiny so as to develop positive attitudes towards the environment in non-literate societies. To put matters another way, philosophic sages are the masters of rational thought, vital skills, and the living libraries of their society.

The informants underline that grey hair does not necessarily mean knowledge and wisdom. Some elders may not have adequate knowledge of their society and the natural environment in spite of their grey hair. My informants attest that there are three types of elders: a man with grey hair who has accumulated knowledge, a young man who has grey hair in his heart and a traveller who has grey hair on his foot (Infs: Borbor Bule; Huka Tadacha). A young man who is intelligent and often stays with elders is knowledgeable about his culture. As the proverb goes, "Wallalan hariidhaan, beekaan guduruudhaan" (BABO, 1999:486)—"One can be ignorant with grey hair as one can be knowledgeable at youth." A traveller who moves from place to place has the opportunity to develop his or her knowledge through his or her interactions with various people.

Although the Oromo children are free to learn environmental knowledge from experts without any restriction, environmental education begins in each and every family. Fathers and mothers teach their children how to behave, and live with the natural environment. Understanding starts

at an early age and develops gradually. Proper care in early childhood makes a very serious difference after one is fully grown. In Oromo society, the appropriate age to begin to receive instruction is seven or eight although it could be before or after. Some children are trained to specific household tasks starting at age three or four: over the years girls learn cooking and cattle tending while boys learn horse riding and spear throwing. Their mothers advise girls to sit and act properly starting from age two (Mengesha Rikitu, 1998:211-212). Children learn more about their environment by tending siblings and cattle, and helping in cultivation. Especially in Borena, groups of neighbours (*Ollaa*) live together, which in turn gives children great opportunities to learn about life, the natural environment, sacrificial animals and so on from their peers and elders in the field and in the village respectively. Children sing and play field hockey together in fields.

What is interesting is that in the Oromo *Gadaa* system, a male child, whose age allows him to participate in the system, is required to train for about 40 years before he becomes the leader of his community. He is required to be trained in warfare including equestrian skills, archery, the martial arts and the celebration of rituals. His knowledge is expected to be improved as he grows up. The aim behind the training of the *Gadaa* leaders and the training recommended by Plato for philosopher kings of his ideal society is similar: to be a leader, one has to undergo different forms of training. The knowledgeable leaders should govern the society. In Oromo society, the young generation has the opportunity to learn a great deal of rules and practices during the *Gadaa* assembly. Furthermore, when Oromo elders discuss various issues, children sit with them and gather proverbs, folktales, riddles, and other methods of discussion.

In a nutshell, the younger generation in Oromo society can acquire the Oromo environmental ethic from their families, elders, *Gadaa* leaders and from other members of their community and from their own experience and observation. Children are advised to accept blessings from their parents so as to develop positive values towards the environment, to respect their parents and their culture, to avoid immoral acts, to worship *Waaqa* and to plant trees. An Oromo environmental ethic can thus be detected by examining various sources of knowledge. In what follows, I will show how Oromo proverbs, songs and myths have been employed by the people to inculcate environmental knowledge in the young and other sections of society.

11.2. PROVERBS, SONGS AND MYTHS AS THE SOURCES OF AN INDIGENOUS ENVIRONMENTAL ETHIC

Many writers have looked into the nature and role of proverbs. Some writers argue that proverbs are the repository of the collective wisdom of the people (Bernth Lindfors and Oyekan Owomoyela, 1973:1).

In other words, proverbs are considered as the common property of all thinkers and non-thinkers alike.

I have some reservations concerning this generalisation. I contend that although one cannot cite the name of African sages, proverbs are originally the works of individual thinkers who were in turn influenced by the beliefs and culture of their own society. My informants have attested that they know the individual authors of recently formulated proverbs. Some critical individuals have created new proverbs in response to various socio-economic and political conditions in their society. Like the authors of some African proverbs, the authors of some philosophical ideas in Europe and Asia are unknown autonomous individuals (Gyekye, 1987:21).

Claude Sumner (1999) claims that a real proverb must have recognition in existing usage already. "The sender, therefore, does not have the liberty to create new proverbs" (Sumner, 1999:26). Sumner's interpretation exclusively relies on printed oral texts, and he seems to overlook the existence of new proverbs in various parts of Oromia that are not yet universally known in all parts of Oromia. Another group of people does not always know proverbs of one group of people, though both groups belong to the same ethnic group. Although a new proverb needs time to be publicised, the assertion that an individual is not free to create new proverbs is unfounded, because some orators coined proverbs as they speak. For instance, the statement made by Winston Churchill after the Second World War became a proverb: "I have nothing to give but blood, sweat and tears." It should also be noted that a statement could be both figurative and a proverb, although not all proverbs are figurative.

As Gyekye (1975) persuasively noted, proverbs are the result of people's reflection on their experiences.

The terseness of the sentences that express them indicates that a particular proverb is a summary of some complex ideas. It is these complex ideas which are condensed in the proverb so that they can be retained and remembered in an environment that knew no writing (1975:47).

In order to introduce a proverb into a conversation, the Oromo elders usually make a proverb about the proverb itself. "Makmaaksi, ittoo dubbiiiti"—"A proverb is a cheese of an argument." "Jabbiin bifa kormaati, mammaaksi bifa dubbiiiti" (BABO, 1998:329). "Proverbs give colour to a talk as the bull father gives colour to the calf." The Oromo believe that a proverb is a core expression of any speech. It spices up conversation. Arguments without proverbs are considered to be monotonous. The insertion of proverbs in an argument may influence individuals to change their attitudes towards the situation under discussion.

Moreover, as D.E. Mutasa (1994) observes, proverbs have the role of instructing the young and ignorant, and reminding the old, who have been remiss in their observance of acceptable moral rules in society. The

Oromo use proverbs to encourage their children to be fruitful and knowledgeable about their culture. As the proverb goes, “Ilma yartu dhalchuu manna muka tokko dhabachuu wayya”–“It is better to plant a tree than to have a useless son.” A tree, which is analogised to a growing son, is very valuable to someone who plants it. It has a protective shadow during scorching overhead sunlight. So is a son in the rural area reputed to have physical stamina and economic strength to provide protection for his family in time of need. The seed, the leaves, the bark, and the stem of the tree are all useful to human beings. Young children are expected to serve their family and lineage. Whoever is incapable of adopting this message should get out of the way. When their children fail to meet their expectations, the Oromo use certain proverbs to motivate them to improve their role in family and society. The following cluster of proverbs indicates the value judgement that reminds the young of the correct moral principle so that they will make progress. “Manni ijaarsa bade, amma jirutti fokkisa”–“A house which is badly constructed is ugly to the eyes of everybody so long as it stands.” “Jibichi korma ta’u hancufarrati beekama” (BABO, 1999:252)–“A calf that would become a strong bull can be known by looking at its sex organ.” A calf is analogised to a growing son. Someone who could become a great man can be known from his childhood. The Oromo say that it is possible to know a son that can grow from how he sits. In short, the above proverbs stress the value judgement that children who have lived up to expectations are good citizens whereas those who have failed to properly grow up in accordance with the mores of society are worthless. In one way or another, the proverbs remind children that proper upbringing during childhood will greatly influence their future. They remind them about the future; that life will not be so easy and straightforward as they may imagine. Accordingly, these proverbs have tremendous moral influence on the newly born children. From the very beginning they learn how a good citizen ought to act and think.

The Oromo also teach their children through the medium of stories, fables, folktales, riddles and songs. Addisu Tolesa (1990) argues that the Oromo *geerarsa* (song) serves as a repository of history, a medium of self expression and national identity. “It is performed by creative folk singers who express changes and continuity through their life experiences and references to different historical periods” (Addisu, 1990:6). According to Addisu, *geerarsa* expresses Oromo resistance against Amhara colonisation. Oromo singers have referred to the historical relationship between the Oromo and other societies in the horn of Africa.

Like songs, folktales can give factual data on different subjects, and express moral values, either positively or negatively, through a judgement against a given vice or defect (Sumner, 1996:131). In this connection, the Oromo in the study sites have used various kinds of stories to teach their children about the value of wisdom and knowledge. The following folktale shows the importance of a wise man in a society. Once upon a time, three persons, a wise man, a rich man and a hero went to the

house of *Bulguu* (bogyman, a terrifying creature believed to be half stone, half man who eats human beings). Before entering the house of *Bulguu*, they left their spears outside. Immediately after they got there, the members of the *Bulguu* family started to sharpen their knives. The wise man asked whether his colleagues could save them. The rich man said: "I understood that my wealth cannot save me. It is left behind and I cannot do anything." "Neither do I have any solution," said the hero. Then the wise man tried to deceive the *Bulguu* family. He told them that they came to their place to inform them that eight people are on the way to their house with their provisions. The *Bulguu* family noted that it would be better to have eight people rather than just three people. They allowed the three persons to go and followed them to capture the eight people. When the three persons got hold of their spears, they forced the *Bulguu* family to retreat. So the wise man got a great name, and the three persons then suggested that society should be run by a wise man rather than by a rich man or a hero (Inf: Borbor Bule).

Although wealth is also important, wisdom is of more use than wealth when a society faces problems of this sort (Inf: Borbor Bule). This folktale reveals that the Oromo people give a special place to wise men. The value conveyed here is that wise men should administer their society, and save it from external enemies.

Riddles are another source of knowledge. Riddles are characterised by question-and-answer form. However, in most cases, the question appears as a statement rather than as an interrogative in form. Finnegan's observation of the role of riddles in Africa is applicable to the Oromo. "More generally, riddles are associated with children's amusement in contrast to the more serious use of proverbs by their elders" (Finnegan, 1970:441-442). But riddles have the role of nourishing the intellect. Their parents ask children to identify a word or a sentence that stands for a tricky sentence. Also, in the evenings, children sit round the fire and ask each other riddles. For instance, "Qorichi fayyaa dhabe"—"a medicine is sick." The correct word that captures the meaning of this expression is a wise person. The Oromo regards wisdom as medicine. The point is that children have been given different sorts of thought to sharpen their minds since their childhood.

In short, the Oromo employ proverbs, songs, myths, and riddles for various purposes: to emphasise the worth of knowledge, wisdom, future oriented thought and action and to correct mistakes. Thus, oral traditions can provide lessons for proper behaviour.

The foregoing discussion about the Oromo conception of time in chapter six and the role of oral literature makes clear that the Oromo people have preserved an indigenous environmental ethic even without a written record. This does not rule out the value of written sources. Oral and written forms are not mutually exclusive. Both need each other. Writing is important to conduct research into oral traditions in particular, and indigenous knowledge in general. Researchers should write down the views

of informants and transcribe the interview data from the tape-recorders. Written literature also draws on the achievements of oral literature. Thus, both oral and written sources have a positive role in preserving an indigenous Oromo Environmental ethic although both have their respective strengths and weaknesses.

11.3. KNOWLEDGE, POWER AND ETHICS

Although one may argue that knowledge is not necessarily related to power relations, for humans to produce knowledge in order to live, social knowledge directly or indirectly reflects the existing power structures. Michel Foucault argues that in the modern era, power and knowledge cannot be separated and counterpoised because knowledge is productive of power. According to Foucault, power does not exist simply to enforce economic exploitation; it does not play the role of the superstructure to infrastructure. Power relations produce knowledge, and

power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations (Foucault, 1977:27).

Power uses knowledge to transform those subject to it. Power needs definite knowledge in order to be productive. At the same time, power is an essential resource of certain knowledges.

The powerless cannot define what comes to be recognised as knowledge and what does not. As has been stated earlier, various Western countries have claimed to have knowledge that is universal because they have power. They despised non-Western knowledge as superstitious. What is important to know is the degree to which those who have control over resources and the production of knowledge ignore the knowledge of the powerless. Even the scientific discoveries of scientists who have no power and wealth can fail to be recognised by the scientific community. A case in point is the discovery of Gregor Mendel in biology. This example was suggested to me by a discussion with Dr. Tewolde Berhan. Mendel made the most important discovery in Genetics. His short treatise “Experiments on Plant Hybrids” was read at the meetings of the Natural History Society of Brönn in Bohemia (Czecho-Slovakia) at the sessions of February 8 and March 8, 1865, and appeared in 1866 in the Transactions of the Society (R A Fisher, 1966:14). Curt Stern (1966) characterised this treatise as one of the triumphs of the human mind. However, from its publication until 1900, it appears to have been completely overlooked, although a few writers cited it in their works (Fisher, 1966:14). One may wonder why Mendel’s paper failed to attract the scientific circles of Europe. One may think that it was not widely distributed. The other reason could be that scientists ignored this

treatise because it is too technical and difficult to understand. The evidence at our disposal, however, does not support these speculations.

The journal in which it was published was not a very obscure one, and seems to have been widely distributed. In London, according to Bateson, it was received by the Royal Society and by the Linnean Society. The paper itself is not obscure or difficult to understand; on the contrary, the new ideas are explained most simply, and amply illustrated by the experimental results (Fisher, 1966:167).

It seems that Mendel was not heard during his lifetime, most probably because of the fact that at that time he was not among those that control power and money, although power and money are not sufficient for scientific recognition. The German Botanist W O Focke, for instance, did not pay sufficient attention to Mendel's work in his 1881 book entitled *Die Pflanzen-Mischlinge* for similar reasons. H F Roberts makes the following comment on Focke's book:

A careful study of Focke's report brings into interesting relief the reason for his having failed to appraise the Mendel paper at its present value. In the first place, Focke was especially interested in the works of those who produced more extended contributions. The work of Kölreuter, Gärtner, Wichura and Wiegmann, whose works were much more voluminous in the field which they occupied, receive appropriate consideration, as do also Naudin's and Godron's prize contributions; but Mendel's paper evidently appeared to Focke simply in the guise of one of the numerous, apparently similar, contributions to the knowledge of the results of crossing within some single group ... It was supposedly not at all conceivable that the laws of hybrid breeding could be compassed within a series of experiments upon a single plant (quoted in Fisher, 1966:170).

Nonetheless, owing to the development of biology, plant breeders rediscovered the achievement of Mendelian Genetics after his death.

The important issue which should be examined in this connection is whether similar problems to those which have been discussed above are apparent in Oromo society. Although indigenous knowledge is mainly derived from people's practical experience, it has been influenced and shaped by the power relations in local communities. Most informants stated that in Oromia in the past and, to some degree in the present time, individuals who have access and control over resources have had a greater role in defining knowledge. The rich persons perceive themselves as

capable of manoeuvring within given contexts. Thus, those who are rich can violate traditional rules and regulations. The poor man's argument is not appreciated although it is sensible and useful. Nobody likes poor persons. Even the mother that gave him birth hates the poor person. Among other reasons, this is because the poor wears ragged clothes and does not have sufficient income. For this reason, even poor persons despise each other. Some informants said that poor persons could not affect you whether they argue against or for you. Accordingly, in most cases, the poor do not want to participate in local meetings, for the people do not accept their arguments. They have little voice and respect. The informants said that useful argument is buried in intelligent poor persons' hearts. The following Irish proverb also conveys that this is the case in many countries. "Two things that go to loss ... turf on a mountain and the wisdom of a poor man" (Sean Gaffney & Seamus Cashman, 1990:75). Thus, like Gregor Mendel, many elders in Oromo, and I assume other parts of the world, have died with their invaluable knowledge because they did not have the power and money to transmit their knowledge to the younger generation. Those who have power and promote foreign values have often despised the poor.

As some writers observed, knowledge is power when one has the means to implement his or her knowledge. For instance, Francis Bacon stated that knowledge is necessary for power. "Human knowledge and human power meet in one; for where the cause is not known the effect cannot be produced" (1960:39). Indigenous knowledge in some special areas is also a form of power, and not accessible to everybody; initiation was a highly selective process (François C Dossou, 1997:306).

On the other hand, what the rich persons argue is taken as a sound argument because of their wealth. When the rich person says water flows upward, others would say that what he or she has said is true. For this reason, the rich person asserts what he/she does not know well. Lack of power can be interpreted as lack of knowledge, for the powerful defines what recognised knowledge is.

What has been outlined above shows that although poor persons are knowledgeable, the rich persons manipulate local political and environmental decisions. The powerless individuals have been obscured and marginalised by those who control local resources. In some cases, the rich persons go as far as violating traditional rules to fulfil their vested interests.

Another problem is that currently, the state controls the flow of environmental and development knowledge in rural Ethiopia. Although peasant farmers have no power to openly react against the proposals and advice of Peasant Association and government officials, they resist what they consider unfair and harmful. Unless they see the positive impacts of extension services, peasant farmers do not accept them.

The power relationship between women and men is also a factor. There is a clear division of labour by gender in Oromo society. For instance, in Borena, military and political activities, the construction of

kraals and fences, preparations of wooden utensils, the building of dams, tilling the land, taking care of herds and excavation of wells are believed to be the vocation of men. Thus, men are more knowledgeable than women regarding these activities. Women cannot participate in the elections of leaders of camps and *Gadaa* classes and defence of wells, herds and shrines. They do not bury corpses. On the other hand, the construction of houses, and the preparation and distribution of food are delegated to women. Women can tend animals. However, men can participate in the construction of houses with corrugated iron. Both women and men can participate in various forms of ritual although men decide on these issues. In Borena, it seems that women have more responsibilities than men do.

What should be underlined here is that women are excluded from decision making. They cannot be selected as *Gadaa* officials. They do not participate in the *Gadaa* system partly because of their dual identity—their own and their husband's. As lineage is counted through a male line, women's identity does not count. For this reason they cannot go through all the *Gadaa* grades. "Like liminal persons who are in the process of transition, they are neither here nor there" (Asmarom Legesse, 1973:112). Also, according to the Oromo law, women cannot hunt wild animals or go to the war front. They are not allowed to sacrifice animals or participate in libations in a traditional religious ceremony. It is customary for women to go to their parent's place when they have quarrelled with their husbands. The *Gadaa* system, however, does not allow the *Gadaa* councillors to leave the *Gadaa* centre and move to other places. According to informants, all these factors prevent women from being *Gadaa* leaders. It seems that women are separated from men partly by exclusion from cultural ceremonies, and partly by roles within them.

Reasonably strong empirical evidence suggests that men and rich persons have tried to justify the power relationship in the Oromo society by appealing to the law of nature that was believed to be authored by God and ethical codes such as *Saffuu*. Some elders argue that *Waaqa* qualifies the female sex for the bearing and rearing of children and maintaining the family and household (for instance, cooking, collecting water and fuel). They said that she is a sack. She carries a child. Some informants contend that because of her natural behaviour, woman can sacrifice her culture and husband in favour of her lover (love outside of a marriage). It is believed that the wisdom of a woman is spoiled by her sexual desire whereas the wisdom of a dog is spoiled by its dirty scavenging habits (Inf: Borbor Jilo).

The Oromo also believe that there is *saffuu* between a man and a woman. A wife is required to obey and respect her husband. If she fails to do so, she will violate *saffuu*. There will be further discussion of the role of *saffuu* in chapter 14. A husband who is subservient to his wife is despised by society. It is believed that a woman cannot stand on her own feet independently of a man. Women are believed to be physically weaker than men are.

Moreover, the Oromo men use myths to support the view that women cannot be the leaders of society. Women are blamed for the tendency to lose their rational behaviour owing to sexual desire. The following Oromo proverbs indicate the inherent inferiority of women. “Nadheen furdoo qabdi malee beektuu hin qabdu”–“One can find many fat women but not knowledgeable ones.” “Sammuun nadheeni ammaa dhaha baquu hin geesu” (BABO, 1999:438)–“Women’s brain is less than butter that easily melts.” Men believe that women’s intellect is dangling like their breast. It is believed that the knowledge of males grows upwards whereas the knowledge of women grows downwards.

Expressed in another way, a common metaphor in Oromo thinking is the notion that the knowledge of women and the light of the moon are similar. The light of the moon cannot enable a person to pull out a thorn from his foot. It is not powerful. Likewise it is believed that women’s knowledge does not go far.

What has been discussed above reveals that men have been using different means to justify the inferiority of women. This view has been accepted as true throughout Oromia. As Foucault has persuasively pointed out, systems of power produce and sustain truth, and truth induces and sustains systems of power. “We are subjected to the production of truth through power and we cannot exercise power except through the production of truth. This is the case for every society” (Foucault, 1980:93). The Oromo men sustain the truth they have produced about women by referring to religious beliefs and practices that in turn justify their power.

In the same way as in the Oromo tradition, other people have negative attitudes towards women in Ethiopia. For example, the Amhara people in Northern Ethiopia have similar belief about women. The following Amharic proverbs denigrated the nature and behaviour of women. “Keset yemekere besar yassere”–“One who plots together with a woman is like one who ties a thing with grass, because a woman cannot keep a secret” (William H Armstrong and Fisseha Demoze, 1969:46). “Set’na ahiya yale dulla aykenum”–“A woman and a donkey can’t be kept straight without a stick” (Armstrong and Fisseha, 1969:46). Also, the role of women in the Orthodox Church is limited.

Moreover, women have been considered as inferior to men in European philosophy and law, although there were exceptions. Plato, in his work *The Republic*, said that women and men are equal, and can be educated and become the Guardians, Plato’s ruling class, although in his final book, *Laws*, he changed his mind about women (Plato cited in Anna Coote and Polly Pattullo, 1990:29-30).

On the other hand, philosophers, such as Aristotle, Thomas Aquinas and others emphasised the inherent inferiority of women (Victor Ferkiss, 1993:181). Aristotle thought that the natural function of women was to breed, and child-rearing went “naturally” with child-bearing (Coote and Pattullo, 1990:30). Likewise, the English liberal philosophers, Thomas Hobbes and John Locke, and the eighteenth-century French thinker, Jean-

Jacques Rousseau excluded women from political life (Coote and Pattullo, 1990:30-31). In eighteenth-century Britain,

[i]n law, a wife was not a person in her own right; she was 'under couverture' to her husband, existing merely to provide him with children, perform what duties he required, both physical and sexual, and, if he were of a certain class, to look decorative and appealing (Coote and Pattullo).

Surely, however, there is another line of thought which is different from this view. Besides modern feminists, particularly ecofeminists, in different parts of the world, in the study sites some informants criticised the power relationship in the Oromo society. They have reservations concerning the validity of the above proverbs. They emphasise that if a woman can give birth to a knowledgeable son, she must be knowledgeable. They said that the Oromo men maintain this false belief to dominate women. They argue that women were forced to be dull – in men's terms, because of cultural domination. The real point is that women's intellectual development has – in a sense, been contained or shaped within the household due to the nature of the traditional Oromo understanding of gender and their different roles in society. In effect, traditionally, women do not have any power over resources or other fundamental aspects of their lives in general (Infs: Bekele Gutama; Borbor Bule; Legese Mamo; Shuma). The male dominated culture has forced Oromo women to accept the view that they are really inferior to men. There is evidence that when they are given the chance to lead the Oromo society, most women are reluctant to do so (Infs: Borbor Bule; Sora Boru). When the Oromo revised the laws governing their society during the *Abbaa Gadaa* of Dawe Gobo (1697-1705), they attempted to give the chance for women to be elected as *Gaddaa* leaders. The then-Oromo women refused to come to the meeting, let alone to lead Oromo society. They could not challenge the deep rooted negative attitudes towards women (Inf: Borbor Bule).

In fact, in some instances, women are considered more useful than some wicked men are. Consider the following saying. "Ilma gadhee godhachuu mannaa intala gaari godhatani soddaadhaa kennanii firoomu wayya" – "It is better to beget a daughter and get her married to a good man and become friendly with him than to beget a useless son." The Oromo males also use a proverb that it may be advantageous to have a woman in the house (see Sumner, 1995:327).

In short, as has been the case in many countries, the inferiority of women and the poor is taken as given. Environmental knowledge has been reshaped by this attitude over the years. This in turn has had a negative impact on the development of an Oromo environmental ethic. As I have shown earlier, the poor were not encouraged to plant trees or improve the quality of the land, although the land was privatised after the Abyssinian

conquest of the Oromo lands. At the same time, women were not encouraged to be independent conservationists. Although they work long hours on the farms, their husbands control their role and the produce from the farms. Accordingly, the Oromo culture has not sufficiently allowed women to actively participate in environmental protection. The Oromo men use the ethical codes, which have been proved important to protect the Earth and its inhabitants, to control women and their activities.

I have attempted in this chapter to demonstrate that the Oromo environmental ethic is based on oral traditions. Oral traditions are valuable sources of environmental and philosophical ideas. They embody values, items of advice or warnings, orders or prohibitions which are useful to develop environmental consciousness. Proverbs are vehicles for educating children; they are used to add flavour to individuals' speech. Myths, riddles, and songs have had a paramount role in Oromo society. Accordingly, the Oromo have managed to retain their environmental knowledge for generations through oral literature. The Oromo have experts who perform various ceremonies, and train people. Both philosophic sages and folk sages transmit their knowledge to the younger generation. Their parents also train children at various stages. Children are required to understand how their present action can influence their future. Besides, through one's participation in ceremonial and festive occasions and other cultural practices, one is expected to acquire personal knowledge of various practices and beliefs. The Oromo men who have the chance to participate in *Gadaa* council are required to study the *Gadaa* rules and practices in order to qualify for *Gadaa* leadership. Mnemonic devices are also important to transmit oral tradition from the old generation to the new one. In Oromia, examples of mnemonic devices include *Bokkuu*, *Siqee* stick, ritual cloths, *surree ruuffaa*, *Gadaa* villages, the tombs of *Gadaa* leaders and time-reckoning experts and ritual places. As has been stated earlier, the names and the deeds of recent *Gadaa* leaders will be remembered during *Gadaa* assemblies.

Moreover, it has been argued that people's knowledge is related to environment, experience, age, sex, labour division within the family or community, occupation, socio-economic status, religion, history and moral rules. Although the people have developed their knowledge through experimentation and observation over centuries, social relations of power have influenced knowledge. In both industrialised and "developing" countries, those who have power and the potential to decide and act with autonomy define and promote what is recognised as knowledge so as to fulfil their vested interests. Knowledge is socially and politically constructed. My study has shown that what is recognised as knowledge is defined and manipulated by those who have power in Oromia. Wealth appears as the source of knowledge. There has been a hierarchical structure among the local people that has promoted a superiority complex on the basis of wealth. Women are often subordinate to men, and are considered as inferior producers. The poor and women have little say in local

environmental and development decisions. Oral traditions have been used by males to maintain the status quo in Oromia. They have established the basic relations of power. The preceding discussion, however, suggests that the Oromo people and other social groups should change rigid ethical principles that justify the domination of women by men.

CHAPTER XII

CHALLENGES TO, AND LIMITATIONS OF, INDIGENOUS ENVIRONMENTAL KNOWLEDGE

The discussion so far has been largely devoted to showing the significance of Oromo beliefs and practices relating to the natural environment and its inhabitants. In this chapter, I explore factors which have had debilitating impacts on the transmission and development of indigenous environmental knowledge, and the limitations and negative features of indigenous environmental knowledge. In the first section of the chapter, I examine the impacts of modernisation, the market economy, education and other related factors on indigenous environmental knowledge. In section two, I examine some of the weaknesses of indigenous environmental knowledge. In particular, I argue that failure to use the tried and tested methods of indigenous environmental protection is bound to exact an enormous price, at least in Ethiopia. I would also show that not all indigenous knowledge is environmentally friendly.

12.1. CHALLENGES TO INDIGENOUS ENVIRONMENTAL KNOWLEDGE

12.1.1. Modernisation and Indigenous Environmental Knowledge

As has been stated earlier, some Western scholars and Western trained intellectuals in many developing countries have challenged indigenous knowledge. Both groups have tried to promote scientific knowledge by belittling the accumulated knowledge of the local people. The irony is that they did not take time to critically study indigenous environmental knowledge. Early European adventurers, missionaries and anthropologists formulated their narratives about Africans “in terms of the conceptual schemes of their own upbringing” (Kwasi Wiredu, 1996:162).

In Africa, the young people have been alienated from their culture through the influences of missionaries, modern schooling and the mass media. Subsequently, the great majority of Africans now active in conservation were trained in the traditional Western methods of wildlife management and have hindered the growth of an African conservation ethic by promoting European management systems (Jonathan S Adams and Thomas O McShane, 1992:xvii).

Besides, community members who moved to cities and other places may forget the principles and rules of the cultural practices of their society. Likewise, descendants of immigrants will be alienated from the environmental sagacity of their forefathers (H Odera Orika, 1997: 277).

Because of the negative attitudes of educated persons towards indigenous knowledge, elders pass away without transferring their knowledge. Also, the neglect of indigenous knowledge and governments' linguistic acculturation and assimilation policies have led to the disappearance of various indigenous languages that have had a crucial function in developing, creating, encoding, sustaining and transmitting indigenous knowledge and patterns of behaviour in different parts of the world. The demise in native language will lead to the disappearance of people's knowledge of the natural environment. Some writers predict that many languages will disappear in the near future.

It has been estimated that half the world's languages – the storehouses of peoples' intellectual heritages and the framework for their unique understandings of life – will disappear within a century (Henrietta Fourmile, 1999:226).

For the local people, language has a paramount role for their identity, livelihood, biodiversity conservation and for the continued development of their knowledge systems and cultural traditions.

Moreover, the introduction of religions like Christianity and Islam has challenged the very existence of African indigenous belief systems (C K Omari, 1990:172). African religious beliefs have been regarded as primitive and useless, and the people have been considered as pagans without real religion. Missionaries claimed to civilise the non-European people.

As they did elsewhere, Christianity and Islam looked down upon traditional religion in Oromo lands. In the study sites, the number of Christians and Muslims increased by leaps and bounds within a short period of time, particularly in Illuababorra. They divided the people into two camps—the converts who looked down upon the old traditional religion, and the devotees of traditional religion. The acceptance of modern religions was conceived as the acceptance of civilisation. In particular, the influence of Christianity has become serious in Oromo lands since the last quarter of the nineteenth century, when the Abyssinians conquered the Oromo and other Southern ethnic groups of the present day Ethiopia. The Abyssinian rulers regarded the Oromo religion not as true but as superstition and the Oromo were expected to accept the new religion. A case in point is that the local chiefs in Welega were ordered to ban traditional belief in favour of Christianity after the incorporation of Welega into the Ethiopian state. "Following their local chiefs most of the subject people were baptized *en masse*" (Daniel Ayanna, 1984:118-119). In Borena, the new rulers tried to force the *Gadaa* leaders and the people to be converted to Christianity. They went to the extent of shaving the hair of the *Gadaa* leaders. In spite of these harsh measures, most people opposed the new religion. In fact, the *Qaalluu* leaders became Christians, for the Abyssinian rulers gave them

feudal titles (Inf: Borbor Bule). They were given a semi-equal position with the Abyssinians to be used to dominate the Oromo people. The Abyssinians cut down *Dakkii* trees, burned *Galma*, and they threw ritual beads into the river. They advised the Oromo to bury their dead in the graveyards of Orthodox churches. They cut down trees from traditional graves. They compelled the Oromo to prepare expensive funeral banquets in commemoration of a dead relative; when the Oromo ignored this feast, they would be considered as uncultured savages. In short,

[b]orrowing their faith from the Judaeo-Christian tradition, Abyssinians came to revere a White God [sic] and reduced the Oromo Belief in *Waaqa Guraacha* to a form of devil worship (Gemetchu Megerssa, 1996:97).

Daniel (1984) has also argued that the systematic approach of the Swedish-trained Ethiopian Protestants enabled them to win the confidence of the local chiefs in Welega. 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 peasant farmers. They also provided medical facilities to the local people. This attracted a large number of followers.

On the other hand, the Northern Oromo, such as the Raya, Azebo, Yeju and Wollo accepted Islam during the eighteenth century. The Gibe states embraced Islam owing to the influence of Muslim merchants in the mid-nineteenth century. The Turko-Egyptian colonial powers forced the Oromo in Harergie, Eastern Ethiopia, to accept Islam between 1875 and 1885 (see Asafa Jalata, 1993:25). Besides, most Oromo turned *en masse* to Islam in order to avoid the domination of Christian Abyssinians (Asma Giorgis, 1987). For instance, the Arsi Oromo accepted Islam as their religion and their shield after they lost their institutions in the last quarter of the 19th century (see Asmarom Legesse, 2000:95).

Although the government has not backed Islam, it has had damaging impacts on Oromo religion, especially in Illuababorra. Traditional religion was uprooted from its foundations. Muslims have subverted many aspects of Oromo traditional religion. For this reason, in Illuababorra, it is hardly possible to argue that Islam and Oromo traditional religion coexist together, although some individuals have followed both the traditional religion and the modern religion. Legesse also reports that the *Gadaa* and *Qaalluu* Institutions disappeared in Arsi and Harar owing to the combined effects of Menelik's conquest and the subsequent islamisation of the people (2000:173-174). Some informants also lamented that, at present, above all, the followers of the Pentecostal faith have challenged Oromo traditional religion. They cut down sacred trees, kill respected wild animals and despise the Oromo conceptions of time and divination.

On the other hand, in the Eastern part of Oromia, the *Qaalluu* institution has been deliberately disturbed by the Muslims. Oromo names

have been changed into Muslim names (Inf: Gemetchu). Gemetchu has stressed that Somalia looks at Oromia as one kind of raw material for religious conversion whereas Abyssinia, with its Orthodox Christianity, looks at Oromia as another kind of raw material. The Adare and Somali Muslims went as far as propagating the idea that the word “*Qaalluu*” came from the Arabic word “*kul*” (Inf: Gemetchu). They have been looking for any similarity in pronunciation of the Oromo and Islamic terms. The *Ayyaanas* that are supposed to possess the *Ayyaantuu* are known by the names Haile Getaw, Woson Gala and Marite (if the spirit is a female), where Orthodox Christianity is common, and Haji Suleman, Haji Risa and Haji Abdala Nura in Muslim areas (Inf: Gemetchu). These names are not Oromo names. They are Amhara and Muslim names, respectively. Also, the Amhara rulers and the followers of Islam and of the Pentecostal faith have forced the Oromo people to discard the *Gadaa* system. The informants claim that the gradual disappearance of the Oromo traditional religion and the *Gadaa* system led to the proliferation of diseases, drought, barrenness, and the migration of people to other places. Therefore, various groups have been distorting the Oromo view of the world, the Oromo culture, including the names of the lineages, the names of important individuals and the names of places. There has been a political economic motive behind such an interpretation of what Oromo are. In between, people tend to forget the Oromo view of themselves.

12.1.2. The Market Economy and Indigenous Knowledge

In Africa, the indigenous belief systems have been destroyed by the introduction of a money economy with its capitalist mode of production 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.

Value systems which used to help keep balance between humans and the environment are no longer in place; instead, we have value systems controlled and motivated by the greedy accumulation of capital on an individual basis. As a result, even ethical decisions regarding the management of land and natural resources are guided by a production principle and the social principles that emerge from it (Omari, 1990:171).

Like many African and other developing countries, Ethiopian governments have favoured modern technologies, export-oriented plantation agriculture and large scale commercial farming at the expense of the peasant small-holder sub-sector. A case in point is the third Year Plan of the Haile Selassie I government (1968-73) (see John M Cohen, 1975:348; P

Koehn, 1982:255-56). The imperial government encouraged the large commercial plantations to use fertile lands for the production of luxury crops or inedible commodities destined for export abroad. This led to the eviction of Nomadic Afars from their traditional pastureland in the Awash valley. Their struggle for survival in the fragile uplands degraded the ecosystem and led to the starvation of cattle and the people (see Koehn, 1982:253-89).

In the same way, the information I gathered from informants revealed that hundreds of Oromo small peasant farmers were evicted from their traditional homes in Gumaro Abo area, in Illuababorra, by the government, to establish Gumaro Tea Plantation. The informants have stressed that the establishment of Gumaro Tea Plantation in Illuababorra in 1960s has contributed to forest depletion. First of all, *Kegnazmach* Mejid Abboud, a Lebanese expatriate, started the first commercial tea farm with the co-operation of a Belgian at Gumaro in 1957. At that time, the tea plantation covered 25 hectares. In 1964, *Kegnazmach* Mejid made a lease to 12 associated individuals, and to Mr. J B Hissette, who later established a private limited company in 1966. Meanwhile, the Agricultural and Industrial Development of Ethiopia and the British Common Wealth Corporation formed the Gumaro Tea Plantation Share Company in 1969 to succeed the Private Limited Company. In 1976, the new proprietors only planted 13 hectares of tea and 25 hectares of eucalyptus. However, the military government nationalised the plantation and handed over to the Coffee and Tea Development and Marketing Authority (CTDMA) within the Ministry of Agriculture in 1976 (see ECTDME, nd). At present, the Gumaro Tea Plantation has covered a total of 2423 hectares (860 hectares of tea; 735 hectares of eucalyptus; 4.5 hectares of coffee, 2.5 hectares of peasant farmers' tea plantation, 822.3 hectares of land that has buildings, natural forests, water and unused land). The plantation evicted 150 household heads (108 from Gumaro Abo Peasant Association and 42 from Kundi and Baki Peasant Association) in Illuababorra (GTP REPORT in Amharic, nd). Although the government paid money to peasant farmers as compensation, the latter do not consider it sufficient. The action of the government forced many peasants to overexploit the remaining land. The tea plantation has no significant value to peasant farmers. Peasant farmers are required to prevent their domestic animals from entering the tea plantation. If grazing animals are coming into the fields to graze grass, the security guards may imprison them and the owners will be asked to pay money to get back their animals. Similarly, the attempt on the part of government to transfer communal land to private ownership in pastoral areas has resulted in the breakdown of the indigenous institutions and destabilisation of the pastoralist economy (Gufu Oba, 1998). The current government also sold Gumaro tea plantation to a private investor.

Besides, in the last ten years of imperial rule, attempts were made to enhance the cultivation of food crops for domestic consumption. The government promoted mechanised farming schemes in the production of food for local markets. This strategy led to the establishment of different

development units of which the Chilalo Agricultural Development Unit (CADU), the Ad'a District Development Project (ADDP), and Shashamene and Negele Development Project (SNDP) with the assistance of the Swedish government (SIDA), the US government (USAID), and UNFAO, respectively, were established in Oromo lands. This mechanised farming resulted in tenant insecurity, exploitation, eviction, and soil erosion and deforestation (see Michael Ståhl, 1974:75-7, 103-5, 126-67; Cohen, 1975: 349; Koehn, 1982: 256-57).

In particular, the negative impact of CADU on Oromo peasant farmers in Chilalo is worth noting. The Ethiopian government established CADU in Chilalo, central Ethiopia, in 1967. Though no systematic study was undertaken to document the extent of tenant insecurity and eviction in Chilalo region, "[a] review of available studies, interviews, and observations, suggests that total evictions between 1967 and 1974 ranged between 2,500-5,000 tenant households" (Cohen, 1987:128). Moreover, tenant rents rapidly rose to one-half of crop production, and pressure increased to convert pastureland into cultivated areas as a result of the introduction of intensive mechanisation. This process enormously destroyed indigenous land management practices. This reminds us that some carelessly designed modern development programmes have negated or directly destroyed ecologically sound traditional land use and occupational structures in the name of scientific progress.

Note, I am not arguing here that mechanised farming and modern technologies have no good effects. I am saying only that it should not be promoted at the expense of environmentally sound practices. Subsistence economic systems alone may not enable the people to produce surplus products and satisfy their needs. They also need to improve the quality of their life. Certainly, Ethiopia needs some mechanised farming and modern technologies to feed its people and solve other related problems. Nonetheless, any attempt to promote mechanised farming should take into account the interests of the rural poor.

Another serious challenge to indigenous environmental knowledge is the expansion of transnational corporations. More recently, in many developing countries, transnational corporations have undermined the diversity of traditional crops by breeding new crop varieties through genetic engineering (Darrell A. Posey and Graham Dutfield, 1996:15). Nation states have also contributed to this piracy by allowing TNCs to collect different species. The local people are powerless to challenge their governments who are friendlier to transnational corporations and foreign powers. I will discuss more about the damaging effects of TNCs on indigenous knowledge in chapter 13.

12.1.3. Poverty and Indigenous Knowledge

The other major challenge to indigenous knowledge is that on the one hand, the people want to maintain a healthy and safe environment, and on the other hand, they want to satisfy their basic needs. Even some peasant

farmers and pastoralists may desire to have Western style of life. Theoretically, nobody wants to confine himself to a small scale economy. However, maintaining a sustainable balance between the two without destroying the resource base is a very difficult task because of poverty and environmental degradation. If the local people do not have alternatives during times of crisis, maybe they will be forced to stop respecting their religious practices. As has been stated in the foregoing discussion, poverty has compelled peasant farmers to avoid traditional conservation practices, to cut down trees, and kill some wild animals. Put differently, unless peasant farmers and pastoralists have alternatives, they may not fully maintain environmentally friendly practices. Hence, famine, war, external interventions or other environmental crises may lead to the displacement or death of the people and thereby, to the breakdown of indigenous knowledge. Unlike some environmental groups in the West, for instance, the proponents of Earth First! Group (see Dave Foreman, 1987), who lead the most privileged life on Earth, and want indigenous people to suffer more in order to save forests and animal populations, I would argue that it is ethically unacceptable to require the rural poor to do so. These groups cannot see the simple practical common sense of improving the circumstances of human populations, perhaps even in technological ways, in order to save endangered species.

In the study sites, peasant farmers and pastoralists have not been given alternatives, sufficient advice or room for participation. They are asked to stop charcoal-making, firewood collection and cutting down trees without being offered alternative sources of income. Similarly, government policy does not give attention to urban inhabitants and individuals who have bakeries to prepare food and to provide bread for the market. They are too poor to use electricity. Using electricity may increase the price of bread which in turn may affect the urban poor. Countries that have the power to use electricity can avoid the destruction of trees. P. Knize states that in America, "the demand for timber had declined since the invention of the internal-combustion engine and since we began using electricity and fuel oil instead of wood for our energy needs" (1994: 538).

The government also advises the people not to kill wild animals that destroy their crops and domestic animals, without providing any controlling mechanism. The main goal of government officials is for the people to fulfil their quota and meet the target of the government. Higher officials have compelled extension workers and government officials to collect tax, organise peasant farmers, collect different types of fees, mostly by force, to serve as a police force, cadres, leaders and health officers. For this reason, peasant farmers and pastoralists consider development agents the staunch servants of politicians rather than of peasant farmers and pastoralists themselves. They prefer to avoid extension and development agents. Theoretically, the main aim of extension workers is to become agents of change. But government officials have manipulated it. Although extension workers have reported the situation on the ground to higher

officials, no corrective measures have been taken by the authorities. This fact implies that the government itself has challenged indigenous environmental knowledge for short term goals. The disappearance of trees and palatable grasses, the appearance of new weeds, human and animal diseases, the appropriation of peasant farmers' forests by the government have further threatened indigenous environmental knowledge.

12.1.4. The Challenge of Integrating Science and Indigenous Knowledge

This work and the contribution of many a scholar suggest that indigenous knowledge and science should be integrated. However, if the extraction of relevant knowledge which involves the process of sifting "useful" from the "useless," and the objective from the subjective through scientific validation is not carefully done, it can be harmful to indigenous knowledge. It may lead to the dismemberment and fragmentation of indigenous knowledge (Douglas Nakashima, 2000).

Even scientists with the best of intentions may end up accelerating the demise of these other systems of knowledge, by valorising those components that most resemble scientific information (Nakashima, 2000:5)

and ignoring what they consider to be of the realm of superstition and belief.

Nakashima suggests that traditional knowledge systems should be appreciated as integral components of other living and dynamic societies and cultures rather than as sets of information. The main drawback of indigenous knowledge is thus that when it becomes more integrated into scientific knowledge, in the long run, it may disappear with the appropriation of its basic elements by science and with changes in land use. Its underlying reasons may be lost for good. Thus, necessary measures should be taken to prevent this from happening.

In this section, I have attempted to delineate that modern education, market forces, foreign religions, poverty and government policies have eroded the indigenous environmental ethic in Oromia and in other parts of the world. Furthermore, the indigenous Oromo environmental ethic is being destroyed owing to the fact that many knowledgeable persons have passed away without heirs, who can transfer their knowledge to the young people.

12.2. LIMITATIONS OF INDIGENOUS ENVIRONMENTAL ETHICS

Careful study of indigenous knowledge indicates that not all knowledge and activities of local people are valid and environmentally

sound. Some of their practices have had undesirable local environmental effects. Unnecessary dependence on traditional beliefs may undermine objective observations and the real causes of changes. Unlike the populist perspective, which 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 (Ian Scoones and John 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.

Moreover, traditional medicine faces certain problems in the areas of diagnosis and pharmacology. Traditional healers lack systematic examination of the causes and effects of diseases. In some cases, "[t]he work of various bacteria, viruses and other micro-organisms was easily attributed to spiritual entities" (Atteh, 1992:26). Kwasi Wiredu also remarks that African medicine men appeal to stories of malevolent witchcraft and necromancy instead of seriously examining the causes of disease, whether of the mind or of the body or both (1980:12-13; see also Tirfe Mammo 1999:209).

The fact of the matter is that many peasant farmers and pastoralists do not give scientific explanation for their beliefs and practices when the context is one of "superstition." There is also a tendency to consider the neglect of culture and religious practices by some peasant farmers and pastoralists rather than practical activities as the major causes of environmental degradation. Although my respondents have realised that deforestation and overgrazing caused by humans have led to climatic change, some of them still take drought and famine as punishment by God. Most informants believe that if the *Gadaa* officials and the people correctly follow their culture and pray to God, environmental problems can be avoided. Very few informants seem to understand the natural causes of environmental degradation. When we look at environmental change, there is a need to clearly understand the consequences of natural changes and human activities. Praying does not solve environmental problems, although respecting sacred groves, avoiding indiscriminate hunting and other environmentally friendly religious and cultural practices are useful to improve the quality of the environment.

Some peasant farmers argue that anointment of trees with butter and women's gathering and libations on the road are useless practices, for both the trees and the roads do not speak and recognise these practices. Anointing a tree with butter cannot prevent it from falling down. They convincingly criticise those peasants who throw a black sheep and flour of

roast grain mixed with butter, salt and water, etc. in the water with the aim of avoiding cold and other diseases (Infs: Bekele Gutama; Mengiste). Some informants have also suggested that the practice of sacrificing animals for *Ateete*, *Qoloo*, and during holidays, has led to poverty and needs to be suspended.

Another weakness of traditional healers is that they could not provide exact measurement of quantity that would affect the efficacy of the concoction as well as the therapeutic effect of the dosage; it is possible that they prescribe under dosage or over dosage for illness (Kwame Gyekye, 1997a:33-34). In fact, to know the appropriate dosage of medicine, they use their little fingers, cups, glasses and other such things as the tools of measurement. They also pay attention to age differences.

Besides, the secretive nature of the knowledge of traditional medicine men has not provided a conducive environment for the transfer of knowledge to curious minds or the improvement of traditional medicine. Linked to this, according to some informants, one of the serious weaknesses of many Oromo experts is their unwillingness to transmit some specialised knowledge, for instance, traditional medicine, and knowledge about plants and crops, to other members of the community. This prevents the members of the community from learning, criticising and contributing to the development of specialised knowledge. As Kwame Gyekye has stated, the death of the traditional healers led to the stagnation of science, including the science of medicine in Africa (1997a:29; 1997b:246).

Even though Gyekye considers knowledge of medicinal plants as a form of scientific knowledge, he proclaims that the users of traditional technologies have not appreciated the pursuit of scientific principles because of their concern to achieve immediate practical results from their activities. As a consequence, they lack real understanding of the scientific processes involved in the technologies they find so useful (1997b:251). However, it should not be denied that they have developed their own indigenous science.

The other limitation of indigenous knowledge is that indigenous technology and practice are not universally applicable, but are locally grounded. Because of the localisation of indigenous knowledge systems, the local people do not have the intellectual resources to engage with global issues created by capitalism. Their attempt to deal with new problems can only depend on the local pool of techniques, materials and genetic resources and other borrowed knowledge. According to Kent H Redford (1990), three conditions are required to sustain indigenous knowledge: low population density, abundant land and limited involvement with a market economy. But these conditions may be too strict. Although some countries lack these features, they sustain indigenous knowledge.

No less relevant is that the uneven distribution of indigenous knowledge within and across communities hinders the spread of various indigenous techniques and practices. Indigenous knowledge is confined to the specific group that uses it to generate revenues, social status and power in the society (see Medani Mohamed Ahmed, 1994).

Despite the positive features of oral traditions, the transfer and use of information is sometimes open to misinterpretations where it has to be passed on orally and held in the heads of practitioners. It is also very likely that individuals who depend on oral literature may forget information on quantitative data pertaining to their indigenous knowledge systems. As has been stated earlier, indigenous knowledge is not easily accessible and has not been stored in a systematic way.

As has been remarked earlier, negative attitudes towards women have discouraged women from protecting their environment in Oromia. In Oromo culture, women do not have equal status with men; they are excluded from political participation, judicial activities of the people and leadership. Women have never participated in development and environmental decisions. Men have forced women to implement their decisions. Women can only informally participate in political life through songs by praising the character of political and military leaders. "Women who compose such songs often influence the course of elections and the prospects of a lineage winning or holding political office" (Legesse, 2000:255). On the other hand, in most cases, higher education and other benefits are restricted to men. I submit that this attitude has destructive effects on the natural environment.

Moreover, polygamy, which is still common in many parts of Oromia, and the desire to have many children, have aggravated population pressure. They are environmentally negative and need to be changed. It should also be recognised that the misguided reputation for bravery in hunting and the recently introduced indiscriminate hunting practice in some Oromo lands have contributed to the disappearance of wild life.

Further, as Gyekye has noted, in some cases, excessive and undue attention to the ancestors has prevented most African people from questioning the validity of the modes of thought and action of the ancestors. It incapacitated them from "seeing beyond such utterances as 'This is what the ancestors said,' or 'This is what the ancestors did'" (Gyekye, 1997b:257). Some of my informants, including Oromo intellectuals, have not given justifying reasons for some beliefs and practices. They simply say "*aadaadha*" (it is our culture, we inherited it from our ancestors, that is how it has always been done). This type of mentality, as Gyekye has observed, is a barrier to the cultivation of the innovative outlook for making progress in various fields. Although the Oromo *Gadaa* system has contained some negative features, such as attitudes to women, it has been adapting itself to new changes. In any case, negative features of any culture which are environmentally destructive and anti-development should be changed to cope with the requirements of the time. This suggestion should not be regarded as a threat to Oromo indigenous knowledge in so far as changes and adjustment to the new situation are necessary. One may think that I am proposing a conspiracy to destroy the Oromo customs, the integral parts of our cultural heritage. Such an attitude, however, misses the internal dynamics of culture and its capability to evolve

and change. The Oromo culture need not be taken as a dead and permanently fixed entity.

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. Although Oromo ecotheology has had positive environmental impacts, some informants have criticised some *Qaalluu* leaders in many parts of Oromia for trying to exploit the Oromo people. These *Qaalluu* leaders outside Borena try to persuade those in trouble to bring gifts to the spirits. In fact, as Herbert Lewis noted, “[t]roubled people bring cattle, money, food, liquor, grain, clothing, pots, kerosene, and all manner of goods to the spirits” (1970:176). But this may only add to the problems of those in trouble. Further, some *Qaalluu* leaders associate themselves with politicians and help the latter to exploit the people, although the *Qaalluu* does not possess political power.

The foregoing discussion shows that idealising the village communities and their knowledge has more disadvantages than advantages. As Atteh has stated, some of the major constraints in utilising indigenous local knowledge involve unwritten knowledge, changing conditions, location specific aspects (it has been used to solve location-specific and culture specific problems), environmental variation, problems of development and replication, problems of storage and oral transmission (oral means that it is susceptible to a high rate of loss, particularly in the field of history, medicine and theoretical indigenous knowledge), language and culture (the problem of language barriers between local people and outsiders), lack of precise measurement that is replicable, and the negative attitude of elites (1992:25-26).

In this chapter, I have made such observations as the following: that a wide range of factors have threatened the indigenous environmental ethic of various peoples; that Oromo culture is being challenged and killed, and with it, a value system that has sustained a community and an ecosystem for generations; that indigenous environmental knowledge has visible and invisible weaknesses; that the uncritical romanticisation of indigenous environmental knowledge does not help either the people or the natural environment; and that indigenous knowledge needs to be complemented by modern knowledge in order to be more efficient. These observations and others related to them suggest the critical investigation of various practices and thoughts of peasant farmers, pastoralists and indigenous communities throughout the world, and that negative features of each indigenous environmental ethic should be changed in order to help us meet the challenges and problems of today.

Despite the weaknesses of Oromo traditions, I aim to elicit some positive principles, which avoid the weaknesses and embody the core of the indigenous environmental ethic.

CHAPTER XIII

INDIGENOUS ENVIRONMENTAL KNOWLEDGE AND INTELLECTUAL PROPERTY RIGHTS: INTEGRATING TWO SYSTEMS OF INNOVATION

This chapter aims to investigate the basic features of intellectual property rights, and show whether the current intellectual property systems can make space for innovations from the informal sector. It examines the impact of IPRs on indigenous knowledge, and IPRs in Ethiopia. Finally, it will investigate how various organisations and individuals approached the integration of formal and informal innovations. It suggests an alternative way that may better protect the intellectual integrity of peasant farmers and pastoralists, and facilitate the integration of modern and indigenous systems of innovation. As such, it can reasonably be regarded as a contribution to the body of knowledge developed by environmental ethicists, because it argues that the rights of the major contributors to biodiversity conservation and the health of the planet Earth and its inhabitants should be recognised, and they should be beneficiaries of their innovation and discovery.

13.1. INDIGENOUS KNOWLEDGE AND INTELLECTUAL PROPERTY RIGHTS

Originally, the word “property” comes from the Latin word *proprius*, which means “one’s own.” 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 (Markku Oksanen, 2001:137). The most important elements of intellectual property involve copyright, patents and trademarks. Intellectual property also includes industrial designs and confidential information. Patents

Under the present patent law in industrialised countries, indigenous environmental knowledge is assumed to be excluded from the realm of patent law. That means that the discovery of a product of nature, and the knowledge pertaining to it, are not supposed to be patentable, for they lack *invention* and have no identifiable author (see Anthony Stenson and Tim Gray, 1997:190). The resource which comprises the knowledge of indigenous peoples is considered to be common and can be accessed freely.

As Darrell A Posey noted, IPRs are inadequate and inappropriate for protecting traditional ecological knowledge and community resources, for they recognise individual, not collective rights, require a specific act of ‘invention,’ simplify ownership regimes, stimulate commercialisation,

recognise only market values, are subject to economic powers and manipulation, are difficult to monitor and enforce, and are expensive, complicated, and time-consuming (1998:99).

The present intellectual property laws favour new life industries that use biotechnology and other multinational corporations. Industrialised countries introduced Plant Breeders' Rights in the 1960s and 1970s. Member states signed the International Convention for the Protection of New Varieties of Plants (the 'UPOV Convention') in Paris in 1961. It has been revised three times, in 1972, 1978 and 1991 in Geneva. "The 1978 Act entered into force in 1981, and the 1991 Act entered into force in April 1998" (Graham Dutfield, 2000:26). The plant breeders' rights (PBR) system was established in 1961 under the Union for the Protection of New Varieties of Plant. It is one form of intellectual property rights established primarily for plant breeders. Individuals who have developed new varieties of plants are given legal monopolies to exclude others from producing or commercialising material of a specific plant variety for a fixed period of time. "In order to be eligible for PBR, the variety must be novel, distinct from existing varieties, and uniform and stable in its essential characteristics" (Jeroen Van Wijk *et al*, 1993:3; see also Dutfield, 2000:27). UPOV 1978 provides farmers with privileges to use their own harvested material of protected varieties for the next year's planting on their farm without having to pay royalties. Nonetheless, PBR was more limited than patents, and was not favoured by the plant biotechnology industry. This led to the revision of the UPOV Convention in 1991, which rules out farmers' freedom to save seed for the next production cycle on their farm. This convention does not allow researchers to save the seed of new protected varieties. The irony is that industries in the "North" developed new varieties from the seeds of the "South" and overlooked the achievements of developing countries' peasant farmers as breeders.

Industrialised countries have used multilateral international trade instruments such as the General Agreement on Tariffs and Trade (GATT) and the World Trade Organisation (WTO) to extend their intellectual property rights regimes to plants, animals and microorganisms (Gurdial Singh Nijar, 1996:75). The General Agreement on Tariffs and Trade (GATT) was established in 1947 by 23 industrialised countries of Europe and North America so as to revive trade after World War Two by avoiding barriers and "distortions" to international trade.

In 1986, about 100 countries launched the Uruguay Round of the GATT negotiations so as to minimise national trade barriers, and to formulate a multilateral agreement on minimum levels of protection for IPR. GATT's Uruguay negotiations

broadened GATT's agenda to include investments, services, and intellectual property rights, and drew attention to the at first obscure goal of eliminating

‘technical’ or ‘nontariff’ barriers to trade (Tom Athanasiou, 1999:499).

Signatory states discussed intellectual property as a trade issue in GATT for the first time. In the past, intellectual property was a national concern. It became an international obligation in the mid-1990s. Accordingly, Intellectual property such as the TRIPS agreement on the Trade Related Aspects of Intellectual Property was included in GATT. The Uruguay Round negotiations were concluded in 1994. The World Trade Organisation (WTO) was established in January 1995 to manage and monitor the GATT agreement.

Genetic engineering has enabled humans to develop new varieties of organisms by transferring genes with desirable qualities to a suitable strain. In particular, some industrialised countries have developed new transgenic organisms from the germ-plasms preserved by peasant farmers and indigenous people for centuries. After minor modifications of the local landraces, which are drought-resistant, insect- and pest-resistant, the plant breeders and germ-plasm collectors consider them as their inventions. Companies that hold international patents for seed varieties ask peasant farmers to pay royalties and buy their own seeds from them. Under intellectual property rights provisions contained in GATT and enforced by the WTO, exchanging seeds is sometimes viewed as an illegal trade practice, although peasant farmers have freely exchanged seeds for generations.

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 favourable to transnational corporations. TRIPs enable corporations to privatise and patent life forms, including plant and other genetic resources of “Third World” countries. Surendra J. Patel remarks that the Uruguay Round of the GATT is the great betrayal by the West (1996:314). TRIMs render illegal certain measures which countries—notably developing countries—have employed so as to encourage TNCs to establish linkages with domestic firms.

But do TRIPs provide benefits and give countries room to set their own course? Or are they totally destructive for developing countries? Although the objectives and interests of trade and TNCs have shaped the notion of TRIPs, some of the articles of the Uruguay Round relating to TRIPs can be used to introduce safeguards to protect the public interest including biodiversity. Article 27, for instance, seems to allow developing countries to protect biodiversity. Under clause 2, it gives rights to countries to exclude from patentability any inventions that are liable to cause serious prejudice to the environment. It states:

[m]embers may exclude from patentability inventions the prevention within their territory of commercial

exploitation of which is necessary to protect 'order public' or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment provided that such exclusion is not made merely because the exploitation is prohibited by their law (quoted in Vandana Shiva *et al*, 1997:153).

It seems that developing countries can adapt their patent laws to this principle and promote and protect their biodiversity. Furthermore, the GATT agreement gives the chance to countries to adopt either a patent or some form of *sui generis* system, or a combination of these for the protection of plant varieties. According to article 27 (3) (b):

[p]arties may exclude from patentability plants and animals other than microorganisms, and essentially biological processes for the production of plants or animals other than non-biological and micro-biological processes. However, parties shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof (quoted in Shiva *et al*, 1997: 153).

Developing countries can opt for various approaches in line with technology policies that are intended to foster access to technology and the promotion of innovation at the national level within the purview of the TRIPs Agreement (see Carlos M. Correa, 2000).

However, some industrialised countries, particularly the US, have been trying to remove the *sui generis* clause in TRIPs by making patents the only form of IPRs available to countries that are signatories to the WTO (SEEDLING, 1998:3; see also Dutfield, 2000:92). It is noteworthy that the US government has used the agreements reached on trade-related intellectual property rights to effectively reverse the Rio position on control of access to biodiversity (Robin Attfield, 1999:144). Far worse, it seems that the present strategy of the US government is to remove article 27.3(b) entirely from TRIPs, in order to avoid restrictions on the patenting of life-forms (see Dutfield, 2000:92).

In short, Western countries and corporations recognise little value in the knowledge of different plants that serve as the bases of plant-based drugs for the pharmaceutical industry. Intellectual property rights serve private interests of foreign enterprises by undermining the attempt to promote self-reliant national development in developing countries. Developing countries are forced to reserve markets for foreigners.

13. 2. INTELLECTUAL PROPERTY RIGHTS IN ETHIOPIA

Intellectual property law is a recent phenomenon in Ethiopia. Until

recently, innovators lacked protection for their works. Assafa Endeshaw reports:

the evolution of IP in Ethiopia goes back over a century. The running thread in this evolution is the recognition of creativity in the area of writings, particularly in manuscripts and poetry, and in the arts, at first this took a social form where creators were either praised or frowned upon (1996:359).

The first Ethiopian laws underlined that the works of creators should not be passed off without giving them credit. Although they were influenced by foreign traditions, the 1957 (Penal) and 1960 (Civil and Commercial) codes outlined laws of copyright, unfair competition and confidentiality.

The transitional government of Ethiopia promulgated the Inventors, Minor Inventions and Industrial Designs in May 1995 in order to encourage local inventive activities by building up national technological capability and promote the transfer and adoption of foreign technology. The implementing regulations were enacted in March 1997. This law of innovation accommodates foreign elements and local improvements. Invention is defined as “an idea of an inventor which permits in practice the solution to a specific problem in the field of technology” (TGE, 1995). It states that someone who wishes to obtain a patent should confirm that his or her invention is new, involves an inventive step and is industrially applicable. These are the requirements which inventors in industrialised countries are required to fulfil to obtain a patent. The patentee has the exclusive right to make, use or otherwise exploit the patented invention to the absolute exclusion of others for the period of the patent. However, the patentee does not have import monopoly rights over the products of the patented invention in Ethiopia.

The document also recognises the moral rights of inventors; inventors have the right to be named in the patent application and the patent, unless in a special written declaration addressed to the commission, he or she indicates that he or she wishes not to be named.

Invention contrary to public order on morality, plant or animal varieties, schemes, rules or methods for playing games or performing commercial and industrial activities and computer programs, discoveries, scientific theories and mathematical methods, methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods practised on the human or animal body and works not protected by copyright are not patentable in Ethiopia.

What is important is that most of the innovative activities in Ethiopia do not satisfy the basic requirements for patentability. Thus, minor inventions are supposed to be protected through a Utility Model Certificate. Unlike a patentable invention, a minor invention is considered to be new if

at the time of the filing of the application, the invention has not been made available to the public or has not been publicly used in Ethiopia. Things not protected by Utility Model Certificate may include changes in the shape, proportions or material of a patented object or of one that is public property, that do not alter the qualities of the object, and the mere replacement of elements in a known combination by other known elements having an equivalent function, which does not thereby produce an improvement in its use or minor inventions that are contrary to public order or morality (TGE, 1995:227). The required degree of novelty for minor inventions is lower than that of patentable inventions. At the same time, the period of protection for a utility model is shorter than for a patent. A utility model certificate is granted for a period of five years. Its terms can be extended for up to five years if the minor invention has worked in Ethiopia. A patent can be granted for an initial period of fifteen years commencing from the filing date of the application for protection, and can be renewed for a further period of five years, provided that the patentee provides evidence that the invention is being exploited in Ethiopia.

What is lacking from this law of innovation is concern for peasant farmers' and pastoralists' innovations. It deals with the modern sector. As it is a direct copy of the law of industrialised countries, it did not recognise the contributions of peasant farmers. In other words, there is no legal protection for the practitioners of indigenous knowledge systems in Ethiopia.

In spite of their cumulative knowledge, peasant farmers and pastoralists receive no payment or appropriate economic incentives in return. Instead, private companies, and foreign and Ethiopian intellectuals freely derive knowledge and resources from peasant farmers, and demand legal protection for this knowledge without acknowledging the many Ethiopian peasant farmers and religious leaders. For instance, Ethiopian research related to the *endod* (soapberry) plant is being patented by the University of Toledo (RAFI, 1994a:7). This plant serves as a shampoo and detergent in Africa. It also kills snails. Moreover, the knowledge base which started with the local communities is being further developed by the Ethiopian scientists to make it more useful. The Ethiopian scientists have confirmed that the solution of *endod* can fertilise the soil (Inf: Melaku Worede).

The United States of America has also exploited farmer-derived Ethiopian barley which is worth 150 million dollars in the United States each year (Jack Ralph Kloppenburg, 1988:168). One gene from a single barley plant taken from Ethiopian peasant farmers by the farmers of USA is resistant to the yellow dwarf virus (Tewolde Berhan Gebre Egziabher and Getachew Mengiste, 1993:7). At present, California's \$160 million annual barley crop is being protected by this variety from yellow dwarf virus (UNEP, 1992). But none of this money is used to support peasant farmers who originally selected, developed, maintained and improved indigenous crop varieties. They did not get any recognition. They do not even know

that this theft is happening elsewhere. US growers have also used sorghum from Ethiopia which is worth 12 million dollars a year (Jack Ralph Kloppenburg, 1988:168). Denmark has also used resistant germ-plasm which came from farmers in North Africa, Ethiopia, and South Asia (Seedling, 1984: 2). “Danish breeders developed barley varieties resistant to powdery mildew in the late sixties thus preventing crop losses amounting to \$200 million in the period 1967-1974” (RAFI, 1994a: 6). *Teff*, the indigenous Ethiopian plant, was taken from Dese area (Northern Ethiopia) and grown for one season in the US. It is being patented by the *Teff* Company of the America in USA. Moreover, some scientists from the University of Western Australia have managed to collect a large number of samples of legumes covering peas, faba beans, lathyrus and lentils as well as root nodules from some of the most acid soil sites in Ethiopia (see CLIMA, 1998).

The evidence, thus, shows that peasant farmers and pastoralists in Ethiopia have not benefited from the current global economic activity. They are left out of it. Their knowledge has been undermined by the globalisation processes.

What has been discussed so far indicates that there is weak intellectual property protection in Ethiopia. This is not exceptional to Ethiopia. IPR standards are weaker in developing countries than in developed countries. Many developing countries do not favour the patent system, for they think that multinational companies limit technology transfer, and IPR protection deprives them the benefits of new technology. “They have taken the stand that the patent environment has kept their industries from catching up with the industrialised countries” (Wijk *et al*, 1993:14).

Sidney B. Williams (1991), however, argues that breeders/producers, farmers and society in general benefit from intellectual property laws, because these laws promote the innovative process. He asserts that strong patents provide great incentives for the development of new products.

There is no conclusive empirical evidence on the links between stronger IPR regimes in developing countries and “North-South” technology transfer in science-intensive areas such as biotechnology and innovation. It seems that stronger IPRs have both positive and negative effects on technology transfers to developing countries. Although some studies show that there is a positive correlation (for review of some works on this issue see Dutfield, 2000:59), there is an indication that weak IPR protection can hinder investment in and technology transfer to developing countries (see E Mansfield, 1994). On the other hand, evidence from Zimbabwe (Kathryn Stokes, 1998:27) found that weak IPR protection appeared to have no significant effects on the acquisition of proprietary technologies.

The foregoing discussion shows that like other indigenous people in the world, Ethiopian peasant farmers and pastoralists have not been the

beneficiaries of biotechnology and globalisation. There are no IPRs which support inventions in the informal sector. Individual researchers and corporations have tried to patent genetic material developed by generations of peasant farmers in Ethiopia.

13. 3. INTEGRATING TWO SYSTEMS OF INNOVATION

There have been international attempts to address the property rights of indigenous people and peasant farmers, and the possibility of integrating formal and informal innovations. The first United Nations organisation to deal with indigenous issues was the International Labour Organisation (ILO). It established a Committee of experts on Native Labour in 1926 in order to develop international standards for the protection of native workers. Later, a special convention (number 107) known as the Convention concerning the Protection and Integration of Indigenous and other Tribal and Semi-Tribal Populations in Independent Countries was adopted by ILO in 1957. The Convention was revised in June, 1989, as Convention 169, Convention Concerning Indigenous Peoples in Independent Countries. The revised Convention also supports indigenous peoples' rights to land, natural resources, and traditional livelihood activities (see Darrell A. Posey and Graham Dutfield, 1996:117; Marie Battiste and James [Sa'ke'j] Younhood Henderson, 2000:194). It recognises the collective aspects of indigenous people's relationship with the lands or territories.

Moreover, the World Intellectual Property Organisation, the United Nations Economic and Social Council (ECOSOC), UNESCO, and FAO have attempted to call for protection of and just compensation for the intellectual property rights of indigenous and tribal peoples (for details see Posey, 1994; The Crucible Group, 1994; José Esquinas-Alcázar, 1996; Nijar, 1996; Posey and Dutfield, 1996; Battiste and Henderson, 2000). However, the existing international mechanisms have not fully supported the rights of peasant farmers and other indigenous communities in the world. Regrettably, international attempts have not seriously addressed the existing situation, and the Uruguay Round of GATT has failed to make a positive difference.

It is worth noting that many writers praise the collective rights of indigenous people. An interdisciplinary team of experts from the Third World Network, an international group of "Third World" individuals and organisations developed concepts of "collective intellectual property rights" (CIP) in 1993 (Shiva, 1997:80). CIP systems recognise the rights of peasant farmers and thereby enable them to protect the biological and cultural diversity of peasant farmers 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 recognise the value of all knowledge and production systems. Community intellectual rights are supposed to capture the collective and communal nature of the

innovations and rights related to indigenous biodiversity utilisation. Community intellectual property rights acknowledge the creativity of various communities, protect their livelihoods and restrict IPR monopolies (Shiva *et al*, 1997). Community Intellectual Property Rights are designed to oppose the usurpation of seed by multinational companies (Posey and Dutfield, 1996:97).

Moreover, draft model legislation on community rights and access to biological resources was developed by the Scientific, Technical and Research Commission of the Organisation of African Unity (OAU/STRC) task force in 1998. Article 5 of the draft characterised local communities as “the lawful and sole custodians of the relevant knowledge, innovations and practices,” and the state is required to

recognize and protect the rights of the local communities to collectively benefit from their knowledge, innovation and practices ... and to receive compensation for the conservation of biological and genetic resources.

The draft also stresses that communities should have the right to decide on access to their knowledge, technologies and resources.

As this chapter has shown, under conventional IPR systems, only inventions that can be dated and attributed to an individual or small group of people can be patentable. Conventional IPR systems are designed to encourage innovation by allowing the innovator monopoly control of commercial applications. Accordingly, the current IPR law does not protect the rights of indigenous people and peasant farmers. Ethiopia and other developing countries do not have appropriate laws to recognise and reward informal innovators. Some writers and organisations who suggest the protection of community intellectual rights and collective rights do not seem to acknowledge the existence of autonomous and independent innovation by individuals within communities either, although their position is much better than the proponents of conventional IPRs. As has been shown earlier, there are independent thinkers and innovators in the informal sector. As a matter of fact, not all indigenous knowledge should be treated as communal and collective property.

I would suggest that if the people of 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, modified and changed in favour of the protection of all forms of knowledge. As many writers have persuasively argued, the patenting of biodiversity resources will not only undermine communities’ control over food production and access to land and food, but also the ability of developing countries to feed themselves and sustain the global food supply. Further, the patenting of life-forms in developing countries will end the source of seed acquisition.

As Posey and Dutfield (1996) convincingly suggested, we should go beyond the present intellectual property regimes. The principles of the present IPRs protection should be fundamentally changed in order to recognise and promote formal and informal innovations. IPRs that recognise the rights of peasant farmers, pastoralists, indigenous people and people in industrialised countries too should be instituted. Peasant farmers should be rewarded for their collective and cumulative innovation. The rights of both a whole community and individual innovators should be recognised and protected. Communities' informed consent, which has been given due attention by Biodiversity Convention, should be instituted to avoid the marginalisation of peasant farmers and pastoralists. We need to oppose the new enclosures of the knowledge and skills of farming and indigenous peoples and of biodiversity. This may mean the negation of TRIPs, which demand monopoly rights and the privatisation of biodiversity.

Adopting any of a range of some ethical theories (even though most ethicists are not concerned with the subject of indigenous knowledge) could defend the rights of the majority of indigenous people, pastoralists and peasant farmers to their resources, knowledge and innovations. Among the eligible theories, consequentialism may best support the causes of indigenous people, pastoralists and peasant farmers, although I am aware that consequentialism alone is not sufficient to address their rights. Unlike the other theories, consequentialism stresses that all foreseeable impacts upon the well-being of current and future bearers of moral standing should be given attention, irrespective of their country, gender or species (see Attfield, 1999). Indeed, it really would help countries to pay attention to the knowledge and needs of the majority of the people and preserve ecosystems and habitats, something that consequentialism readily upholds. The present intellectual property system is at variance with this principle because it promotes the well-being of the smallest number of individuals and transnational corporations at the expense of peasant farmers, pastoralists and indigenous people in the world. Thus, although the consequentialist principle has its own problems in the sense that it might be used to defend an act performed from evil motives which can result in a balance of pleasure over pain, nevertheless, formal and informal innovators could benefit if they pay attention to the well-being of all concerned, as consequentialism would again suggest. In other words, they can make positive practical difference. In any case, whatever our fundamental theory may be, we need a principle affirming the view that peasant farmers and pastoralists should benefit from their own inventions and discoveries too. They should be consulted before using their knowledge and resources. Certainly, most of the basic theories of ethics (for instance, rights based theory, contractarianism, and Kantian deontology) will support the rights of human beings to be beneficiaries of their own inventions.

However, conventions and moral principles, without appropriate enforcement agencies internationally and nationally, will not effect change.

A strong national and international legal framework is required to protect biodiversity and people's intellectual heritage.

By and large, a creative relationship between modern and indigenous community systems is imperative; it will help control the rate of biodiversity loss and increase production. Community innovators, with their intimate knowledge of the environment, can help scientists to understand rural realities, whereas scientists can help the former to understand the realities of the present complex world. All the concerned parties should be ethically bound to respect the contribution of each group to the common good.

CHAPTER XIV

INDIGENOUS AND MODERN ENVIRONMENTAL ETHICS: TOWARDS PARTNERSHIP

This chapter will build upon the analysis carried out in the previous chapters. It examines current debates in modern environmental ethics, and the possibility of integrating indigenous and modern environmental ethics. The chapter is divided into four sections. The first section begins by addressing the question of whether the Western tradition has contributed positively to environmental issues. Subsequently, it examines current debates in modern environmental ethics. Section two explores how modern environmental ethicists can derive lessons from indigenous environmental ethics. Section three outlines the degree to which peasant farmers and pastoralists can benefit from the knowledge of environmental ethicists and theorists. Section four deals with the way forward. It highlights the need to reexamine the present situation. The upshot of this chapter is that indigenous and modern environmental ethics both have something to teach as well as something to learn.

14.1. CURRENT DEBATES IN MODERN ENVIRONMENTAL ETHICS

14.1.1 Anthropocentric and Non-Anthropocentric Environmental Ethics

As has been shown in the review of the literature, various Western writers have developed various conceptual issues that have played a central role in much subsequent discussion of environmental and ecological questions. Some writers have suggested that advocates of an environmental ethic can benefit from some Western traditions (see Robin Attfield, 1994:62). John Passmore has pointed out that the existence of various attitudes towards the natural world in the West is important “because it means that there are ‘seeds’ in the Western tradition which the reformer can hope to bring into full flower” (1974:40).

On the other hand, almost all of my environmental theorist informants (see Appendix Three VI) have pointed out that detailed knowledge of various Western traditions is necessary to evaluate their environmental records. They, however, agree that in most cases, Western moral traditions have been human-based and have not sufficiently considered nonhuman creatures, let alone more general questions about the natural environment. In fact, they noted that a range of Western writers have written about the natural environment, from which contemporary

environmental ethicists can learn a lot. Some informants have underlined that it may be difficult to support the view that Christianity has been responsible for Western environmental problems because there is no such a thing as a unified Christianity. There are Christian traditions which have emphasised the human domination of nature. There are also Christian traditions which have emphasised human unity with nature. There is not an overall Christian view (Inf: Belsey). So, my informants have reflected the two conflicting attitudes towards the natural environment outlined in the foregoing discussion. For some informants, environmental ethics may rely on some aspects of Western traditions only.

Although many Western scholars have tried to show the value of the natural environment, Aldo Leopold in 1949 proposed an extension of ethics to cover the living systems of the Earth. He states that the land ethic affirms the right of different species to continued existence in a natural state. Human beings should change their role as conquerors of the land community and respect their fellow members, and also have respect for the community as such by becoming plain members and citizens of it. His land ethic, thus, "simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively, the land" (1966:219). Leopold extends moral concern to nonhuman animals. His environmental ethic is holistic rather than individualistic. He writes "[a] thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold, 1966:240). What should be remarked here is that as Vernon Pratt (with Jane Howarth and Emily Brady) has argued (2000), persuasively in my view, Leopold and other environmentalists have taken from ecology scientific support for the view that human beings belong to communities that involve all the animals and plants, and the habitats of those animals and plants living in a specific environment.

Although Leopold has enlarged ethics to include the rivers and the soils, as well as the fauna and flora, his vision is local. His Land Ethic does not extend to global warming or to ozone holes. Leopold did not raise any question regarding population explosion, sustainable development, or the relationship between the rich "developed" and the poor "developing" nations" (Holmes Rolston, 199b:131).

However, many philosophers have been influenced by Leopold and began the environmental debate in the 1960s. Subsequently, philosophers have tried to bring the natural environment within the purview of ethics. Environmental ethics appeared as a distinct branch of ethics in the 1970s. It is a critical study of the normative issues and principles relevant to the relationship between human beings and the natural world. It is primarily concerned with how human beings can live responsibly with the natural environment. As J. Baird Callicott observes, "*an environmental ethic would impose limitations on human freedom of action in relationship to non-human natural entities and to nature as a whole*" (emphasis in original, 1994:1). Environmental ethics extends the scope of moral thought beyond

one's community and nation to include all people everywhere, animals and the natural environment (Louis P. Pojman, 2000:VI). As such, it deals with pollution, population control, resource use, food production and distribution, energy production and consumption, the preservation of the wilderness and of species diversity.

There are two main approaches in modern environmental ethics: human-based (anthropocentric) and non-anthropocentric. There are different strands of thought within the two approaches. A detailed study of these strands is beyond the scope of the present study. Many of the works of recent environmental ethicists are listed in the bibliography.

The adherents of these approaches disagree on the question of whether there is value beyond human well-being and interests. Environmental theorists have made a distinction between intrinsic (non-instrumental, non-derivative) and instrumental value. 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. While it may contribute psychological satisfaction to those who observe it, it need not contribute such satisfaction.

Although Callicott is not in agreement with anthropocentrists, he has challenged objectivist notions of intrinsic value. He believes that though nature has a place in human values, there can be no value apart from an evaluator, that all value is as it were in the eye of the beholder. Only human beings are able to give values to the ecosystem (Callicott, 1980:325). For Callicott, intrinsic value is generated with the appearance of the subject-generator. All intrinsic value is grounded in human feelings but is "projected" onto the natural object that "excites" the value. "Intrinsic value ultimately depends upon human valuers." "Value depends upon human sentiments" (Callicott, quoted in Rolston, 1988:113). This is an anthropogenic intrinsic value, which is distinct from the theory of autonomous intrinsic value. "The anthropogenic theory of intrinsic value strains to insist on the subjectivity of value conferral while straining to preserve the object with all its properties" (Rolston, 1988:116).

Rolston argues that natural values exist before humans arrive (1994:196). "When humans come, they find Earth often *valuable*, able to produce *valued experiences*" (emphasis in original, Rolston, 1994:196-197). He believes that nature itself is a value generator, that it began generating intrinsic value independently of humans long before they evolved, and that it continues to do so. The value discovered by humans is already existent in nature.

Besides intrinsic and instrumental value, Rolston recognises the existence of systemic value, a creative potential that steadily becomes actual. The system has fecundity, creativity and is self-organising, although it has no self. Natural history is spontaneously organised by the system which in turn fills that natural history with organismic selves, each also self-organizing (Rolston, 1994:71 and 181).

As Bryan G. Norton (1996) has rightly pointed out, however, Rolston's theory of intrinsic value seems inconsistent. On the one hand, he

maintains that natural value is “emergent,” and that all perception and valuation is relational, that “this marriage of a subject to its object gives birth to value. It enters and exists with awareness” (quoted in Norton, 1996:213). On the other hand, he states that objective natural values are present outside the self and outside culture (1993:412). He thus believes that “intrinsic natural value recognizes value inherent in some natural occasions, without contributory human reference” (quoted in Norton, 1996:212).

A thing is of instrumental value according to writers such as Andrew Brennan (1992) and Rolston (1988), if it serves as a means to some other ends. It contributes to further interest satisfactions.

However, Christine M. Korsgaard (1983) argues that the theory that opposes intrinsic to instrumental value and equates intrinsic value with value of ends restricts the possibilities open to us in serious ways.

If all extrinsic value is instrumental value, then the only option is that the activity is a *means* to pleasure. Now if the two distinctions are not equated, there is room for some other sorts of accounts of extrinsic value, and one may not be forced to this conclusion (emphasis in original, Korsgaard, 1983:172).

According to Korsgaard, the value a thing has in itself is intrinsic goodness, whereas the value a thing gets from some other source is extrinsic goodness. Accordingly, based on the Kantian theory of goodness, Korsgaard states that there are two distinctions in goodness that are quite separate, namely the distinction between things valued for their own sake and things valued for the sake of something else—between ends and means, or final and instrumental goods, and the distinction between things which have their value in themselves and things which derive their value from some other source: intrinsically good things versus extrinsically good things. The distinction between intrinsic and extrinsic goodness refers to the value of a thing either because of its nature or because of something else. “To say that something is intrinsically good,” she says, “is to say that it has goodness in itself” but it does not mean that it is valued for its own sake. On the other hand, a thing that is extrinsically good can be valuable as an end. That means, a thing can be valued as an end although it is not valuable intrinsically.

Extrinsic value is not found in the object itself and it does not have instrumental value either. Consider the following example: Ms. Y got the snowflake. How is this snowflake valuable? The crystal snowflake is not valuable because it is useful for Ms. Y. It does not have instrumental and intrinsic value. It is not a very fine artistic crystal. The crystal snowflake is valuable to Ms. Y, because it is a souvenir. It gives her memories of her grandmother and father. Thus, Ms. Y assigned value to the crystal

snowflake that is not found in the crystal snowflake. This value comes from the outside. Philosophers consider such thing as an extrinsic value.

John O'Neill (1992) for his part noted that some writers commit the fallacy of equivocation by interchangeably using the concept "intrinsic value" in different senses, sometimes as a synonym for non-instrumental value, other times in G E Moore's (cited in O'Neill, 1992) sense—as something that refers to the value an object has solely in virtue of its "intrinsic properties" and still at other times as a synonym for "objective value," i.e., value that an object possesses independently of the valuations of valuers.

A thing that serves as a means to some other value may also be of value in its own right. In other words, the same thing can have both intrinsic and instrumental value. Thus, as Brennan noted, the categories of instrumental and intrinsic value are not exclusive (1992). The distinction between intrinsic and instrumental value cannot be removed owing to the possibility that both can be present together (Attfield, 1995:30).

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 only.

In contrast to human-based ethics, non-anthropocentric ethics stresses that things apart from human beings should be the proper subjects of moral concern as well as human welfare. It challenges the existing value categories and moral analysis. Some environmental ethicists contend that some nonhuman animals, at least those with the neurophysiological capacity for experiencing well-being and its opposite, must be the subjects of moral concern. They do not consider species membership a criterion of difference between individuals; in other words, they ignore the usual basis for moral concern. They recognise that environmental modification can affect the well-being of both humans and nonhuman animals. As has been stated in the foregoing discussion, Tom Regan (1983) is the defender of animal rights. Peter Singer (1993) also emphasises the well-being of individual sentient animals.

Although this position challenged human chauvinism, some environmental ethicists consider it unjustifiable chauvinism. For them, psychological capacities should not be taken into account exclusively so as to consider the moral status of animals to the exclusion of all other beings.

They extend value to all life forms. Paul Taylor (1981, 1986) proposes a "biocentric" view of reality where the outer layer of moral considerability is to be judged by a thing's ability to possess a good-of-its-own. Objects' capability to be harmed or benefited indicates that they have a good-of-their-own. Taylor and other biocentric egalitarians also argue that all living creatures have equal inherent worth irrespective of differing capacities (such as sentience and intelligence). Belief in degrees of significance is regarded as discriminatory and arbitrary. Taylor has adopted an individualistic, life-centred ethic. He argues that human beings and all

living things must be valued on equal grounds, since every living thing is pursuing its own good in its own unique way. Biocentrism thus respects life, with the focus on any and all living beings. Attfield can also be regarded as a biocentrist. He recognises the moral standing of all living creatures (see Attfield, 1991 and 1994). In this view, to harm any living thing is to impede its natural flourishing. Accordingly, “biocentrists claim that environmental ethics is not merely an affair of psychology, but of biology” (Rolston, 1999a:414). Some biocentrists, including Taylor, claim that the extension of our duties to respect other living things is supported by the biological conception of life and the evolutionary origins we have in common with living things in general (for details see Pratt, 2000:100-118).

Other environmental ethicists have suggested an extension beyond living things. Their ethical system is known as ecocentrism, for they extend value to entire ecosystems. Rolston (1988) argues that individual animals, species, and ecosystems all have their own kind of intrinsic value and merit appropriate respect. In his view, the aim of environmental ethics should be the investigation of both wild nature and culture-bound nature. For Rolston, until one has a concept of nature, no education is complete. In the same way, until one has an appropriate respect for fauna, flora, landscapes, and ecosystems, no ethics is complete (1988:192).

He thus suggests that humans are required to recognise the value of nonhumans outside themselves. “Nevertheless, humans are of the utmost value in the sense that they are the ecosystem’s most sophisticated product” (Rolston, 1988:73). He persuasively maintains that besides self-actualisation and their central nervous systems, humans are superior in loving the other, perhaps even as themselves. “The animal takes a gastrocentric view (centering on food), a self centered view (protecting its own life), a species-centered view (propagating its kind), but humans can take something more than an anthropocentric view” (1988:72).

Rolston further suggests that humans ought to follow nature because they are the only creatures that have the appreciative respect for the system and for others in the system beyond themselves. They are privileged resource users and respondents to the natural world (1988:78). He advises people to think of nature as a community first, a commodity second (1988:310).

14.1.2. Alternative Approaches

14.1.2.1. Deep Ecology

Radical ecologists, such as deep ecologists, contend that all beings, processes and systems possess value independent of human beings. They argue that nature is a living web that has its own purpose and meaning. They intend to foster a new ecological consciousness and sensibility that recognises humanity as one part of the ecosystem in metaphysical, moral and social terms without overlooking the irreducible individuality of human beings (P.

Marshall, 1995). There are different trends and proposals in radical ecological theories (for enlightening discussions of the basic principles of these theories see Murray Bookchin, 1982; Arne Naess, 1973; J. Clark, 1990; Carolyn Merchant, 1992; Marshall, 1995; George Sessions, 1995).

Deep ecologists have argued that the looming threat of future ecological catastrophe is the consequence of Western anthropocentrism, metaphysical atomism and dualism that rob nature of its inherent value and thereby alienate human consciousness from the natural world which forms its object and out of which it arises. They have advised human beings to replace Western anthropocentrism with biocentric egalitarianism, atomism with relationalism, dualism with non-dualism, and utilitarianism with an attitude of respect and love for all beings so as to preserve a richly variegated complex ecosystem (see Naess, 1973).

Self-realisation and biospherical equality are the two norms of deep ecologists. Self-realisation is possible through identification with the larger Self of the world. It involves the realisation of the “self-in-the Self” where the “Self” stands for organic wholeness. Therefore, like Romanticism it conceives human being as a part of nature (see Pratt, 2000:35). Also, deep ecologists declare that all things have the right to live and have equal intrinsic worth.

Moreover, deep ecologists advocate a simple life style which is supposed to be helpful in reducing the human impact on other species. They regard modesty and humility as central virtues. Consequently, deep ecologists have proposed that the environmental impact of human beings could be limited by living in mixed communities in bioregions. Bioregionalism, they argue, begins by acting responsibly at home, and helps us to protect our local environment and culture. Watershed, spirit of place or cultural identity can be used to define a bioregion (see Marshall, 1995:417).

In line with Native American philosophy and the Eastern traditions, deep ecologists have tried to explain the importance of sustainable development. They suggest that to realise sustainable development, industrial activities on Earth should be reduced, consumption lifestyles should be changed, the size of the human population should be stabilised, and wild ecosystems should be restored and protected. According to Naess, sustainable development does not merely reflect the protection of special spectacular items—pandas, wolves, 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; Andrew McLaughlin, 1995:89). Deep ecologists see the size of the human population as a problem and call for the reduction of the number of people. Naess criticised the so-called Brundtland Commission Report (1987), for

not taking the population issue seriously. He thinks that without subsequent population reduction, sustainable future development is impossible (Naess, 1990:92-93; see also Brian Tokar, 1988:135; McLaughlin, 1995:88). Deep ecologists also argue that recycling, appropriate technology and renewable sources of energy must be used by human beings in order to minimise the destruction of non-renewable limited resources.

14.1.2.2. Social Ecology

Social ecologists such as Murray Bookchin (1982) have challenged traditional development approaches. They argue that social evolution is an extension of biological evolution. According to Bookchin, natural evolution has provided humans the ability and necessity “to be purposive interveners into ‘first nature,’ [the natural world] to consciously change ‘first nature’ by means of a highly institutionalized form of community we call ‘society’” (1994:237). Furthermore, social ecologists argue that environmental problems are the result of social development and can only be solved by social and political measures. Ecological crisis is not merely caused by unchecked technology, industrial growth or overpopulation. The institutionalisation of domination and hierarchy in human society are more responsible for ecological crisis. The very real domination of human by human is the source of the domination of nature by man (Bookchin, 1982:1).

Social ecologists further comment that traditional development approaches 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 has led to the breakdown of local community and its subjugation to the culture of domination (see Daniel Chodorkoff, 1990:72 and 73).

Social ecologists argue that the relation of humans with the rest of nature can be changed through the attainment of harmony and balance within society. They therefore call for the creation of a genuinely decentralised ecological society and the development of an ecological sensibility that deeply respects the natural world and the creative thrust of natural evolution. They call on local communities to become more self-reliant on the basis of their own indigenous resources and talents. Self-reliance promotes interdependence among the communities, a sustainable ethos in the realms of production and consumption, decentralisation in the political sphere, and healthy respect for diversity. Accordingly, social ecologists suggest that an ecologically sustainable and locally self-reliant society could be developed through decentralisation and community scaled technologies (see Chodorkoff, 1990:74-75).

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 favours spectacular animals over people. For instance, Ramachandra

Guha argues that deep ecology's conclusion that intervention in nature should be guided primarily by the need to preserve biotic integrity rather than by the needs of humans is not acceptable. The setting aside of wilderness areas in countries like India favours the rich at the expense of the poor (1989). He underscores 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 1989).

David M Johns (1990), on the other hand, charges that Guha is partly wrong in claiming that deep ecology equates environmental protection with wilderness, because deep ecology recognises the place of humans in nature.

Naess (1995a) also claims 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 wilderness is not the single goal of deep ecologists, the conclusion is hard to avoid that deep ecologists have paid much more attention to wilderness than to human communities. The segregation of the local population from the land without solving their problems is to be deprecated. Deep ecologists do not question the political basis of industrialised societies. Likewise, 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 (W M Adams, 1990). Deep ecologists have not clearly shown 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 future generations are unthinkable without the survival of the present generation.

Social ecologists rightly suggest that decentralisation of power, where real authority and resources devolve 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 in itself, but the proposals of social ecologists do not seem to go beyond theoretical speculation in a world that is dominated by powerful capitalist countries and transnational corporations.

14.1.2.3. Ecofeminism

Feminist writers have developed a theoretical line that sees critical links between the domination of nature and the exploitation of women. The French Feminist writer Françoise d'Eaubonne coined the term "ecofeminism" in 1974. In its early days, ecofeminism promised to expose and challenge dominant power structures in all spheres of experience.

In recent years, ecofeminism has become a diversified and decentralised social movement in which both men and women play important roles. Women's Environmental Network (WEN) in Britain and the Women's Pentagon Action in USA are the two best examples of this promising trend in ecofeminism. While the former has endeavoured to analyse the life cycle of products by investigating the social and environmental costs, the latter was organised in 1980 and 1981 by participants of the conference on "Women and Life on Earth: Ecofeminism in the 1980s," and since then, has engaged in the struggle against the arms race, and exploitation of resources, people and the environment (R. Braidotti *et al*, 1994:161-62).

There is a good deal of theoretical difference among ecofeminists. Merchant has shown the basic principles of liberal, cultural, social, and socialist ecofeminism (1992:184-200). Following Val Plumwood, one of the leaders of ecofeminism, Braidotti *et al*, (1994) for their part have argued that there are two distinct streams within ecofeminism: cultural/nature ecofeminism and social ecofeminism. On the other hand, Andrew Dobson (1995) has outlined the basic difference between what he calls "difference" ecofeminism and "deconstructive" ecofeminism. This suggests that it is not an easy task to make a clear distinction between various ecofeminists. Even within one group there are different strands. In what follows, I briefly examine the central ideas of some ecofeminists.

According to Dobson, "difference" ecofeminism is based on three sets of thoughts. Firstly, some ecofeminists in this group believe that there are female values and ways of behaving distinct from male values. Learning early to observe, attend and nurture; belonging; relationship; letting be; empathy; caring; and other characteristics are attributed to women. On the other side, they identify what they call harmful male values such as discrimination, domination and hierarchy, and disregard for the house keeping requirements of nature. If all of us, they argue, were to adopt the positive values of women, the planet would be better off (Dobson, 1995:86-190). I agree with Dobson and some ecofeminists, including Plumwood, that it would be very difficult to assert and upgrade "female" values, for some men exhibit "female" characteristics and some women, male characteristics. The identification of male and female values involves practical problems.

Plumwood and other ecofeminists have rejected the idea of accepting the feminine and rejecting the masculine. Plumwood argues that women are required to be treated as just as fully human and as fully part of human culture as men.

The second group in “difference” ecofeminism sees similarities between the domination of nature by men and the domination of women by men. Dobson contends that two forms of this link can be identified: weak and strong. The weak link is based on patriarchy as the source of domination. In the West, the logic of domination conveys that men are superior to women, and humans are superior to rocks. For many ecofeminists, women and nature have been the two objects of patriarchal domination. Karren J. Warren and other ecofeminists argue that all environmentalists and feminists should seriously consider the interconnection between the domination of women and the domination of nature. Concerning the strong link, most ecofeminists argue that women and nature have been considered as irrational, uncertain, more chaotic, more mysterious in motivation, more emotional, more moist, more polluted and hard to control (J. Biehl, cited in Dobson, 1995:192-93).

The third tendency in “difference” ecofeminism has been taken up by those ecofeminists who believe that compared to men, women are closer to nature and far more responsible for environmental protection. They appeal to biology to justify their position. They argue that the reproductive cycle shows the close connection between women and nature. They further emphasise that the Earth is the source and fount of life. Therefore, ecofeminists declare that women are best placed to provide role models for environmentally sensitive behaviours, for they are closer to nature than men (see Dobson, 1995:194).

Some ecofeminists have approached environmental issues from the “Southern” perspective. Kumar D'Souza endeavoured to reconcile ecofeminism and socialism by criticising her own male-centred culture and the Western patriarchal society. She suggests that the experience of the hitherto excluded “Southern” people from the dominant scientific patriarchal knowledge systems can serve as the new epistemological framework. Therefore, the plurality of different cultures and traditions should be respected if we are to transform the existing exploitative social order (D'Souza, cited in Braidotti *et al*, 1994:165).

Similarly, Vandana Shiva (1994) is critical of Western development in the so-called “Third World” countries. Shiva characterises Western-type development as “maldevelopment,” a development bereft of the feminine, the conservation, and the ecological principle. According to Shiva, the oldest forms of oppression—gender subordination and patriarchy—have been exacerbated by the project of development which destroyed women's productivity and the natural resource base for the production of sustenance and survival. Therefore, “maldevelopment” is a fragmented, reductionist, and dualist approach undermining the integrity and the harmony of man in nature and the harmony between man and women. It places man above nature and women and separated from both. As a result, nature and women have been considered as resources for the use of alienated man. Shiva further argues that women have been severely affected by the poverty crisis of the “South” which is caused by destruction of scarce resources by Western development “first because they are the poorest among the poor, and then because, with nature, they are the primary sustainers of society” (Shiva, 1994:283).

Shiva reminds her readers that the proponents of Western development consider all activities that do not produce profits and capital as non-productive or unproductive activities. They believe that maximisation of profits and capital accumulation are the principles of natural resource use. Accordingly, they use market mechanisms to manage nature and human needs (Shiva, 1994).

Shiva suggests that the patriarchal foundations of “maldevelopment” can be transcended and transformed through the recovery of the feminine principle as the basis for development which conserves and is ecological.

More recently, some feminist writers have brought feminist claims into the realm of established religions, and promote spiritual ecofeminism. “They questioned male power in religious institutions, sexist teachings about gender relationships and exclusively male images of divinity” (Roger S. Gottlieb, 1996:320).

In spite of the variety of interests and approaches among ecofeminists, most of them agree on one point: patriarchy is the root cause of exploitation and the environmental crisis. They maintain that patriarchal society was based on “four interlocking pillars: sexism, racism, class exploitation and ecological destruction” (Marshall, 1995:409).

The majority of ecofeminists are right when they criticise hierarchy and power relations in modern societies. These factors are partly responsible for the many difficulties we presently face because of the often unrestricted use of technology and resources.

Some ecofeminists, however, do not seem to provide strong reasons in support of their thesis. There is little or no evidence to suggest that there is any necessary connection between the domination of women and the domination of nature. It is true that some societies such as the American Indians, the Oromo of Ethiopia and others believe that to mistreat any aspect of the biosphere is to mistreat ourselves. But this reverence for nature does not rule out the domination of women by men. Bookchin (1994:231) reports that although the Nile river was used in a highly ecological manner, Egypt was one of the most hierarchical and oppressive societies in the ancient world.

14.1.3. Reconciliation of Anthropocentrists and Non-anthropocentrists

James Sterba (1994) has tried to show that anthropocentrists and non-anthropocentrists can be reconciled if they accept the exact same principles of environmental justice. Sterba says that his reconciliation project is different from that of Bryan G. Norton (1991) who seeks to achieve reconciliation at the level of practical policies. Sterba makes clear that his project seeks reconciliation at the level of general principles as well. Unlike Norton’s reconciliation project, his project does not intend to exclude deep ecologists, like George Sessions, and biocentric egalitarians, like Paul Taylor, from the class of environmentalists.

Non-anthropocentrists stress that both humans and nonhumans have distinctive traits that may not be common to them. Sterba believes that humans are equal to other living things. But humans have a priority which can be justified. The first principle is, thus: A Principle of Human Defence: Actions that defend oneself and other human beings against harmful aggression are permissible even when they necessitate killing or harming animals or plants (Sterba, 1994:231). Another reason which can be used to justify human preference is preservation. Thus, the second principle is: A Principle of Human Preservation: Actions that are necessary for meeting one's basic needs or the basic needs of other human beings are permissible even when they require aggressing against the basic needs of humans and plants. This principle involves two possibilities. On the one hand, we can be allowed to aggress against the basic needs of both humans and nonhumans if it can serve our own basic needs or the basic needs of other human beings. On the other hand, whenever it serves our own basic needs or the basic needs of other human beings, we would be allowed to aggress against the basic needs of only nonhumans. According to Sterba,

this degree of preference for our species is still compatible with the equality of all species because favouring the members of one's own species to this extent is characteristic of the members of all species with which we interact and is thereby legitimated (1994:232).

Sterba further proclaims that preference for humans can go beyond bounds; that involves A Principle of Disproportionality: Actions that meet non-basic or luxury needs of humans are prohibited when they aggress against the basic needs of animals and plants (1944:232). We can change our way of life and justify the view that the members of all species are equal, said Sterba, if we adopt this principle. It would be wrong for humans to satisfy non-basic needs by aggressing against the basic needs of some animals or plants. Sterba remarks that if people's basic needs are not at stake, we can depend on holistic reasons to ensure the prevention of harm to a species, an ecosystem, or the whole biotic community.

Sterba said that although we adopt the view that humans are superior to other species, we are required to support a principle of human defence which is favoured by a non-anthropocentric perspective in order to defend our selves from harmful aggression. A principle of human preservation is also needed to meet our basic needs or the basic needs of other human beings, even at the expense of the basic needs of animals and plants. Sterba further argues that the claim that humans are superior to the members of other species implies that members of the latter are "intrinsically valuable, although not as intrinsically valuable as humans" (1994:237). Any claim of human superiority should also recognise the fact that many animals are superior to humans in various ways. Sterba suggests that both anthropocentrists and non-anthropocentrists should favour a

Principle of Human Defence, a Principle of Human Preservation, and a Principle of Disproportionality, for these “three principles strike the right balance between concerns of human welfare and the welfare of nonhuman nature” (1994:241).

Brian K. Steverson, however, argues that Sterba is not successful. He argues that they cannot totally agree, for example, on what Sterba calls the Principle of Human Preservation. It is not clear whether non-anthropocentrists must accept or even should prefer this principle. Although the anthropocentrist position can favour this principle, “it may fall short of making commitment to that principle absolutely obligatory” (Steverson, 1996:353). Steverson thus states that the existence of such a difference in strength of commitment between the two perspectives can be one of the reasons to question the extent to which reconciliation has been achieved (1996:353). Underestimation of the divergence that exists at the level of general principles and practical policy, as a result of the initial value commitments, shows the failure of theoretical “reconciliation” or convergence suggested by Sterba.

Sterba (1996) has tried to clarify the requirements that follow from his principles of environmental justice in his reply to Steverson’s objections to his view. He argues that the limitation of the scope of application of the Principle of Nonhuman Preservation seems defensible from both a non-anthropocentric and an anthropocentric perspective. He writes,

it would be permissible for humans to aggress against their own basic needs, (i.e., sacrifice them) in order to meet the basic needs of nonhumans, but not permissible for humans to aggress against the basic needs of other humans for that purpose (1996:365).

He thinks that this supports his reconciliationist argument.

I am of the opinion that although the two groups may not have exactly the same attitudes towards the principles which have been enumerated by Sterba, they can work together and influence people to maintain a positive relationship with the natural environment. They have to reconsider some of their principles, which may stand against cooperation. It would be incorrect to suggest that unless one group defeats the other, the two groups cannot contribute to the protection of the natural environment. In fact, it is very unlikely that some groups which uncompromisingly defend their respective positions against others could make peace with their opponents by changing their original position. (Indeed, some are defending the capitalist system which has been destroying the global environment, and may think that change of position may contribute to the collapse of the system which in turn affects their personal life.)

Although environmental ethics has become popular among many philosophers, Janna Thompson (1990) attempted to refute it by indicating that it fails to meet her criteria for ethics: consistence, non-vacuity, and

decidability. For her, it is a “dead end,” “an unnecessary diversion,” “not properly ethics at all.” She argues that an ethical system must not be arbitrary and must not allow that all individuals or systems are of equal value. Ethics must be able to dictate what is of value and what is not in order to solve ethical dilemmas (Thompson, 1990). She proposes to limit moral considerability to beings with a “point of view.”

I believe that an ethic which takes individuals who have a point of view (i.e., that are centers of consciousness) as having intrinsic value—an ethic which supports the satisfaction of the interests, needs and preferences of those individuals—is such an ethic. The fact that individuals have a point of view, and can therefore be caused anguish, frustration, pleasure, or joy as the result of what we do, is one good reason for valuing such individuals and requiring that their interests and preferences be a matter of moral concern to all rational, morally sensitive agents (Thompson, 1990:159).

But Thompson does not tell us why having a point of view is morally relevant. Michael P Nelson states that “her criterion of moral consideration is no less arbitrary than those of the ethical systems she previously dismissed” (1993:244; see also Attfield, 1991:205-207). Nelson further argues that because Thompson’s point of view centred ethic does not take the biotic community as a whole into account, it is incapable of addressing many of the problems of the ‘environmental crisis,’ with which environmental ethicists are concerned (1993:253). Contrary to basic evolutionary and ecological biology, Thompson’s ethic segregates human and other beings with a point of view from the rest of the natural world (Nelson, 1993:250). Thus, Thompson’s rejection of environmental ethics is unlikely to be accepted. Many writers have already defended the importance of environmental ethics long before Thompson’s article (see Richard Routley, 1973; Evelyn B. Pluhar, 1983). Environmental ethics is a living subject that underlines the links between humans and the natural environment.

What has been stated has revealed that there are various lines of thought, and it is sometimes difficult to label various environmental ethicists as purely anthropocentrists or non-anthropocentrists. I suggest that the dialogue among environmental ethicists and other theorists can influence human beings to reconsider their relationship with the natural environment. Environmental ethicists might encourage people to try to combat the influence of powerful countries and corporations.

14.2. WHAT ENVIRONMENTAL ETHICISTS CAN LEARN FROM INDIGENOUS ENVIRONMENTAL ETHICS

14.2.1 Non-Western Perspectives

In their search for ancestors, some Western and non-Western ecological thinkers have delved into ancient traditions for a model of a harmonious relationship with mother Earth. They aimed to derive conceptual resources for the new environmental ethics. According to Callicott, the gradually emerging environmental consciousness in the West is being shaped by Eastern philosophy (1994:11). Many environmental ethicists have tried to base themselves on non-Western traditions. In particular, 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. For the Hindu, nature “is an expression of the Godhead, not something created but something poured out of the divine essence. As a result it too is ‘good,’ and should be treated with reverence” (Victor Ferkiss, 1993: 135).

Taoists also revere nature. Ancient philosophers conceive Tao as the way of transformation and the fountainhead of all forms of life in the world (Chung-ying Cheng, 1986:352). According to Taoists, “the way to live is according to ... nature and one’s own” (Ferkiss, 1993:140). Accordingly, Chinese Taoism is a mystic teaching and recognises the essential unity of humanity with nature, and the fundamental harmonisation of all things through balancing of *yin* and *yang*. “*Yin* is passive, receptive, close-in, downward, soft, resting, and background-like, whereas *yang* is active, creative, open-ended, upward, firm, moving, and foreground-like” (Cheng, 1986:364). Cheng stresses that man is considered as the consummator of nature rather than as the conqueror of nature, as a participant in nature rather than as predator of nature in Chinese philosophy. Man is part of the environment and vice versa; they are interdependent, interacting as well as interpenetrating elements (Cheng, 1986).

Taoism, Buddhism and Hinduism emphasise that humans are linked to the natural environment (see Russell Goodman, 1980; Lily de Silva, 1993; Po-Keung Ip, 1993). de Silva believes that the notion of living in harmony with nature, the aesthetic appreciation of nature, as well as the Buddhist contemplative attitude, may help human beings to promote conservation. Japanese Zen Buddhism influenced the emerging contemporary environmental movement in the mid-twentieth century (Callicott, 1994:11). Although Philip Sarre (1995) inserts the qualification that Hinduism and Buddhism seem to be ineffective in a society compelled by mass poverty to pursue economic growth and technological development, they have values which are consistent with environmentalism. Cheng (1986) and Ip (1993) argue 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 recognises the intrinsic values of the natural environment.

It is worth noting that the Chinese radical thinker from the third century BC, Hsün Tzu, argued that humans have to act upon nature and correct it. He raised the following questions to that end:

You glorify Nature and meditate on her:
Why not domesticate her and regulate her?
You depend on things and marvel at them:
Why not unfold your own ability and transform
them? (quoted in Passmore, 1974:26).

Tzu's contribution is a valuable corrective to the view that people should not do any thing to nature. Human beings have to use nature, because they depend on it. If we only say that we should conserve nature, we are likely to promote idealistic picture of possible attitude to nature.

Moreover, some philosophers have appealed to animism. Native Americans have practised animism. The followers of animism regard the natural world as having certain human qualities and containing sacred objects that command respect or worship. For many Native Americans, all of the Earth is sacred. They regard the Earth as a living being, sacred in all her parts. They do not strive to conquer nature but to live in harmony with it. 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 Native American conceives nature as an element in which he exists (N Scott Momaday, 1994). All humans and the nonhuman natural entities possess a consciousness, reason, and 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.

All creatures are believed to be the children of one father and one mother. The bonds of kinship, mutuality, and reciprocity bind our diversified and complex world together. Callicott (1982) maintains that the traditional American Indian attitude toward nature provides foundations for ethical restraint in relation to nonhuman nature. Further, Callicott stresses that

the world view typical of American Indian peoples has included and supported an environmental ethic, while that of Europeans has encouraged human alienation from the natural environment and an exploitative practical relationship with it (1982:293).

Similarly, the Hawaiian people conceive the Earth as the ancestral mother of each person and the sky as father. They believe that to mistreat any aspect of the biosphere, of the extended family, is to mistreat ourselves (D M Dusty Gruver, 1994:304). The Australian Aboriginal peoples also believe that human beings are united with the land and with the other forms of life on the land (see Callicott, 1994:172-184). They think that the natural environment is a sentient being which can communicate with them (see Marcia Langton, 1998).

Likewise, the Maori people in New Zealand conceive the environment as a community of kin rather than as a set of resources to be exploited. For the Maori, "traditional man is kin to the rest of the world" (John Patterson, 1992:23). They believe that everything is linked, more or less directly, to everything else. In the Maori view, all creatures have a life force or *mauri*, which joins them into an interdependent whole and enables them to flourish. Thus, all creatures are seen as both our cousins and our ancestors, and must be treated with respect. According to Patterson (1997a), a Maori philosophy sees all of us as responsible for the well-being of all creatures, through ties of kinship, expressed in traditional genealogies and creation narratives, in which all creatures are descended from Earth and Sky, and in which kin are shown as protecting and enhancing the well-being of each other. The Maori people believe that it would be wrong to treat land as property or an asset, there to be exploited for man's ends because it has an intrinsic value and permanent importance, to be treated always with due respect (Patterson, 1992:50). Everything one wants to use is supposed to have its own *mauri*, has its own life and value, and requires respect. According to Patterson, an holistic Maori perspective, thus, helps us to see humans as not being the only creatures with values. He (1994) contends that the Maori traditions can be considered as symbolic representations of an ecological principle. As Patterson (1997b) persuasively noted, although we cannot always treat all creatures like the Maori or other cultural groups, the ideal of kinship responsibility points us in a fruitful direction even when we cannot follow it.

Similar to other indigenous groups, the Kuna people of northeast Panama symbolise the Earth as mother, for it gives the inhabitants all the necessary resources for their existence and survival. They have designated some places, which are the sources of a great biodiversity of species of plants and animals, as sacred places. They believe that life and nature are interrelated (see Enrique Inatoy, 1995).

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. Yi-Fu Tuan (1968), for instance, doubts whether attitude and values determine behaviour. He says that Western humanists appreciate the virtues of Orientals' quiescent and adaptive approach towards nature. In China, the philosophical-ethical precepts of Taoism and later, Buddhism, served as the basis for an adaptive attitude towards nature. Although Tuan recognised that old traditions of forest care existed in China,

he lamented that both Mediterranean Europe and China have engaged in a gigantic transformation of the environment that has led to deforestation and erosion. Forests were depleted for the making of charcoal, for export and for the construction of old Chinese cities, and to deprive dangerous animals of 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 behaviour and attitude. In other words, what people think is less closely related to how people live than we usually assume (Tuan, 1968:188).

In contrast to Tuan, Callicott argues that the environmental impact of Greek and Roman civilisation was consistent with the general thesis that world view substantially affects behaviour.

I share the view held by J Baird Callicott and Roger T Ames that “[b]ehaviour does not flow exclusively from attitude and values; but neither are attitudes and values simply irrelevant to what people do and how they live” (1989:285). Callicott and Ames seem to argue that the present environmental crisis had its roots in both Eastern and Western civilisations. It is based on the common substrata of human nature itself (1989:282). Ferkiss also states that both the Chinese and Native Americans mistreated nature as much as the Westerners, notwithstanding their theoretical respect for nature (1993:141).

Some studies also show that the Maori prior to European contact depleted various species of terrestrial and maritime fauna. They also destroyed large areas of native forests by overburning (see Roy W Perrett, 1998).

Kent H. Redford has also pointed out that evidence of vast fires in the northern Amazonian forests and of apparently anthropogenic origins of large areas of forest in eastern Amazonia indicates that native inhabitants have had a considerable impact on the tropical forests before European contact (1990:27). Having explained the extent to which Native American Indians affected the environment, Redford (1990) expressed his doubt about the soundness of the views of some writers who have praised the knowledge of indigenous people.

Rolston, however, argues that the influence of Native American on the landscape is low. He writes:

the proportion of human space and influence to the world space and natural processes was low, when they had only the muscles of arm and foot to employ, as well as less knowledge and perhaps desire than we for the radical alteration of landscape (1994:188).

Although they use fire that extensively modifies landscapes, he says, fire is quite natural in America.

Redford states that indigenous techniques which are developed in response to subsistence needs are ineffective when surpluses are needed for cash (1990:29). In fact, he acknowledged that indigenous knowledge offers fascinating insights of ecological value, and occasionally offers methods that can be used by inhabitants in the modern Neotropics. However, he does not seem to believe that it has any relevance to capitalist countries. He seems to assert that modern and indigenous systems are incompatible. However, the evidence suggests that modern systems can derive benefit from the indigenous systems.

One also 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. Shinto is a form of nature worship and related to the concept of *Kami*, sacred spirits that are believed to be found in natural objects. “As seen in Shinto mythology the *Kami* express their sacredness and power through their embodiment in nature” (Ferkiss, 1993:146). People are encouraged to live naturally in harmony with nature. But Shinto has, in fact, hardly prevented Japanese industrial development from being exceedingly destructive.

Although in some cases, theory and practice, belief and people’s actions may fail to correspond, modern environmental ethicists may derive some environmentally friendly principles from the religious beliefs of various cultural groups. That is why many environmental ethicists have appealed to non-Western traditions. However, as Rolston has noted, it is not easy to import non-Western views into the secular West (1999a:417).

Despite the fact that advances have been made through recent discourse on the environmental concern of non-Western traditions, most of the related research has centred on Asia, Native Americans, and Australian Aborigines, with little attention being paid to most of Africa. From 1979 to 2000, for instance, only one article that directly deals with Africa (by G.W. Burnett and Kamuyu wa Kang’ethe [1994]) appeared in the journal, *Environmental Ethics*, that is considered as a forum for diverse interests and attitudes. Those who have studied non-Western religions and philosophies (see, for instance, Cheng, 1986; Eliot Deutsch, 1986; Eugene C. Hargrove, 1989; Ip, 1993; Patterson, 1994; N Scott Momaday, 1994; Marshall, 1995; Teresa Kwiatkowska-Szatscheider, 1997 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, Asians and Australian Aborigines. 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 philosophers better to recognize and criticise their most ingrained and otherwise unconscious

assumptions inherited from the long and remarkably homogeneous history of Western thought (Hargrove, 1989:xx; see also Rolston, 1987:174).

On the other hand, Callicott reviewed some works on the Lele of Congo, the Yoruba of Nigeria, the San, South-central African people often called “bushmen” and other indigenous African religions, and came up with the conclusion that in Africa, indigenous religions tend to be both monotheistic and anthropocentric. By referring to the works of some anthropologists, he boldly derived the conclusion that

[a]pparently, therefore, Africa looms as a big blank spot on the world map of indigenous environmental ethics for a very good reason. African thought orbits, seemingly, around human interests. Hence one might expect to distill from it no more than a weak and indirect environmental ethic, similar to the type of ecologically enlightened utilitarianism, focused on long-range human welfare ... Or perhaps one could develop a distinctly African stewardship environmental ethic grounded in African monotheism ... from the core belief of Judaism, Christianity, and Islam—in God, the Creator of Heaven and Earth (1994:273).

He maintains that “[s]cholarly comment on the environmental implications of Yoruba—and more generally, African—belief is limited and often contradictory” (1994:164). According to many African cultural groups, individuals are not detached from social groups. Personal identity is associated with community. By referring to Yoruba religion, Callicott states that the germ of an African environmental ethic may be found in the

notion of embedded individuality—of individuality as a nexus of communal relationships. Add to the intense sense of social embeddedness an equally vivid sense of embeddedness in the biotic community, and anthropocentric African environmentalism might then be transformed into a nonanthropocentric African environmentalism (1994:167).

He further asserts that only the San seem to develop responsible environmental attitudes and values, although there is no evidence that shows that their attitude towards fellow members of the biotic community is similar to that expressed by the North American Ojibwa. The San believe that human and nonhuman beings have similar behaviour. The cosmogony of the San suggests that they “regarded themselves as one with the other fauna and practiced a quiet policy of live and let live with their nonhuman

neighbours” (Callicott, 1994:172). However, the San did not develop elaborately articulated paradigms of interspecies relationships and failed to attract the attention of contemporary environmentalists (1994:173). Although Callicott tries to show that the San have shown a positive relationship with their nonhuman neighbours, he committed the fallacy of hasty generalisation. He should have studied the world views of other cultural groups to support his conclusion. As has been shown earlier, contrary to Callicott’s assumption, the Oromo consider not only the well-being of humans, but also other nonhuman creatures. Nevertheless, unlike Lee Hester *et al.* (2000), I welcome Callicott’s attempt to find environmental ethics actually or potentially existing in all the world views.

I would like to underline that it is extremely important to understand the fact of a kind of 21st century racism that is undermining the development of our knowledge of environmental ethics and other fields of inquiry. Any intellectual, no matter how liberal or enlightened, who either explicitly or implicitly suggests that there is nothing to be learned from Africa, is terribly ignorant of Africa and is, in my opinion, suffering from this phenomenon. Even today, many writers still do not expect the ‘Dark Continent’—as ‘traditionally’ portrayed by the Enlightenment thinkers and colonial anthropologists—to be the source of environmental ideas that can help the contemporary world solve environmental problems. In current discourse, ‘Africa’ still appears, even if only in its absence, as some kind of black hole of evil.

This constitutes a serious epistemological problem if we are to even begin to comprehend the nature of the global ecological crisis we are facing. It is as if many researchers have simply failed to do an adequate review of all the available literature in their research area by systematically ignoring the ecological insights of African peasant farmers. Therefore, the research results of an environmental ethicist who overlooks African environmental ethics will necessarily be incomplete.

Some will object that, empirically, Africa has one of the worst environmental records on Earth, and therefore, obviously can’t be expected to contribute very much to global environmental management. Africans, it will be said, with all solemn objectivity and honesty, clearly are incapable of overcoming their own environmental and development crisis. To many, this seems a plausible assessment of the African environmental record. But the real issue is not so simple. One has to examine how and why Africa has faced an environmental and development crisis before concluding that Africans are environmentally unfriendly.

14.2.2. The Oromo Perspective

The above critical examination of Oromo world views suggests that some Oromo groups have developed strong indigenous environmental ethics. On the one hand, like anthropocentrists, the Oromo protect their environment for utilitarian reasons. They think that the value of the

environment lies in human use. Trees are a source of capital, investment and insurance against hard times. Trees protect soil from erosion and provide the supply of timber, wood and food. Peasant farmers and pastoralists are conscious that, when their environment deteriorates, their life and future generations of humans will be harmed. The Oromo consider the cycles of nature, the coming of the rainy season, the movement of the stars, solar cycles, the movement and the cries of birds, the nature of entrails, the behaviour of domestic and wild animals and the condition of trees in order to grapple with practical problems of everyday life and future problems. From their practical experience, they know the growing characteristics of each crop and tree, suitable environments, the number of months of rain required, planting and harvesting times, crop care and crop labour requirements.

But the preceding discussion makes clear that the Oromo are not exclusively pragmatists. The bonds between the environment and the rural people are not only material but also spiritual and moral. Normative principles are implicit in the thought and practice of the Oromo people. For them, land is not only a resource for humans' utilitarian ends, but also has its own inherent value given to it by *Waaqa*. It is interesting to reiterate that for the Oromo, *Waaqa* (God) is the guardian of all things, and nobody is free to destroy natural things to satisfy his/her needs. The Oromo believe that the law of society is based on the laws of *Waaqa* as given in nature.

In this connection, it should be noted that the followers of both modern and traditional religions in Ethiopia believe that one should always do what God wills. It is believed that some trees have a special relationship with God and should not be touched by the axe. Individuals who violate this principle are morally wrong. This shows the traditional link between religion and ethics. According to Singer,

religion was thought to provide a reason for doing what is right, the reason being that those who are virtuous will be rewarded by an eternity of bliss while the rest roast in hell (1993:4).

This sceptical interpretation does not establish that for religious believers, belief in heaven and hell is the necessary condition for ethical behaviour. The Oromo peasant farmers and pastoralists argue that some activities that have their own moral codes, such as tilling the land, animal husbandry, planting trees and hunting, are not directly related to religion. The fundamental aim of the people in pursuing these activities is to fulfil their basic needs. In other words, in those cases, there is no direct reference to sanctions of any sort. In fact, as has been discussed earlier on, when one unnecessarily exploits the land and its resources or neglects his children, one conflicts with the laws of God and secular moral laws. But not all laws are natural and immutable. I have stated earlier that the Oromo leaders make a wide range of laws, including moral rules, through discussion

during their national assembly. They change laws that are incompatible with the demands of the time, and thereby, make new laws.

Some individuals may even think that religion is completely irrelevant to morality. According to Kwasi Wiredu, traditional thinking about morality is preoccupied with human welfare rather than supernatural concerns. He contends that sanctions are not important in justifying moral conduct; they can only figure in (psychological) explanation (Wiredu, 1983:7). The behaviour of the individuals is strongly influenced by public opinion, especially the opinion of the kin group, and the opinion of parents, family and lineage heads while the fact or possibility of these sanctions cannot create the sense of virtue. Wiredu argues that the basis of morality in Akan society, Ghana, is rational reflection about human welfare. Goodness is not defined in terms of the will of God. Instead, it is defined in terms of human well-being (Wiredu, 1980:6).

Accordingly, in the absence of belief in God, one can talk about the existence of the rules of good conduct (Wiredu, 1983:11). Although the thought that God hates evil can influence conduct, Wiredu says, the moral knowledge of an adult Akan will be developed through his or her early training in the home and his own later reflection (1983:12).

Wiredu's observation and my research among the Oromo indicate that the view that Africans cannot go beyond religious beliefs is not sound. According to Alexis Kagame, in Africa, "no occurrence is regarded as purely secular, or fortuitous, or dependent solely on human agency however skilfully exercised. The influence of the supernatural is discerned in every event" (1996:88).

Whatever the case, like non-anthropocentric modern environmental ethics, the Oromo world view restricts the freedom of human beings in their dealings with nature. Thus, as I have argued in chapters five, seven and eight, the Oromo world view has fostered a responsible attitude towards nature, plants and animals. The essence of this view is to live in partnership with the natural environment.

The Oromo conception of *saffuu* or *ceeraa fokko* is an interesting example to consider. *Saffuu* is an important concept in the beliefs and practices of the Oromo people. *Saffuu* is a moral concept that serves as the ethical basis for regulating practices in order to ensure a high standard conduct appropriate to different situations. It helps individuals to avoid morally wrong actions. *Saffuu* is, thus, what makes humans different from other animals. While the activities of animals are regulated by instinct, *saffuu* regulates the activities of human beings. *Saffuu* helps individuals to relate natural laws to divine laws and to base their activities on these laws. The Oromo believe that *saffuu* involves avoiding embarrassment, bad conversations, lying, stealing, working on holidays, and so forth. *Saffuu* is respecting one another and respecting one's own *Ayyaana* and that of others. According to the Oromo, *saffuu* is *ulfina* (respect). We need to show respect to our father, mother, aunt, uncle and our mother Earth. Knowing *saffuu* helps us to maintain our culture and revere *Waaqa*. *Saffuu* can also

refer to expression of astonishment, fear, pain, pity, shame, etc. (see Tilahun Gamta, 1989:511).

Whenever there is *saffuu*, there are two things. *Saffuu* is a mediating category between different things, and is mutual. There is *saffuu* between the mother and the daughter, between the father and the son, between generations, between humans and nature, between God and Earth. Thus, *saffuu* regulates people's activities. The exploitation of natural resources is governed by *saffuu*. One cannot unnecessarily overexploit these resources.

Saffuu also refers to the existence of an attitude compounded of both distance and respect between all things. As Lambert Bartels rightly noted, *saffuu*

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* ... *Saffuu* implies both rights and duties (Lambert Bartels, 1983:170).

Accordingly, one cannot understand the concepts *Ayyaana*, *uuma*, and *saffuu* in isolation. *Ayyaana* is a refraction of *Waaqa*. *Uuma* is the physical thing. *Saffuu* mediates between the *Ayyaana*, which is the ideal, and *uuma*, which is the physical that needs to be regulated. The three should be understood together.

Therefore, the main value judgement that can be derived from the concept of *saffuu* is that human beings should live in harmony with all other creatures in the natural environment. The Oromo pay due attention to the moral status of both humans and nonhuman creatures. Violation of *saffuu* will affect the positive relation between individuals, humans and the natural environment.

Besides, the concepts "*Waaqa*," "*Ayyaana*," "*uuma*," and "*saffuu*" provide the metaphysical underpinning of an environmental ethic. They underlie environmental attitudes to nature and society. As has been stated earlier, belief in *Waaqa* requires belief in the value of creatures. The key thing is that the source of basic Oromo value is *Waaqa*, although there are also secular values that are not directly related to *Waaqa*. The valuing of *Waaqa* underpins belief in the value of trees, animals and so on.

It should be noted that their harmony with the natural environment does not rule out the fact that the Oromo have been using it for centuries. Like other people in the world, the Oromo strive to know the mystery of the world and to control the uncontrollable. To put matters another way, my studies of the life histories of peasant farmers and pastoralists in the study sites show that besides their reverence for the natural environment, they have all along been actively manipulating 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 religion may thus indicate the proper relationship between humankind and nature.

In this connection, although some writers have mixed feelings about the environmental impacts of the Jewish and Christian doctrine of creation, in the last quarter of the twentieth century, some Churches in the West call for a relationship to creation of respect and care. This is a promising move and does not contradict the general principle of Oromo religion. It is imperative that the dialogue between traditional and modern religion can serve as the basis for constructive borrowing to the benefit of both peasant farmers and environmental theorists.

The foregoing discussion about Oromo attitudes towards the environment thus 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.

In other words, Oromo attitudes towards the environment may offer insights for redirecting the behaviour of technological societies towards a more sustainable path. In this connection, it is worth noting that people in all parts of the world developed an impressive storehouse of useful knowledge before the age of science. According to Surendra J Patel, “up to the 18th century, the West had borrowed both science and technology from other parts of the world, particularly Asia” (1996:305-306). Patel further remarks that indigenous people have contributed to the scientific and technological breakthroughs of the pre-18th-century period in different areas, including

fire, the domestication of animals, pottery, weaving, agriculture, selection and conservation of seeds, irrigation, smelting of ores, metals, the wheel, carriage, roads, sails, rudder, compass, astronomy, arithmetic, geometry, architecture, city planning, water supply and drainage, paper, printing, glass, gears, horse collar, gunpowder, scripts, philosophies, religions, systems of states and administration, and so on (1996:307).

Indigenous knowledge related to acupuncture, herbal medicine, and dehydration salts is currently being transferred from developing countries to industrial countries. Pharmacologists and plant chemists have isolated relevant active principles of plants which are identified by the local people as the sources of medicine (Oluwayomi David Atteh, 1992). Many

successful Western medicines were based on traditional Chinese medicine. Among others, daisies served as the source of artemisin, which is an anti-malaria drug in the West. Ephedrine is extracted from a plant used for centuries in China, and is important in treating asthma (Hailu Gelatu, 1999:58). Better said, global environmental problems can be better tackled through more cross-cultural and interdisciplinary approaches.

Modern environmental scientists can enrich their knowledge by making systematic inquiry into environmentally sound Oromo and other cultures' practical experiences and religious beliefs. Peasant farmers and pastoralists employ different methods such as progressive adaptive learning, curiosity, hypotheses, observation, and empirical testing, which are germane to conventional, positivist empirically based scientific approaches for solving environmental problems (R. Chambers, 1983:95; F.B. Kilahama, 1994:34). What is interesting is:

[m]any activities undertaken by rural people and scientists are similar: they distinguish, name and classify entities in their environments: they observe, compare and analyse; they experiment; they attempt to predict (Chambers, 1983:93).

Thus, traditional ecological knowledge and scientific knowledge have many things in common. Both help the human mind to comprehend reality. Both rely on observations and generalisations deriving from those observations (Fikret Berkes *et al*, 1995:282). Of course, we shouldn't exaggerate the similarities. Modern environmental science relies on specialised full-time observation, controlled experiments, captive animal studies, and technological devices such as radio collars or electronic monitoring and others (Richard Nelson, 1993:209). And, unlike modern science, indigenous knowledge is not intended to discover universal laws. Instead, it focuses on the web of relationships between humans, animals, plants, natural forces, spirits, and land forms in a particular locality (Marie Battiste and James [Sa'ke'j] Youngblood Henderson, 2000:44). In any case, as Ashis Nandy persuasively (1987) argues, today, the choice is no longer between traditionalism and modernity in their pure forms but an enlightened middle way between the two.

Although moral and empirical claims seem to be of logically different sorts, empirical facts about the natural environment are important for modern environmental ethics. In fact, David Hume (1969) 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 imply 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" (Donald VanDeVeer and Christine Pierce, 1994a:9). Science is useful in the exploration of particular issues in applied ethics. Thus, the results of biology, botany, chemistry, geology,

climatology, marine science, forestry, and so on (both basic and derivative and mixed fields) can be useful for many explorations in environmental ethics (VanDeVeer and Piercece, 1994a:9). Likewise, modern environmental ethics and science may make use of peasant farmers' environmental and agricultural science.

The foregoing discussion in various chapters suggests that modern environmental scientists and ethicists can derive the following lessons from traditional versions of the Oromo environmental ethics:

- the concern to preserve all species and the belief that domestic animals ought to be treated without cruelty;
- an ethic of preservation and production based on the fact that without production and transformation of nature, human life is unthinkable and that a healthy green environment is a *sine qua non* for the survival of all living things;
- the importance of a positive rather than purely exploitative relationship with the environment and
- an appreciation of the Earth as the mother of life.

Moreover, modern environmental ethicists and theorists can learn from Oromo peasant farmers, pastoralists and other local communities about the nature and specific features of the local soil, flora, fauna and climates. They can increase their understanding of diseases, other threats to health, and pharmacological remedies. And, they can gain new practical insights into unique beekeeping, agricultural and fishing practices (Workineh Kelbessa, 2002:56). In many cases, environmental theorists who grew up in the cities are simply not aware of the wealth of knowledge that can be found within rural communities. They are unaware of what is required in hunting, forest management, biodiversity conservation and other activities. It seems some "experts" don't really have a full grasp of the basics regarding agriculture, forest management, biodiversity conservation, hunting, etc.

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. Peasant farmers and pastoralists use various sustainable methods that enable them to secure food, income, employment, social welfare, diversification of crops, and preservation of animal and crop species.

Moreover, there have been well organised rural institutions from which all members more or less equally benefit, in rural Oromia in particular and Ethiopia in general. Indigenous mutual aid associations involve *Eddir* (neighbourhood burial associations) and *Iqqub* (savings exchange groups). The rich and poor individuals have the same status in the *Eddir*. It operates on the basis of elaborate written by-laws. *Iqqub* 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, *Iqqub* has many economic advantages. When a member faces economic crises, he/she will be allowed to collect the pool free of charge. As Dejene Aredo suggests,

[t]he *iqqub* 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 (1993: 259; see also Tesema Ta'a, 1986:202-209; Tirfe Mammo, 1999:194).

Deboo, the village-based mutual help arrangement, is also practised in rural Oromia. It is a tradition of supporting each other, especially elders and sick peasants who do not have their own oxen, by groups of friends and neighbours who pool their labour resources and/or material belongings (oxen, hand ploughs, sickles etc.). Accordingly, some of the advantages of the informal sector include

(a) they are based on local knowledge and practices and are best at recycling and re-use of materials (cost effective and environmental advantage), (b) geared to local consumption and locally oriented, (c) small-scale and therefore manageable and easy to control, (d) and use traditional methods of work with modern innovation (Tirfe, 1999:198).

What interests me is that the social interactions among the members of mutual help organisations are strong. These organisations and the above mentioned environmentally friendly practices and beliefs can be used to enhance environmentally sound development. Popular participation in local organisations is essential for self-reliant economic development. Environmentally sound development can be maintained through optimum use of resources, adoption of integrated development strategies, implementation of local level land use planning, adoption of appropriate farming practices, promotion of public cooperation and environmental education.

In general, various environmental ethicists have shown that 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 (Helena Norberg-Hodge and Peter Goering, 1995:23). Furthermore, many writers have confirmed the positive role of indigenous knowledge in sustainable agricultural development (see David Brokensha *et al*, 1980; R. B. Norgaard, 1984; Medani Mohamed M Ahmed, 1994; John Brohman, 1996). I have also shown above that there is a possibility to derive some positive lessons

from the environmental knowledge of African peasant farmers and pastoralists. At the same time, although some of the environmental theorists I interviewed said that they are not familiar with the views of various communities in non-Western countries, they are of the opinion that modern environmental ethicists can learn a respect for the resources that we use and for the Earth at large from Native Americans, Australian Aborigines, and Asians, and possibly from some African peasant farmers. They said that in most cases, non-Western traditions are close to the natural environment and are not so exploitative. Most non-Western traditions have more enlightened attitudes towards nature and natural processes (Infs: Alcoze; Belsey; Brenner; Dessalegn; Kirby; Langton; Melaku). For the most part, those communities or cultural groups that have successfully survived over a number of millennia in their environments, in fact, develop closely parallel adaptations to those environments (Inf: Alcoze).

One thing that indigenous societies have in common is very strong metaphorical systems which reflect human relationship with the rest of the world. Marcia Langton and Thom Alcoze lamented that the large scientific community and government bureaucrats have not been much interested in the longstanding strategies, ethical relationships, biophysical relationships and all sorts of practical daily engagements of the indigenous people with the natural environment in their respective countries in Australia and USA, for they believe that indigenous knowledge is merely superstition. Tewolde Berhan, one of my informants, on the other hand, said that many of the non-Western traditions are also the basis of ecological foolishness. There is nothing peculiar about Western or non-Western religions and philosophies. Tewolde Berhan's view does not contradict with my finding. I have already discussed the shortcomings of Oromo environmental knowledge. Non-Western knowledge is not always the source of ecological wisdom. However, it is advisable to critically study indigenous environmental ethics rather than totally ignoring it.

14.3. WHAT PEASANT FARMERS AND PASTORALISTS CAN LEARN FROM MODERN ENVIRONMENTAL THEORISTS

Peasant farmers and pastoralists can make use of the knowledge of environmental ethicists. Environmental theorists may alert peasant farmers and pastoralists to understand the long range effects of environmental degradation that are beyond the purview of local people and otherwise unavailable. There are communities that have been removed from their land for a long period of time with terrible environmental results. They have not been able to manage their lands in the traditional ways. Environmental ethics and science can demonstrate in books and journals to the public that the loss of land rights and the loss of access to natural resources cause more problems. Modern environmental knowledge about global warming, global climate, and ozone layer depletion will provide peasant farmers and

pastoralists an opportunity to look at their own local concerns and issues within the context of a greater global perspective.

But do peasant farmers and pastoralists have access to modern environmental ethics or environmental science, particularly in developing countries? In practice, peasant farmers and other indigenous people in developing countries do not have access to modern environmental theories. It seems that modern environmental ethicists in the West have produced their works for the consumption of philosophers and other privileged groups in industrialised countries. According to Norton,

[t]he burgeoning literature of environmental ethics is read mainly by other philosophers, and occasionally by environmental policy analysts, but seldom by environmental activists and managers (1986:202).

Norton has further said, in my view rightly, that the influence of environmental ethicists on the actual environmental decision-making is insignificant, because they use the traditional vocabularies of professional philosophers which may not be understood by Western environmental practitioners, leave alone by African peasant farmers and pastoralists. The modern environmental ethicist does not talk to the common people. He or she talks to other environmental ethicists. So long as environmental ethics is retained at this level, modern environmental ethics has nothing to offer to peasant farmers and pastoralists. In theory, one would hope that it should spread as wide as possible. It will be very useful for peasant farmers and pastoralists, if the information could be disseminated in some way. But it is very difficult to tell how this could be achieved.

Environmental ethicists in Africa and in other parts of the world should try to achieve this goal by enabling peasant farmers, pastoralists and other indigenous people in the world to get the message of their works. First of all, it would be useful to create awareness of what peasant farmers and pastoralists already know. They need to be informed of the fact that their environmental knowledge has a tremendous value for the natural environment so that they should maintain it even under harsh conditions. They should be reminded that if they improve their knowledge, it would even be better. But one has to know how to communicate with them at the grass roots level. Environmental ethicists and theorists will have to learn to talk the language of the peasant farmers and pastoralists. Environmental theory has to be presented in a language that is easily digested by peasant farmers and indigenous people. Environmental ethicists need to promote ethical debate in a language that peasant farmers and pastoralists can understand. There is one concrete example in which peasant farmers expressed their interest to benefit from modern knowledge. John Medcalf is a priest in South and Central America. He reported that, in Peru, a young boy came to his office and borrowed a book entitled *A History of Peru* written in Spanish. After reading the first book, the boy expressed interest

to read more books. This led to the establishment of rural libraries in Peru in which the local people read books on health and first aid, history, children's histories, legislation, poetry, legends and folktales, religion, and perhaps a book about cooperatives and current affairs (Medcalf, 2000:10). It should be stressed that peasant farmers and pastoralists do not read complicated matters. They do read relevant books written in the language they understand.

This does not mean that environmental ethicists should come down to the level of peasant farmers and stop producing other works, which have global dimensions. Environmental ethicists can contribute much to the protection of the environment if they relate abstract understanding to practical problems in society. Peasant farmers and pastoralists should also be encouraged to improve their knowledge, their language and learning skill so as to benefit from modern theories and technologies. It has been shown that in the past, peasant farmers and pastoralists have benefited from modern technology and inventions, such as films, video and communication technologies. Some peasant farmers have already started to use the Internet with the help of Non-Governmental Organisations. In fact, the Internet is based on a language that many peasant farmers hardly understand. Secondly, most peasant farmers in developing countries do not have access to a telephone service. But in societies that are in a better position, peasant farmers can benefit from the works of environmental theorists. Dorism Schoenhoff (1993) even suggests that farmers, traditional healers and local environmentalists must participate in the design of computer systems so that the systems will promote acceptable and enduring development within the indigenous communities. Accordingly, environmental ethicists should be willing to talk to peasant farmers, pastoralists and non-philosophers.

Environmental theorists with varied backgrounds can join peasant farmers and pastoralists who have multidimensional knowledge of the natural environment and help them develop further knowledge of it. Peasant farmers can benefit from scientific selection of plants. Although they have their own strategy, a scientific approach can help them to speed it up.

Moreover, peasant farmers and pastoralists by themselves may not meet the growing demands of the growing population by restricting themselves to local knowledge. The local people need schools, improved medical care, transportation, radio, and hydroelectricity. Modern science and technology are required to increase productivity and to satisfy the growing demands of the population. Peasant farmers and pastoralists should enjoy the material benefits that come from novel economic changes.

The foregoing discussion shows that the dichotomy between indigenous and modern environmental knowledge is not natural. Many of the environmental theorists I have interviewed are reluctant to accept the view that modern and indigenous knowledge are contradictory. They do not say that modern environmental knowledge is superior to indigenous knowledge, although they do acknowledge that modern knowledge is more sophisticated than its indigenous counterpart.

However, one may ask the following question: where does indigenous knowledge end and modern knowledge begin? If we accept the dichotomy between the two, we need to answer this question. But as I have said earlier, the dichotomy between the two is an artificial construct and cannot be defended. My argument might appear to some to embody a contradiction in my overall argument, and to be inconsistent, for the title of my book itself seems to support the dichotomy between the two. This is not the case. I do not endorse the view that there is an unbridgeable gap between indigenous and modern knowledge, or that they are independent entities, although I acknowledge that they represent different levels of the same knowledge. Although there is a distinction to make between indigenous and modern knowledge, there is no dichotomy, because they are continuous. There is a common framework for all knowledge. Thus, science is not only a Western tradition. If one has claimed that scientific knowledge is one's own monopoly, one can be judged to be arrogant.

Here, I am not suggesting that all people who know different things are doing science. As has been stated earlier on, peasant farmers and other indigenous people have their own methods of investigation. They use hypothesis, experiments, observation, and trial and error to understand the nature of various crops, trees, animals and the like. Hence, their environmental science is based on various methods. In fact, this view does not rule out the fact that peasant farmers also do various things by habit, which are not necessarily based on scientifically tested hypotheses.

I would thus argue that modern knowledge is an extension of indigenous knowledge. But both indigenous and modern knowledge have roles in different contexts. The combination of indigenous and modern knowledge helps us to develop a new knowledge base that is more effective than either.

It might be objected that in the practical sense, this does not seem to work because of various factors. On one hand, modern environmental ethicists do not bother about peasant farmers and other indigenous people in the world. They are interested in knowledge and theoretical debate rather than in practical problems at the grass roots level. There is no practical interlinkage between modern environmental ethicists and peasant farmers and pastoralists. Some of my informants argue that environmental ethicists do not count. They simply ventilate their ideas very often without connection whatsoever to the environmental forces that cause all the change. Modern ethicists do not seem to be worried as to whether the system pays them attention either. It seems to be simply a way of life rather than a mission in life (Infs: Gemetchu; Tewolde Berhan). Tewolde Berhan has further pointed out that ethical study does not have any useful impact on the natural environment. Laws, agreements, and conventions, rather than environmental ethics, have significant impact on the environment.

Moreover, one of my informants stated that the West and the non-West traditions could not benefit from one another for the reason that the driving force behind the whole thing is different. What sustains, for

instance, the Oromo environmental knowledge and law is completely different from the motive that drives the Western order. The principle in the West is: can you exploit and benefit yourself? In the West, the way things are ordered is such that there is no way that the West can learn from the non-West. In fact, it might take some elements from the indigenous knowledge and abuse it. Although it is good to combine two different knowledge systems, it will never be realised (Inf: Gemetchu).

Indeed, there has been a debate among philosophers about why environmental ethics does not seem to make any impact. Hargrove (cited in Barnabas Dickson, 2000:134) says that he is surprised that after several years of the journal *Environmental Ethics*, the discipline has not made much impact on USA's policy. Dickson (2000), however, has criticised Hargrove and others for expecting ideas to have any influence. He says that although society can have many individuals who have been students of environmental ethics courses and who have the best possible ideas, when they work for a company, the structures will prevent them making any difference at all. He stresses that both the highly mediated nature of the relationship between individuals and the natural environment and the pervasive pressure on firms in market economies to reduce their costs provide reasons to question the assumptions of people like Hargrove. People, he says, satisfy their needs and desires via complex socio-economic systems, spread over vast geographical areas and involving many different agents. Because of this mediation, people do not seem to consider themselves as responsible for the environmental harm that occurs in the course of satisfying their desires and needs. Wrong attitudes may not be the reason for environmental damage. Dickson concludes that "environmental ethics does not have a major contribution to make to the solution of environmental problems," "because the solution of environmental problems may not rest on ethical change" (2000:149). He suggests that the ethicists are required to engage more closely with empirical questions about the nature of modern societies in order to justify their claims about environmental problems. They should examine the systematic pressure against environmental solutions and the underlying dynamics of socio economic systems that are responsible for this pressure.

Another consideration, which can be presented against my view, is that "Third World" countries have never taken any serious measures to respect indigenous knowledge. What they have done is simply make empty promises. Beyond that, they have done nothing. Far worse, as things stand today, intergenerational knowledge is weak, even at the grass roots level. The younger generation is not interested in the knowledge of elders. In the meantime, elders are dying with their knowledge. Thus, one may conclude that because of this non-commitment and lack of will, what I have suggested could not work.

Furthermore, it can be objected that it will be impossible to get the people in developing and developed countries to change their behaviour and their beliefs on the global scale when there are pressures advertising all the

propaganda for more consumption and material goods. It is extremely difficult to overcome all these pressures. Because of these and other factors, some of my informants are pessimistic about the future (Infs: Belsey; Gemetchu; Tewolde Berhan).

Although there is some truth to the objections outlined above, this is not fatal to my overall argument in this study. However, I do recognize that, for the most part, the dominant trend in the 21st century is one of increasing environmental degradation despite all of the wonderful environmental conventions and conferences that have organized all over the world. It is time to reflect on what has been done and what is coming in the future. It is high time to translate laws and promises into practice. That is the only option. We cannot continue in the previous way and ignore indigenous knowledge as such. Modern scientists, particularly in medicine and agricultural science, are coming back to indigenous knowledge to enrich themselves. For instance, scientists use the *neem* tree as insecticide in India. Some scientists have developed conservation strategies on the basis of indigenous environmental science. On the other hand, quite often, interested companies use indigenous knowledge to exploit people. They use it as a code for exploitation.

The integration of indigenous and modern environmental ethics is a process that is emerging in contemporary history. The process that is emerging is where the two parties, namely technological society and indigenous and peasant farmers in the world, come together and allow the Earth to be in control so that it becomes a very group-oriented process where there are no authoritarian leaders. The people are the leaders and the Earth is the leader. We have to go to and learn from the Earth how to do things. That is the process that has to work. Thus, people should relinquish the colonisation mentality of control (Infs: Alcoze; Marcia) and take their fate into their own hands despite what pessimists such as Dickson suggest about the limits of possibility. In the next section, I will further develop this idea and suggest what is to be done to save the Earth and its inhabitants.

14.4. THE WAY FORWARD

The most important question is: where do we go from here? I do not claim to be able to give a satisfactory answer to this question. I shall offer some tentative remarks about these issues. Concerning the relationship between the governments of both developed and developing countries, it is clear that indigenous people, peasant farmers and pastoralists will need to cooperate and force their respective governments to allow them to decide on what happens to their environment, to their resources and to their own activities. Almost all of the environmental theorists I have interviewed suggest that people should empower themselves by raising their consciousness, by recognising their real situation and the possibility of alternatives and by recognising power structures – also, in my view, rightly. They cannot sit down and wait for other groups to empower them.

One immediate objection to this idea is that the non-accountability and non-democratic nature of political structures, particularly in developing countries, does not seem to allow this to happen, which I think is true. The armed forces can even overthrow the present governments and establish another form of dictatorship. The slogan of many individuals and NGOs about empowering the people has been the order of the day without producing any change. Thus, one may say that empowerment means everything and it does not mean anything.

Although the present situation looks grim, I do not think that the people have any other alternative than empowering themselves. It may take time to do so. Through long and persistent struggle, they will be able to empower themselves. As I have argued in the preceding chapters, peasant farmers, pastoralists, indigenous people, labour, urban, environmental, and other social movements, and those intellectuals and other groups who support the causes of peasant farmers, pastoralists and indigenous people have to network and exchange ideas about strategies and policies. Through networking, strengthening their numbers, and developing key alliances with helpful organisations, they can empower themselves. They may establish organisations that can lobby in global forums such as in UN, in WIPO, in WTO and the like; various scholars who have been working with them may help the people build up a body of knowledge that has influence in the Western knowledge production systems, in universities, and in research institutions.

Indigenous people and peasant farmers around the world have already started to challenge their own states and globalisation processes, which have been promoted by transnational corporations and Western capitalist countries. They have tried to protect their resources and knowledge. In Africa, ordinary peasant farmers have considered the state the main obstacle to development. They have tried to find alternative strategies of survival by avoiding the state. Many peasant farmers have begun to avoid export crops and produce food crops for local consumption (Fantu Cheru, 1996). Peasant farmers in Kenya, for instance, have almost totally abandoned coffee production, and tea and sugar growers have demonstrated their anger at the perceived hostility of the official buyers toward them by neglecting their crops (Kimenyi cited in Fantu, 1996:157). Ernest T. Mallya also states that peasant farmers in Kilimanjaro, in Tanzania, have been affected by government policies. Between the mid-1970s and early 1980s, peasant farmers began to chop down coffee trees in response to the low prices they were getting from coffee sales. They were interested in producing food crops for the local market and local subsistence, rather than producing cash crops for the international market. The main reasons for this move involve the government's pricing policy, which was designed to maximise the surplus produced from the peasantry and the existence of favourable local markets for food crops (see Mallya, 1996). Zie Gariyo (1996) also reports that in Uganda, local people have started to challenge the logic of external forces such as the

World Bank/IMF and their market-oriented development agenda by creating local institutions and organisations that are useful to the people.

Likewise, some indigenous organisations have endeavoured to promote indigenous knowledge, such as the Coordinating Body for the Indigenous People's Organisations of the Amazon Basin that represents the interests of several regional and national indigenous organisations in the Amazon Basin of South America (COICA) (Shelton H. Davis, 1993: 5-6).

Also, indigenous people, rubber tappers, environmentalists and other activists from around the world met in 1989 in Altamira, Brazil, and forced the World Bank to delay funding of massive hydroelectric dams. The Kayapó, an indigenous nation of the Brazilian rainforest, initiated the meeting (Craig Benjamin and Rebecca Tiessen, 1993:253).

Furthermore, since the Earth Summit, indigenous people around the world have tried to oppose the dominant intellectual property rights regime. Among others, Indigenous-Tribal Peoples of the Tropical Forests have demanded in their Charter guaranteed rights to their intellectual property.

Since we highly value our traditional knowledge and believe that our biotechnologies can make an important contribution to humanity, including 'developed' countries, we demand guaranteed rights to our intellectual property, and control over the development and manipulation of this knowledge (quoted in Darrell A. Posey *et al*, 1995:894).

Also, indigenous peoples have attempted to discuss the protection of their folklore on an international level. The Maatutua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples was produced by the participants who attended the First International Conference on the Cultural and Intellectual Property Rights of Indigenous Peoples in Aotearoa, New Zealand in 1993 (see Darrell A. Posey and Graham Dutfield, 1996:205-208). The declaration, among others, asks states and national and international agencies to recognise that indigenous peoples are the guardians of their customary knowledge and have the right to protect and control the dissemination of that knowledge. It also called for the establishment of an additional cultural and intellectual property rights regime that accommodates the rights of indigenous peoples.

Moreover, in India, the Chipko (Hug the tree) movement opposed deforestation in the Himalayan foothills. Peasant farmers protested against the unsustainable actions of the urban centres and industry (Ramachandra Guha, 1989:81). Furthermore, the Joint Forum of Indian People Against Globalisation protests against what has been referred to as the "recolonisation" of India by TNCs (J. Martinez-Alier, 1997). Indian farmers also burned genetically modified crops that were planted in the fields (K. Inez-Ainger, 1999). Further, in 1997, some people in a remote part of Kerala, India, declared their local biodiversity as a community-owned resource, and decided to protect it from TNCs or other groups who want to

patent it (Shiva, 1999:65). The community identified itself as Pattuvam Panchayat (the Panchayat is the locally elected body for village governance, accountable to the village community who have elected it) (Shiva, 1999:65).

It is also worth noting that farmers and consumers in the USA have begun to reject genetically modified (GM) foods. Moreover, “even industry-friendly powers organisations, such as the National Corn Growers Association have been advising farmers to steer clear of GM crops” (SEEDLING, 2000:31).

The other serious objection is whether capitalist societies will be able to build an environmentally sound capitalist system and allow indigenous people to empower themselves and “Third World” countries to sustainably use their resources. I submit that this is a very difficult question, and the full discussion of this issue is beyond the scope of this study. I will raise some major points, which are relevant to my study. Two answers can be put forward concerning the future of capitalism.

Some environmental theorists and other scholars I interviewed are very doubtful whether capitalism can maintain a balance with nature (Infs: Belsey; Brenner; Gemetchu; Samorzewski; Tewolde Berhan). Some even stressed that capitalism does not have a future (Infs: Gemetchu; Tewolde Berhan). A capitalist society is a self-eating and self-destroying society. Capitalism has been looking for profit and unlimited growth at any cost. It has been destroying itself and non-capitalist countries for years. Some individuals thus conclude that capitalism cannot be an environmentally friendly system (Infs: Tewolde Berhan; Gemetchu). James O’Connor (1994) also states that the prospects for a sustainable capitalism are dim.

Capitalism is self-destructing and in crisis; the world economy makes more people hungry, poor, and miserable every day; the masses of peasants and workers cannot be expected to endure the crisis indefinitely (1994:154).

The present situation thus seems to suggest that capitalism is not ecologically sustainable.

However, some informants argue that an environmentally friendly capitalist society can be established. They suggest that capitalism requires various alterations and adaptations. It can be forced to modify its behaviour (Infs: Alcoze; Marcia). Capitalists may understand that further exploitation of the environment may jeopardise their very existence, and they might close their factories. The dynamics of the system will force the capitalists to take steps to curb the excesses of the dynamics of the system. The fear of death and the fear of decimation will keep modifying the capitalist system. In fact, this interference with the capitalist system has been a constant struggle in the contemporary world. Various attempts have been made to force transnational corporations to internalise environmental costs. Increasingly, there are some smart corporations that seem to understand that

resource sustainability relies on environmental sustainability. Therefore, it may be argued that green corporations can influence other corporations which are more exploitative.

Similarly, Rolston argues that we must regulate capitalism in order to conserve natural value (1994:156). For him, this regulation enables us to internalise costs to create a more perfect market, and permits non-market values to enter into our decisions. In this sense, he has said, regulation should be viewed as a liberating policy. But Rolston does not tell us how capitalism can protect natural values. He is not sure whether democracy can regulate capitalism in the twenty first century (see Rolston, 1994:158).

Furthermore, Rolston suggests that moral force is essential rather than coercive authority to persuade countries to respect international environmental law. A vital part of international law, he says, is the moral force. He states that every nation tries to avoid moral condemnation (1994:214). In his early work, Rolston stresses that “[p]ower without ethics is profane and destructive in any community” (1988:XII). The avoidance of ethics prevents humans from appreciating values on the Earth where we reside (Rolston, 1988).

Robin Attfield (1987) for his part proclaims that political authorities should meet certain ethical standards to justify their power. He suggests that the power of authorities and of the obligation to obey them could be justified in relation to the overall consequences of their rule and of obedience to it in terms of a greater difference being made to the satisfaction of needs. He stresses that it has to be shown that the rule of the government better meets the needs of the people affected than any available alternative would, and than would happen in the absence of government. According to Attfield, disobedience is justified when various rights of the people are violated.

Attfield also maintains that some kind of ethic (a theory of right and responsibility) is necessary to solve problems, whether global, environmental or otherwise, for it provides us with guidance and direction (1999:27). He suggests that consequentialism is the best theory enabling us to tackle various kinds of problems. He states that only consequentialist theories take into account the needs of present and future generations.

Although I do acknowledge that ethical pressure is important, and that there are connections between knowledge, power and ethics, I have some reservations to register. Despite the good principles formulated by ethicists and countries during international conferences on various subjects, the world is not yet on a path toward just and environmentally sound development. Transnational corporations and various countries have continued to promote their interests at the expense of the natural environment and poor countries. Moral force and consequentialism as a global ethic for all seasons respectively suggested by Rolston and Attfield do not influence transnational corporations and powerful countries to limit their exploitation in the absence of changes in power structures. Following other writers, Attfield contends that without transforming the structures of international aid, trade and debt and without the

cooperation of the countries in the “South” to preserve their biodiversity and to research pathways for biotechnical development, and perhaps without superseding international capitalism or subjecting it to global regulation to curtail its inherent tendencies to unsustainability, sustainable development cannot take place (see Attfield, 1999:112). But it is not clear how consequentialist theories help the world to realise all this when transnational corporations and international capitalism are not willing to accept ethical principles. Attfield suggests that global resources can be protected through international treaties which should be complemented by global citizenship, as embodied in transnational groups and groupings, international peace groups, and federations of trade unions, minorities and ethnic groups such as the Environmental Justice Movement. Nigel Dower (1998) also argues that we need to accept a global ethic and to see ourselves as world citizens. He stresses that what is required is global governance rather than global government. He remarks that “[t]o the extent that citizens accept a level of identity as world citizens, to that extent their states will be directed to the global common good anyway” (Dower, 1998:196). Although Dower has noted the environmental problems of the present world, he is of the opinion that some of the trends in the world can be checked through transformations of attitude and of ethical priority.

However, as has been said earlier, international organisations including United Nations and the people have not yet forced transnational corporations and capitalism to be environmentally friendly, and respect international treaties. Powerful industrialised countries can ignore regional and global environmental treaties. Signatory states can violate a treaty and continue to destroy the environment (see E.U. Weizsacker, 1994:165). Although economic policy instruments may be used to compel these states to take environmental action, other countries and environmentalists have no real power to force them to abide by the law. Moreover, some countries, through the pursuit of their own selfish interests, refuse to cooperate with other states. For instance, during the Rio Conference on Environment and Development in 1992, the treaty on biodiversity was opposed by the United States of America, which favours market-based solutions (see J. Homberg *et al*, 1993). Further, the former US President George W Bush was opposed to the 1997 Kyoto Protocol agreement that calls for developed nations to cut emissions of greenhouse gases to 5% below their 1990 levels by 2012 (see Environmental News Service, 2001). He was afraid that the treaty would put US manufacturers at a disadvantage and hinder efforts to boost domestic energy supplies. He also stated the following reason for his refusal to sign the Kyoto Protocol: “I’ll tell you one thing I’m not going to do is I’m not going to let the United States carry the burden for cleaning up the world’s air, like the Kyoto treaty would have done. China and India were exempted from that treaty. I think we need to be more evenhanded...” (quoted in Singer, 2004: 138). It is not clear what he meant by being “more evenhanded.” In the context of the 2004 election in the US, it should also be noted that Senator John Kerry’s position on Kyoto differs little from that

of George W. Bush. He has refused to commit himself to supporting the protocol.

It is interesting to look at the response of George W. Bush for the question whether he has any role regarding global warming. "We will not do anything that harms our economy, because first things first are the people who live in America" (quoted in Singer, 2004:135). Thus, international agreements do not get to the heart of the problem despite being indispensable. As long as powerful countries can reject these agreements, the danger of environmental degradation persists. Currently, there is no way to implement international treaties against the interests of global powers as perceived by their ruling elites. Therefore, the fact on the ground is that power seizes and produces knowledge for its own ends and marginalises ethics. Power can be used to secure knowledge and determine what a society believes to be correct knowledge.

What is obvious is that the capitalist system keeps creating new ways of trying to beat the various laws and international agreements. According to James O'Connor, capitalism is both "crisis-ridden" and "crisis-dependent" "in the sense that economic crises force cost cutting, 'restructuring,' layoffs, and other changes that make the system more 'efficient,' that is more profitable" (1994:159). In this connection, Samir Amin (1998) stresses that the way capitalism functions today does not allow it to find a lasting solution. The dominant forces, he said, look for a means of managing the crisis rather than looking for a way out at all. They gave priority to the tactic of crisis management (Amin, 1998:72). Martin O'Connor (1994) also underlines that market society superexploits both the wealth of the Earth and of human societies. In spite of the negative consequences of the capitalist system, many countries and corporations still believe in growth.

Although it is sometimes possible to put pressure upon capitalist countries through diplomatic means, it would be more difficult to control transnational corporations, because they are not based anywhere, and are almost outside the normal diplomatic relations that exist between countries. Thus, transnational corporations can escape many restrictions. They can shift their basis from Europe to Africa or from America to Asia.

The proponents of free trade and capitalism, however, argue that it is poor government practice, rootless businessmen, corruption and lack of knowledge in "Third World" countries, which are mainly responsible for global environmental crises. They keep on saying that non-capitalist countries have more problems than the capitalist countries do. In particular, Neo-liberals proclaim that capitalism is capable of controlling environmental problems, and that market institutions, if only they are left alone, will promote economic growth.

However, the neo-liberal development model, which has been practised for decades in many countries, has aggravated the condition of poorer people, and has led to the concentration of power and wealth in a few unaccountable transnational corporations (see Brendan Martin, 1996:153).

As has been stated earlier, powerful capitalist countries have created various multilateral international trade instruments and have continued to exploit powerless “Third World” countries and the natural environment. “Third World” countries are too poor and powerless to challenge these countries. Environmental laws and principles are required to be subservient to international trade treaties. And GATT has challenged governmental export controls. “A government trying to conserve scarce resources by restricting their export will violate GATT” (P. Hawken, 1993:100). Also, under the GATT, national governments are required to remove foreign investment requirements, export quotas, local procurements and technology specifications. Thus, free trade has very little to contribute to environmental protection. In global free trade, what is valuable is decided by money. Big companies have been able to externalise environmental and social costs.

Another important point that ought to be acknowledged in this context is that both capitalist and socialist powers have contributed to global environmental problems. Socialist countries have proved as environmentally destructive as the West. The production system of socialist states is not significantly different from that of capitalism in terms of methods and goals. Like the capitalist system, the socialist system takes economic growth as the central concern, and tries to increase wealth, GDP and so on; it involves waste and causes massive ecological damage. Likewise, governments in “Third World” countries are also responsible for the global environmental crisis. They sell the natural resources of their countries to transnational corporations under the pressure of big external debts, in the name of development and modernisation. They have destroyed the economic bases of peasant farmers, pastoralists and the urban poor through the application of modern technologies.

Thus, the problem is as complex within “Third World” nations as it is outside them. However, it is still the case that until such time as international institutions such as the WTO, World Bank, the IMF, and the Security Council of the UN can be effectively democratized, “Third World” countries will remain relatively powerless to resolve their own environmental problems or contribute to the resolution of global environmental crises. In any case, though I cannot fully argue the case in this work, in my opinion, capitalist countries are more responsible than non-capitalist countries for the global environmental crisis because of the expansion of modern technologies and the unlimited exploitation of the global environment by transnational corporations.

What is important to make it clear is that environmental questions are not simply ethical. Environmental and development issues involve more than moral persuasion. They cannot be addressed without taking political power into account. In order to address global problems, there have to be major changes at political and ethical levels. Both capitalist and non-capitalist countries have to note that unlimited growth for indefinite periods of time is not possible. They cannot have economic growth, growth in

consumption and pollution indefinitely in the world. The Earth has limited natural resources. We have already faced global ecological problems including rising sea levels, the melting of the polar icecaps, shortage of fresh water, ozone layer depletion and so on. Therefore, all the concerned parties should be willing to change the present system. The political will to control the environmental impacts of transnational corporations through regulative regimes of international trade have to be established. Alternative attitudes towards nature must be generated.

I would thus submit that new mechanisms must be sought to enforce global environmental laws. There should be a way to punish countries which violate international laws. Otherwise, global environmental and development solutions through ethical rules would be unrealistic, although I share the view held by Dower (1998) that ethical reasoning can make a difference. In that sense, as some of my informants (Belsey and Brenner) suggested, there could be a sort of managed transition to a non-capitalist approach. One would have very good reason to be pessimistic about the possibility of doing so. At the present time, many capitalist countries and transnational corporations are not willing to undertake such changes.

However, I would argue that if powerful capitalist countries and transnational corporations are not willing to do so, they could only exploit global resources for a short period of time. One day, the TNCs exploitation of global resources will collapse. Rolston also argues that “[o]n global scales, no nation, no culture, no people really win when the Whole Earth loses. With the goalposts in the right place, no evil comes to those who care for the Earth” (1994:229). To put matters another way, it is not physically possible for powerful self-interested states and transnational corporations to continue to grow indefinitely without global consequences. Some form of collapse is inevitable. As that approaches, the knowledge of indigenous people, hunter-gatherers, peasant farmers and the pastoralists will be rediscovered. It is inevitable that we will either change or industrial society will collapse. Finally, changes will come whether we like it or not.

Yet it will not be an easy task to change people’s attitudes and promote environmentally and socially sound practices within a short period of time. I have raised various issues in this paper in order to demonstrate the significance of environmental ethics; I seek to provoke a far-ranging debate. I am hopeful that, despite the criticism of the contribution of ethical study to the environment, if we critically study environmental theories in different parts of the world, eventually all these small efforts will bear fruit. That is why it is important to try to raise awareness. The ideas of environmental ethicists and theorists have had an impact on the natural environment. The Precautionary Principle (which urges intervention to prevent possible disasters in advance of the availability of scientific certainty) is such an ethical principle which is increasingly embodied in legislation of various governments. It is, for instance, institutionalized within European Union legislation and in the Maastricht Treaty (Michael D.

Young, cited in Robin Attfield, 1999:185). Moreover, “the Kyoto agreement [about emission quotas] owes some amount to the Precautionary Principle” (Attfield, 1999:186). The Precautionary Principle is one possible response to the necessity of decision making in conditions of uncertainty. Thus, environmental risk assessment is not solely science-based; its requirements are based on value commitments such as the Precautionary Principle. Accordingly, although there are still some doubts and uncertainties in our knowledge about global warming, the ‘better safe than sorry’ approach, formally referred to as ‘the Precautionary Principle,’ has proven itself to be very useful in our attempts to avoid what could otherwise lead to extremely disastrous outcomes.

There are, of course, those who argue against the precautionary principle. For instance, for the automobile, fossil fuel, and mining industries, “the slogan ‘better safe than sorry’ means economic disruption, lost profits, and controversy—all because of risks that they are not convinced even exist” (Sheldon Rampton and John Stauber, 2001:127). Transnational corporations complain that the precautionary principle is based on theories, fear and innuendo rather than sound science. The ethical implications of their arguments have some merit. If we accept that poverty alleviation is dependent on economic development, and if the use of the Precautionary Principle does have a negative impact on economic development, then there are some real ethical issues that need to be taken into account. The problem, however, is that such “ethical” concerns are frequently used to advance profit-orientated and political agendas totally independent of any real ethical concerns regarding the environment or poverty alleviation. All of this indicates that both ethicists and scientists need to be cognizant of the increasing power of industries and governments controlled or influenced by transnational corporations to manipulate science at the expense of the environment and human development.

In general, various environmental ethicists have put forward their own proposals concerning how human beings can live with the natural environment. Some of them argue that the natural environment has instrumental value and should be protected for the sake of human beings. Others are of the opinion that all living things have moral standing and require respect from human beings. And other environmental ethicists argue that both living and nonliving things have intrinsic value beyond the interest of human beings. Others are against these strands and have even questioned the very possibility of environmental ethics. But I have attempted to show that this position is not tenable, and argue that environmental ethics is important and can enrich itself by deriving some useful lessons from both European and most non-European traditions. Therefore, what has been discussed so far suggests that Oromo environmental ethics can be integrated into modern environmental ethics. There are many things that the rural people know and environmental ethicists do not and *vice versa*. In some cases, peasant farmers and pastoralists who live on and by the land are far more resourceful and innovative than modern

technicians in the area of environmental control and soil conservation. Likewise, modern environmental ethics and related theories can address a vast array of problems that indigenous knowledge cannot even understand. Thus, modern environmental scientists and ethicists and the rural people can learn from one another. Mutual understanding between the rural people, environmental ethicists and scientists can generate many common principles and areas of cooperation. I have further argued that although ethics is important and may influence power and its exercise, we still cannot rely on ethics alone to tackle environmental, development and political problems. To be really effective, the question of power should be looked at in a different way.

CHAPTER XV

CONCLUSION

Two major research objectives were addressed in this work: (a) to explore whether indigenous knowledge systems are essential for the development and the health of the natural environment and its inhabitants and (b) whether indigenous and modern environmental ethics are complementary. The data obtained from interviews would support the view that there are indigenous Oromo environmental and development experts. The Oromo and other local people have developed detailed interactive knowledge of the heavens, of the Earth, of the weather, of the animals, of vegetation, of the water, of the soil, of crops, of insects, and of environmental and nutritional requirements, properties and peculiarities. This general conclusion is supported and reinforced by the findings of various chapters.

15.1. History and Literature

In chapter 1, I defined some basic concepts, set out the objectives of the study, outlined the scope of the study and explained the variety of sources used in the study. In chapter 2, I presented a short history of the Oromo people. I have argued that the Oromo are the indigenous people of the Horn of Africa, and the beliefs and practices of other cultural groups and modern religions in this region have influenced their environmental values. The Oromo *Gadaa* system has mainly shaped the Oromo environmental ethic, although it was outlawed by Abyssinian rulers in the last quarter of the 19th century in most parts of Oromo lands except in Borena. In the *Gadaa* system, personal achievement is the basis of power whereas ritual authority is inherited.

In chapter 3, I reviewed relevant literature. I have shown the present status of indigenous knowledge in Ethiopia, Africa and other parts of the world. I have also discussed the place of environment in Western traditions. It has been stated that the proponents of the dominant Western tradition have regarded the natural environment as a value-free realm that should be dominated by humans despite creditable exceptions.

15.2. Basic Concepts

Chapter 4 identified soil erosion, deforestation, population growth, inappropriate economic policies, and insecure land tenure as the major causes of environmental degradation in Ethiopia. I have pointed out in chapters 4 and 12 that peasant farmers and pastoralists in Oromia have lost control of their natural resources because of the Abyssinian domination and the introduction of modern agriculture. This, in turn, has forced them to

degrade their own base in order to maintain their survival, for they could not starve and protect the environment at the same time. Although the propagation of the idea of empowering the people and environmental and development proposals have become a fashion in Ethiopia, they do not find their way into practice.

Furthermore, in chapter 5, I have argued that traditional Oromo attitudes towards the natural environment have enabled them 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. In many respects, Oromo ecotheology is environmentally friendly, and fosters a positive relationship with the environment. *Waaqa*, the Earth, *Ayyaana*, and other creatures are united in various ways. *Waaqa* is believed to manifest Himself in the form of *Ayyaana*. 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 future generations. 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. The rationale behind Oromo traditional religion has an important message for modern environmental ethicists.

In chapter 5, I have also attempted to show that the Oromo are not blind followers of the course of nature. They have consciously manipulated the natural environment to satisfy their needs. For them, the course of events can be influenced by human beings, although they believe that *Waaqa* is the ultimate source of power and value.

The discussion in chapter 6 reveals that the Oromo do not lack the concept of the "future" as Mbiti believed to be the case throughout Africa. If Mbiti and other writers had really propounded the correct account of the African conception of time, it would have been impossible to write a book about an Oromo environmental ethic. Birds, animals, rivers, trees, mountains and other aspects of the natural environment and human activities serve as the source of information for the Oromo. According to Oromo law, people who share their birth date with other species take responsibility for that species, and they are not allowed to hunt this species. This shows how humans and nonhuman animals share birth dates and other features; the positive relationship between humans and animals has been discussed in further detail in chapter 7. Accordingly, the finding of this chapter supports my overall conclusion. If Africans have a sensible concept of "time," indigenous knowledge is more worth studying. The analysis in chapters 5, 6, 7, 8, 9, 10, 11, and 14 also makes clear that the Oromo are concerned with future generations.

15.3. Attitudes to Nature

The Oromo world view involves both beliefs and reasoning. In

particular, the Oromo *Gadaa* system has fostered democratic traditions and contains provisions for the protection of the rights of both human beings and nonhuman species. In chapters 7 and 8, I have shown that the Oromo have developed both anthropocentric and non-anthropocentric attitudes towards the environment and its inhabitants. On the one hand, they regard animals and trees as sources of livelihood. They think that trees are good and should be protected. Forests are a source of income, food, honey, medicine, oil, dye, insecticides, building materials and aesthetic value. Animals are the source of meat, hides and ivory. However, I have shown that the Oromo do not merely focus on creatures that have economic importance, but they also pay attention to other species as such. Sacred groves have symbolic meanings. Similarly, certain wild animals are looked upon as symbols of unity and religious significance. *Saffuu* regulates the relationship between various things, and the use of trees, animals and other resources. The Oromo moral law does not allow irresponsible and unlimited exploitation of resources and human beings. In this case, then, it can be argued that the Oromo conception of *saffuu* is based on justice. It reflects deep respect and balance between various things. The Oromo do not simply consider justice, integrity and respect as human virtues applicable to human beings, but also they extend them to nonhuman species and mother Earth. Accordingly, the Oromo share the view held by most indigenous people (see Deborah Bird Rose, 1999:178) that those who destroy their country and resources destroy themselves, because their survival depends on the life of their country. For the Oromo, a sick environment cannot be the living space for creatures. What is interesting is that natural laws are related to human beings and other creatures through *saffuu*. The important ethical principle, arising from my discussion of indigenous forest and wildlife management, is that it is morally wrong to totally destroy species and that humans should live in harmony with other creatures. The Oromo also believe that domestic animals should not be maltreated. This view was further supported in chapter 14.

The evidence also shows that there have been genuine concerns for nonhuman animals compatible with some of the beliefs and practices of the Oromo people in the West, although in practical terms, Western societies have relied on the dominant Western tradition and exploited both humans and nonhuman species. The positive attitudes of some Christian fathers and writers in the West were not able to prevent Western countries from using religion to keep people, let alone nonhuman species, under control on the basis of race, sex and other bases of discrimination.

In chapter 9, I have examined indigenous Oromo water and range management systems. I have argued that the Oromo, particularly the Borena, have developed environmentally friendly water harvesting systems, satisfying the needs of humans and animals (both domestic and wild animals). The Borena Oromo believe that wild animals, as the creatures of God, should have their own share of water drawn from wells where there are no rivers from which wild animals can drink water. A detailed

knowledge of the local environment and the interplay between specific plants and livestock has enabled the Borena Oromo to stabilise the animal population at levels within the carrying capacity of rangelands, and cope with harsh climatic conditions. The study suggests that traditional well management should be improved to fit the needs of the present.

In chapter 10, I looked at the Oromo indigenous agricultural knowledge. I have shown that the contribution of peasant farmers and pastoralists to environmental protection and development is not merely material, but has also involved knowledge of the materials that they have preserved for centuries, which is a very important material base for the future. Peasant farmers have preserved biodiversity resources, which they have nurtured and developed since time immemorial. Chapter 10, together with chapters 6, 7 and 8, demonstrates that the experimentation has already been conducted in the long past, and that peasant farmers and agropastoralists in the study sites know the nature of various crops, the time of harvesting, poisonous and non-poisonous plants, edible and non-edible plants, medicines for both human and animal diseases, and various species of animals. Each local community has strict classification systems about plants and animals. The most important conclusion to be derived, then, is that the history of modern medicine, agriculture, range-ecology, environmental ethics and science is incomplete without due recognition of the achievements of indigenous people, peasant farmers and pastoralists in the world. This conclusion is reinforced by various arguments I have presented in chapters 13 and 14 in favour of indigenous knowledge, innovation and ethics.

Nonetheless, the foregoing discussion shows that the global market culture has destroyed the basic classifications made by the local people. Biological resources are being depleted, owing to both internal and external factors.

This study thus suggests that only by involving peasant farmers, pastoralists and indigenous people at the grass roots level will we have the political strength and will to avoid the above mentioned problems, and implement serious changes needed to address other serious environmental and developmental problems. Both development and environmental experts and the local people need to participate in the process of development and environmental protection, from planning to implementation. Further, the communities should be given alternatives, and 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, and improve indigenous environmental science in order to protect the natural environment. Increasing the provision of alternative energy sources such as bio-gas technology, solar energy, electric power supply and other appropriate technologies can reduce the destruction of forests. This study also suggests

that *appropriate* policies should be applied to solve environmental and development problems of peasant farmers and pastoralists.

15.4. Environmental Ethics: Traditions and Progress

In chapter 11, I have examined the role of oral traditions as the sources of an indigenous environmental ethic and other issues. Oromo view of the environment, knowledge, and power is illustrated by examining proverbs, folktales, riddles and songs that convey values. The wide variety of proverbs in Oromia shows different levels of peasant farmer and pastoralist environmental knowledge. Contrary to the conventional view, this chapter shows that there are some independent thinkers who subject their own culture to critical scrutiny in Oromia. Reasonably strong empirical evidence suggests that elders and some other knowledgeable persons are the masters of fine environmental knowledge and the living libraries of their society. Another conclusion, which is suggested by the discussion in chapter 11, is that both oral and written sources are useful bases of knowledge transmission, even though both have their own respective strengths and weaknesses. I have also argued that power can influence ethical laws, and the preservation and transmission of local knowledge. In some cases, powerful groups manipulate ethical principles and knowledge, and exclude those who are not rich from power and participation.

What appears to emerge from the conclusions of various chapters is that pastoralists' and peasant farmers' environmental consciousness, protection, management and utilisation of resources are integrated into their traditional life (religion, politics and culture). Their environmental consciousness primarily stems from their efforts to grapple with their practical, immediate, and pressing problems which arise in everyday living. Also, their cultural practices and beliefs contribute to the development of their consciousness. They have been improving their environmental consciousness in response to new ideas and environmental hazards over time. This view is reinforced by the fact that indigenous knowledge is dynamic and in a process of change. Peasant farmers and pastoralists are not passive receivers of new ideas or inactive transmitters of local knowledge. Instead, they are active receivers and transmitters of knowledge, and initiators of development as well.

They preserve and nurture the already existing knowledge and create new knowledge and culture. In the process, they have discarded some aspects of their knowledge and refined other aspects of it. Put differently, they have developed their own indigenous environmental science. They protect their natural environment for various reasons. The level of individuals' environmental consciousness has considerably influenced environmental protection. Those who have learned environmental knowledge from knowledgeable persons are more responsible for the natural environment and its resources than other groups.

The people also employ effective management systems in order to minimise resource depletion. Peasant farmers' and pastoralists' environmental management involves the use of improved pest- and drought-resistant crop varieties over other crops, planting of fast growing trees, diversification of farming strategies, seasonal use of water and grazing-lands and agroforestry. Accordingly, they know what grows where, under what conditions and what is needed to improve it. Another interesting point is that they have their own conscious plans regarding where, when and how to utilise natural resources. Environmental consciousness largely influences decisions about the use of resources. Thus, peasant farmers' and pastoralists' environmental consciousness, protection, management and utilisation are interconnected.

In chapter 12, I show that indigenous knowledge has been challenged by modernisation, the market economy, transnational corporations, foreign religions, the government's acculturation and assimilation policies, the imminent losses of cultural knowledge with the passing of the elders and environmental losses caused by resource extraction and other human activities and the attempt to integrate it into scientific frameworks. The important conclusion implied by this chapter is that the people should be supported to maintain, revitalise, and continue to develop their languages and thereby reclaim and update their knowledge and environmental ethics. The exploitation of peasant farmers and pastoralists by transnational corporations, governments and others should be resisted, and the integration of indigenous knowledge into science should not risk its very existence. These conclusions are supported by the conclusions of chapters 13 and 14.

In chapter 12, I argue that not all aspects of indigenous knowledge are useful. Some practices and beliefs can be a hindrance to development and environmental protection. As a remedy for the negative effects of some forms of indigenous knowledge on the natural environment, critical and careful study of Oromo practices and beliefs is recommended. One of the most important conclusions of chapter 12 is that the negative attitude towards women and the attempt to exploit the people in the name of Oromo traditional religion and moral principles are destructive and must be changed. Indigenous beliefs and practices should be improved to meet the modern needs of society. This conclusion is consistent with the fact that Oromo indigenous knowledge is capable of improvement. Indigenous environmental ethic, thus, should not be romanticised as a cure-all solution to environmental problems.

In chapter 13, I show that current legal regimes which promote monopolisation are inadequate to protect indigenous knowledge. They do not protect the individual and communal rights of indigenous people, peasant farmers and pastoralists in their knowledge, innovations and practices. In particular, the TRIPs provisions in GATT allow transnational corporations and individuals to patent products which are based on the knowledge of indigenous peoples and local communities; but peasant

farmers and indigenous people who first developed superior crop varieties have not received recognition and reward for their inventions. Three principal conclusions emerged from the discussion of indigenous knowledge and IPRs. Firstly, expansion of transnational corporations in the name of the free market can only further the degradation of the natural environment and threaten the health and well-being of all the Earth's inhabitants. Secondly, the extension of patents to include biological resources is a dangerous move for the future of developing countries, and for the global food supply and gene pool. The privatisation of environmental resources will aggravate the gap between the rich and the poor, and the propertied and the propertyless, both within and between nations. The third main conclusion of this chapter is that conventional IPR law requires change in order to bridge the gap between formal and informal innovations. I argue that not all knowledge is communal in nature. Inventors—both communities and independent innovators—in the informal sector should be rewarded for their inventions and be given fair compensation for the sharing of information. Private sector firms which, on occasion, might get patent rights or licensing agreements need to pay society for the rights, and society benefits as a whole from the generation of basic knowledge. It has been argued that if the concerned parties adopted the basic principles of consequentialism and the practices that would be involved, thereby, the majority of people can benefit from their inventions.

I have noted that many environmental ethicists who have been defending the rights of animals, trees and ecosystems have not paid attention to the intellectual property rights of indigenous people, peasant farmers and pastoralists in spite of the fact that some of them have been discussing biodiversity conservation and loss, and the negative impact of transnational corporations on biological resources, on the Earth and its inhabitants. I would argue that if they continue to neglect the major contributors to biodiversity conservation, and environmentally friendly practices, their ethical theory of forests, biodiversity, development, global justice and the like will not have significant impacts on these issues. I suggest that environmental ethicists have to support the legitimate claim of peasant farmers, pastoralists and indigenous people to be the beneficiaries of their inventions and contributions to environmental protection.

Chapter 14 brings together the ideas developed in the preceding chapters and shows the linkage between indigenous and modern environmental ethics. It delineates how anthropocentrist and non-anthropocentrist environmental ethicists have promoted a wide range of attitudes relating to the natural environment and its inhabitants. Various environmental ethicists have discussed issues like the moral responsibility of humans, the moral value of nonhuman natural objects, the moral status of future generations, global environmental problems such as water pollution, global warming, ozone layer depletion and so on. Other issues such as the value of non-Western traditions, population growth, poverty, environment and development in “Third World” countries have attracted the attention of

various environmental ethicists. Some philosophers have treated nature in a utilitarian way as a means to the best consequences. Others have tried to extend morality to nonhuman species and the natural environment, and argue that the natural environment has inherent or intrinsic value.

Most environmental ethicists have pretended that their position is the only correct way of ensuring the protection of humankind and the planet Earth. However, no single approach to environmental problems is fully satisfactory. Various environmental theories have valuable insights and can contribute to the solution of environmental problems in different ways. A variety of perspectives and values are useful in understanding environmental problems and the place of humans within nature. Environmental problems require global concerns and cannot be solved by one nation or one single approach alone. It has to be noted that if we simply defend the intrinsic value of different things and ignore the interests of humans, our position will be vulnerable to attack and remain mere speculation without any relevance to the real environmental problems in the world. We cannot continue to defend this position when many people are starving. As some writers have persuasively noted, I would argue that anthropocentrism in the weak sense (human-centred) is inevitable in the ecosystem. Here, I am certainly not suggesting that humans should dominate and possess the natural environment without restriction. I mean to suggest, instead, that it would be unrealistic to advise human beings not to use nonhuman species and the natural environment at all. We have to recognise different levels of values. The rights of humans and deadly viruses such as AIDS, ebola and the like should not be considered as similar. Otherwise, the purpose of medical science will turn out to be meaningless, and human beings and other nonhuman species can disappear from the Earth owing to diseases caused by some members of the ecocommunity. On the other hand, consumer demands alone should not be the measure of environmental value, and the natural environment should not be considered as a mere resource to be exploited by humans. It ought to be noted that the disappearance of a single species will affect the health of the ecosystem. Accordingly, anthropocentrists and non-anthropocentrists have to reconsider their positions and make realistic attempts to contribute to the protection of the home planet and its residents, although it may not be possible for them to be reconciled as Sterba (1994) suggested.

In chapter 14, I also show that, with certain notable exceptions, various modern environmental ethicists have devoted little explicit ethical attention to the environmental knowledge of African peasant farmers and pastoralists. The example of Oromo view of the natural environment, however, suggests that there has been an indigenous environmental ethic in Africa.

For reasons which I have sought to explicate at various points, I have argued that indigenous and modern environmental ethics are complementary. Both indigenous and modern environmental ethics recognise the interdependence of human and nonhuman species. The

either/or of indigenous knowledge against modern knowledge is an ideological construction. I establish the position that modern environmental theorists can benefit from the environmental knowledge of peasant farmers and pastoralists. Different groups of people have different traditions which are compatible with the theories of various environmental ethicists. Thus,

[t]he world's indigenous and traditional systems of thought must create a network of environmental ethics—each a jewel, with its own unique color and composition, reflecting the light of all the others (Callicott, 1994:234).

Peasant farmers and pastoralists can also improve their environmental consciousness if they are given access to the works of environmental ethicists and theorists presented in the way they can understand. The combination of an indigenous and a modern environmental ethic may facilitate cross-cultural understanding, and thereby enhance the process of development and local and global environmental management. I would thus argue that the kind of ethic embodied in indigenous beliefs and values typically does not contradict the kind of ethic found in modern beliefs and values. But these kinds of ethics complement each other, and in some instances, one is superior to the other.

I also argue that indigenous environmental knowledge and an indigenous environmental ethic are important not only for modern environmental ethicists but also for environmental theorists, scientists and development experts. Many facets of indigenous knowledge are quite fit for scientific investigation, and well suited to scientific trials and verification, potentially contributing to the total of scientific knowledge. Accordingly, indigenous knowledge is a necessary condition to build a sustainable future, but it is far from a sufficient one. The sharing of indigenous knowledge within and across communities can best serve environmental protection and development efforts. Isolated attempts of peasant farmers, pastoralists and other indigenous people or modern technicians, environmental theorists and scientists alone hardly avoid threats to the environment. Very often, scientists, philosophers and environmentalists go their own ways and treat environmental and other problems without giving any attention to what has been done about these problems in other fields, let alone approaching the local people. The methodology I have chosen for my research has enabled me to understand that addressing environmental problems requires the cooperation of and contributions from various professionals, and many diverse societies and cultures.

Therefore, modern environmental ethicists and scientists should make in-depth consultation and ongoing dialogue with local communities and professionals. This can promote reciprocal information flow in a wide variety of fields. Accordingly, the local people, researchers and international organisations should maintain constructive partnerships. All parties should work towards the achievement of the long-term goal of

economically, socially, and environmentally sound development. This conclusion coheres with the conclusions of chapter 13.

In chapter 14, I state that the above conclusion might not be translated into practice because of the influence of power. Reasonably strong empirical evidence shows that powerful countries have ignored ethical issues and international environmental treaties, and promoted their vested interests at the expense of the majority of the people and nonhuman species. What we have been observing is the growing pauperisation of the poor and increasing affluence of the well off. As has been stated in chapter 14, it is time for us to reflect on past mistakes and future events. I have argued that there are two options for us: we either change the present situation or the industrial society will collapse in the future. In the ensuing discussion of the possibility of establishing environmentally friendly societies, I hope to have shown that the unlimited greed to exploit Earth's resources cannot last. If the accelerated misuse of the natural environment is unabated, it will lead to long-term negative consequences such as the decline of agriculture and of individual and community income, poverty, increased competition for scarce resources, loss of forest products and so forth, which will endanger the survival of present and future generations, and nonhuman species.

Accordingly, this misuse of the natural environment should be changed for the benefit of all members of the ecosystem. In this situation, we must rethink our position, our future, and what our proper role might be, as members of the ecocommunity. What is demanded of us is to change our attitudes towards the natural environment. For this to happen, I have argued that people should empower themselves against dominant powers and irresponsible rulers in their respective countries by building up alliances with sympathetic groups in the state administration, the environmental lobby, the academic community, and other individuals and organisations. Another conclusion, arising from my discussion of the relationship between power, knowledge and ethics, is that even if transnational corporations and various capitalist countries and bureaucrats in developing countries have given mere lip service to ethics, the importance of ethics is beyond doubt. It can influence governments and transnational corporations to change their attitudes towards the environment. Moreover, if environmental ethics broadens its scope and addresses the injustice done to the majority of the people and to nonhuman species, it will have a paramount role in creating awareness within countries, and globally, about the actions of transnational corporations, irresponsible capitalist countries and local industries which damage the environment. The efforts of many a people will one day bring change in favour of the majority of the people, nonhuman species, and the planet Earth. There are some grounds for hope. But I do understand that there is still a formidable distance to travel.

This study covers only two zones of Oromia region. Further research is needed in a variety of settings in Oromia and elsewhere in order to substantiate the relative importance of the current findings. The findings

of this study suggest that the study of an indigenous environmental ethic both in different parts of Ethiopia and elsewhere is very important. Hence, I would suggest that various experts should come together and undertake systematic study of indigenous environmental ethics and science on the basis of multi-disciplinary approaches. If we delay the study of indigenous environmental knowledge and its impact on the development process and environmental management, it will disappear together with its invaluable possessors.

Finally, through the course of my research, I have learned that the study of indigenous environmental ethics, where the tradition of interview and critical examination of the established traditions is not common, requires patience and systematic approaches. The road is far from being smooth and readily travelled. Even where fieldwork is common, for instance, in Borena, the people are very suspicious about the significance of fieldwork. They want to see some positive effects of the research carried out by outsiders in their areas. The people will support the study of indigenous environmental knowledge and ethics, provided that they are the beneficiaries of this study. Thus, researchers and all the concerned parties should take this important point into account.

It is hoped that this study will foster an awareness and appreciation of indigenous environmental ethics among modern environmental ethicists and theorists, and provoke further research on the subject.

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APPENDICES

APPENDIX ONE: QUESTIONNAIRE

Background Information

Sex Male Female

Age

Marital Status

- a. Single d. Widowed
b. Divorced e. Separated
c. Married

Educational Qualifications

None 1-6 7-8 9-12 12 & above

The Number of your family _____ Male Female

Questions

1. What is the major occupation of the household?

- a. Crop farming c. Mixed farming
b. Livestock d. Other (specify)

2. In your life experiences have you perceived that the soil in this area has degraded?

- a. yes b. no c. do not know

If yes, what do you think is the cause of soil degradation?

3. In your life experiences have you perceived that forest in this area has decreased?

- a. yes b. no c. do not know

If yes, what do you think is the cause of decrease in forest cover?

4. A. Have you planted trees on your homestead?

- a. Yes b. No

B. If yes, which species have you planted?

Species

- a. _____
b. _____

- c. _____
- d. _____
- e. _____

C. If your answer is no for question A, give reasons.

D. Have you planted trees on your farmland?

- a. Yes b. No

E. If your answer is yes for question C, which species have you planted?

Species

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

F. If your answer is no for question C, give reasons.

G. Have you planted trees somewhere else?

- a. Yes b. No

If your answer is yes for question G, which species have you planted?

Species

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

I. If your answer is no for question G, give reasons.

5. A. Do you respect wild animals?

- a. yes b. no

B. If yes, which species do you respect?

C. Which of the following reasons would you say most influenced you to respect wild animals ?

- a. religion
- b. environmental friendliness
- c. because they are the sources of income
- d. future concern
- e. other (please give details) _____

D. If you do not respect wild animals, give reasons.

MILTOO TOKOO: GAFFILEE (APPENDIX ONE, OROMO VERSION)

GAAFFILEE

Saala Dhiira Dhalaa
Umrii

Haala fuudhaa fi heerumaa

a. kan hin fuune d. kanirraa du'e(duute)
b. kan hiike/te e. kan gargar bahan
c. kan fuudhe

Sadarkaa barnootaa

kan hin barre

1-6 7-8 9-12 12 ol

Lakkoofsa miseensota maati:

Dhiira Dhalaa waliigalatti

1. Hojjaan maatiin kun ittiin bulu maaliinni?

a. qonna midhaanii b. loon horsiisuu
c. lamaanuu d. waan biraa (ibsi)

2. Jireenya keessan keessatti biyyoon dhiqamuusaa argitaniittuu?

a. eeyee b. lakki c. hin beeku

Eeyee yoo jettan sababni kun ta'eef maali jettanii yaaddu?

3. Jireenya keessan keessatti bossonni naannoo kanaa barbadaawuusaa hubattaniittuu?

a. eeyee b. lakki c. hin beeku

Eeyee yoo jettan sababni kun ta'eef maali jettanii yaaddu?

4. A. Naannoo qa'e keessaniitti muka adda addaa dhaabduu?

a. eeyee b. lakki

B. Deebiin keessan eeyyee yoo ta'e gosa muka akkamii dhaabdan?

Muka

a. _____
b. _____
c. _____
d. _____

e. _____

C. Yoo lakkii jettan maaliif?

D. Lafa qonnaa irrattii mukoota dhaabduu?

a. eeyee b. lakki

E. Deebiin keessan eeyee yoo ta'e gosa muka akkamii dhaabdan?

Muka

a. _____
b. _____
c. _____
d. _____
e. _____

F. Yoo lakki jettan maaliif?

G. Muka gara biraatti dhaabduu?

a. eeyyee b. lakkii

H. Deebiin keessan eeyyee yoo ta'e gosa muka akkamii dhaabdan?

Muka

a. _____
b. _____
c. _____
d. _____
e. _____

I. Yoo lakki jettan maaliif?

5. A. Bineensota bosonaa keessaa kan kabajjan jiruu?

a. eeyee b. lakkii

B. Yoo eeyee jettan isaan kam kabajju?

C. Sababoota kanaa gadii keessaa isaan kamtu akka isin bineensota bosonaa kabajjan isin kakaase?

a. amantii b. jaalala naannoof qabdan
c. jireenya wayyeessuuf d. fuulduraaf yaaduu
e. kan biraa (ibsi) _____

D. Yoo hinkabajjan ta'e maaliif? _____

APPENDIX TWO: INTERVIEW GUIDES

I. KEY PEASANT FARMERS AND PASTORALISTS–INFORMANTS AND FOCUS–GROUP DISCUSSION INTERVIEW GUIDE

DATE _____
PEASANT ASSOCIATION _____
NAME _____
SEX a. Male b. Female
AGE _____

QUESTIONS

A. INDICATORS OF ENVIRONMENTAL DEGRADATION

1. A. Have you observed environmental change since you started farming?
a. yes b. no
- B. If yes, how do you view the level of environmental change?
2. A. What do you think are the causes of soil erosion, in order of importance?
B. What types of soils are found in the area?
C. What criteria or indications do you use to identify fertile and poor soils?
3. What do you think are the major causes of deforestation?
4. What are the tenure arrangements for resource management, how and why do conflicts over resource use arise and how are they resolved-at what level?
5. Is there enough land to feed the number of people alive nowadays?
6. Are children always a blessing, or only sometimes?
7. If your ancestors of 100 years ago were alive now, what would they think about the state of the land?

B. INDIGENOUS CONSERVATION METHODS

1. What do you think your society should do to avoid poverty and environmental degradation and to protect the natural environment?
2. A. What inputs do you use to maintain soil fertility?
B. Are these inputs more effective or productive at present than five years ago? Why?
C. Do you use manure from different animals to maintain soil fertility?
a. yes b. no
c. If yes, give the names of animals in order of importance.

D. Could you identify different types of crops you use to maintain soil fertility in order of importance? Which one is the best?

E. Why do you use chemical fertilisers?

3. What other conservation methods do you use?

4. Compared to indigenous methods, do you think that modern conservation practices are more fruitful or productive? why?

5. How do you control pests and disease in fields and in storage?

6. Do you use any irrigation scheme?

a. yes b. no c. If yes, give reasons.

C. INDIGENOUS FOREST MANAGEMENT

1. Do you plant trees?

a. yes b. no c. If yes, why? d. If not, why not?

2. Can both men and women plant trees?

a. yes b. no

3. Is there a communal forest management initiative?

4. What are the uses of trees?

5. Which trees are planted around religious institutions and other burial places?

6. Is there natural forest in your village?

a. yes b. no

c. If there is none, have you heard or can you remember when there was?

7. Are there more trees or fewer trees in the land of your home village now than when you were born?

8. What indigenous methods are used to conserve trees (for instance replanting)?

9. Why do you think we should preserve all the species of trees?

10. Would it matter if all the forest is cut down in the next few years?

11. Do you produce honey?

a. yes b. no c. If yes, why?

12. Could you list the trees or flowers from which bees make honey, in order of importance?

D. THE CONSERVATION OF MEDICINAL AND SPECIAL FOOD PLANTS

1. Are there medicinal plants in your village?
a. yes b. no
c. if yes, what are they?
2. Do people preserve medicinal trees?
a. yes b. no c. If yes, why?
3. Do you think that the local people prefer traditional medicines rather than modern medicines?
a. yes b. no c. Why?
4. Are there edible wild plants in your area? If yes, give details.

E. INDIGENOUS SYSTEMS OF WATER MANAGEMENT

1. What are the major sources of water supply in your village?
2. What mechanisms are used to conserve water?
3. Have you observed a decrease in the availability of water since you started to live in your village?
a. yes b. no c. If yes, what do you think are the causes of this?

F. INDIGENOUS CLIMATE KNOWLEDGE AND TIME

1. Do you use lunar and stars' cycles in farming and rainfall calculations and prediction?
a. yes b. no c. If yes, how?
2. Do you use solar cycles to determine different seasons?
a. yes b. no c. If yes, how?
3. Do you think that most events will repeat themselves in the future?
a. yes b. no
4. How do the Oromo use the *Gadaa* system to determine different seasons?
5. What other methods do you use to anticipate the behaviour of the environment and weather conditions?
6. For how many years do you expect to live?
7. What do you think that we, the people now alive, owe to the people of the future? (or, to the people who will live after we are dead?)
8. Will your great-grandchildren inherit your land?

G. INDIGENOUS WILDLIFE MANAGEMENT

1. What types of wild animal are found in your region?
2. Have you practised totemism?
 - a. yes b. no
 - c. If yes, give the names of the totem animals.
 - d. if not, have you heard from your parents that there was a totem animal in Oromo?
 - a. yes b. no c. If yes, give the names of the totem animals.
3.
 - A. Do you hunt wild animals?
 - a. yes b. no c. If yes, do you have preferences for hunting certain species? Why?
 - B. How often do you hunt?
 - C. In which season do you hunt?
 - D. Are there certain wild animals you never eat?
 - a. yes b. no c. If yes, name them.
 - E. Are there certain wild animals that people do not eat at certain times?
 - a. yes b. no c. if yes, name them.
 - F. Are there certain wild animals you used to eat, but which you do not eat at present? Why?
4. Does your community show kindness to animals quite apart from human interests?
 - a. yes b. no c. If yes, why?
5. Could you mention the names of wild animals that are respected in your area?
6. Does it matter whether wild animals continue to live in the forest, or not?

H. ECOTHEOLOGY

1. Do you protect trees for religious reasons?
 - a. yes b. no c. If yes, why?
2. A. Does your community regard the earth as a living being? Why?
B. Does your community regard the earth as a conscious being? Why?
3. Does your community regard human beings as part of nature? why?
4. Does your community believe that *Waaqa* (God) exists and humans can experience Him as a person?
5. Who creates *Waaqa*?
6. How did the idea occur to *Waaqa* to create the universe, the thing?

7. Given the fact of evils, how can it be said that the world was created by an omnibenevolent, omniscient and omnipotent *Waaqa*?
8. If *Waaqa* is all good, why does He allowed evil at all in the present world? Why does He not make the universe uniformly good?
9. Could you explain the relationship between God and the Earth?
10. Can both man and woman be religious leaders?
 - a. yes
 - b. no
11. Does the land belong to all, living and dead included, (or, living, dead and unborn included) according to your community?
 - a. yes
 - b. no
 - c. Why?
12. Do people stay away from certain places because these places are related to evil things?
 - a. yes
 - b. no
 - c. If yes, give examples.
13. Where does your community build Churches, Mosques and *Galma* (traditional ritual hall)? Why?
14. What is *Ayyaana*?
15. What is *Qaalluu*?
16. What are the weaknesses of Oromo religion?

I. POWER AND KNOWLEDGE

1. What is the role of proverbs and myths in Oromo culture?
2. Do peasant farmers and pastoralists have the power to resist government inspired unecological development?
 - a. yes
 - b. no
 - c. If yes, give an example.
3. Does the government support indigenous conservation practices?
4. A. Who was entitled to manage forests, wild animals and other natural resources before the 1974 revolution? How?
B. Who was entitled to manage forests, wild animals, and other natural resources after the 1975 agrarian reform? How?
C. Who is entitled to manage forests, wild animals, and other natural resources at present? How?
D. As far as you know, which system of the above systems is favourable to environmental protection? Why?

5. Which people have indigenous environmental knowledge? Are there some peasant farmers and pastoralists who have specialised knowledge about their environment in your region?
6. Who is controlling knowledge in your society? Why and how? Is knowledge open to every one and does acquisition of it depend simply on individual aptitude in Oromo society?
7. Do women have the right to use natural resources? I have heard that not all women have the right to use natural resources. What can you tell me about that?
8. Do religious leaders and other knowledgeable persons dominate or exploit others?
 - a. yes
 - b. no
 - c. If yes, how and why?

MILTOO LAMA: QAJEELCHA ODEEFFANNOO (APPENDIX TWO, OROMO VERSION)

I. QOTTOOTAAFII (I, Translated)

Guyyaa _____ Waldaa Qottootaa _____
Maqaa _____
Saala (a) Dhiira _____ (b) Dhalaa _____
Umrii _____

A. AGARSIIFITOTA MIIDHAMA NAANNOO

1. A. Qonna erga calqabdani geeddrama naannoo hubattaniituu?
 - a. eeyee
 - b. lakki
- B. eeyee yoo jettan, geeddarama naannoo akkamitti ilaaltu?
2. A. Dhiqama biyyootiif waantota sababa ta'an sadarkaa rakkoo uumaniin natti himaa.
- B. Biyyoo bifa attamiitu naannoo keessanitti argama?
- C. Attamitti biyoo gabbataafii huuqataa addaan baaftabnii beektu?
3. Bosonni akka barbadaawu kan taasisu maalinni?
4. Qoodni Qabbenya uumamaa attamitti? Attamittiif maaliif wal dhabisni nammotaa qabbenya uumamaa irratti ka'a? Wal dhabisni ka'u kuniwoo attamitti hiikkata?
5. Namoota amma jiran hundaaf waan nyaataa oomishanii dhiyeessuuf Lafti gayaa ta'e jiraa?
6. Daa'imman ennaa hunda jaalatamoodha moo ennaa ennaadha?
7. Akaakayyuwwan keessan isaan waggaa dhibba duraa hardha otoo jiraatanii waa'ee qabeenya lafaa yero amma maal yaadu?

B. MALA AADAA QABEENYA GARA GARAA QUSACHUUF GARGAARAN

1. Naannoo kunuunsuuf akkasumas hiyyummaa balleessuuf uummatni naanno keessanii maal gochuu qaba jettaniit yaadduu?
2. A. Biyyoo gabbisuuf mala attamiitti gargaaramtu?
B. Malli gabbisa biyyo amma gargaaramtan kan waggaa shan dura gargaaramtan irra gaarii dhaa? Maaliif?
C. Biyyoo gabbisuuf dikee beellada gosa adda addaatti gargaaramtuu?
a. eeyee b. lakki c. eeyee yoo jetan akaa faayidaa dikee sanaatti tartiibaan tarreessa.
D. Biyyoo gabbisuuf gosa midhaanii kamitti akka gargaaramtan tartiiba faayidaa isaaniitiin natti himuu dandeessuu? Kamtu caalabayeesa?
E. Xaa'oo maaliif gargaaramtu?
3. Naannoo kunuunsuuf malli biraa ittiin gargaaramtan maalinni?
4. Malli hammayyaa kan naannoo ittiin eegan mala isa durii caalaa? Maaliif?
5. Raammoo gara garaa maasiitti akkasumas mana keessa iddoo midhaan kuuftanitti kan midhaan balleessaniifii dhibee biqiltootaa attamitti ofirraa dhoowwitu (ittiftu)?
6. Maksaatti gargaaramtuu?
a. eeyee b. lakki c. eeyee yoo jettan maaliif akka maksaatti gargaaramtan ibsaa.

C. MALA AADAA KAN ITTIIN BOSONA EEGAN

1. Mukoota dhaabduu?
a. eeyee b. lakki c. eeyee yoo jetan maaliif? d. lakki yoo jetan maaliif?
2. Dhiirris dubartiinis mukoota dhaabuu danda'uu?
a. eeye b. lakki
3. Bosona uummatni waliin eeguun jiraa?
4. Faayidaan mukootaa maalinni?
5. Mukoota isaan kamtu lafa amantaa fi lafa awwaalaarratti dhaabbata?
6. Naannoo keessan bosonni uumamaa jiraa?
a. eeyee b. lakki c. lakki yoo jettan durii jiraachuusa dhagesanitu?
7. Naannoo jireenya keessanii bosonni ennaa isin daa'ima moo amma irra jira?
8. Malli bosona ittiin eegan maal fa'i? (Fakkeenyaaf muka deebisanii dhaabuu)

9. Akaakuu mukaa hunda eeguun maaliif gargaara jettanii yaaddu?
10. Mukkoon bosonaa hundi waggootii xiqoo dhufan keessatti yoo muraman rakko fida?
11. Damma baaftuu?
 - a. eeyee b. lakki c. eeyee yoo jeatan maaliif?
12. Mukoota yookii abaaboowwan kanniisni damma hojjachuudhaaf itti gargaaraman sadarkaadhaan tarreessuu dandeessuu?

D. EEGUMSA MUKOOTA QORICHAA FI NYAATAAF OLANII

1. Naannoo Keessanitti mukoonni qorichummaaf oolan jiruu?
 - a. eeyee b. lakki c. eeyee yoo jettan maal fa'i?
2. Uummatni mukoota qorichummaa qabaniif eegumsa godhaa?
 - a. eeyee b. lakki c. eeyee yoo jettan maaliif?
3. Uummatni naannoo keessanitti qoricha hammayyaa irra qoricha aadaa filata jettani yaadduu?
4. Naannoo keessanitti biqiltoonni lagaa kan nyaataman jiruu?

E. MALA AADAA BISHAAN QUSACHUUF GARGAARU

1. Maddi bishaanii kan ganda keessanii maalinni?
2. Bishaan attamitti kunuunsitu?
3. Naannoo amma jiraattanitti erga jiraachuu jalqbdanii bishaan hirdhachaa deemuu isaa hubattanittuu?
 - a. eeyee b. lakki c. eeyee yoo jettan sababni bishaan hirdhachaa deemeef maali jettaniit yaaddu?

F. BEEKKUMSA HAALA QILLEENSAAFI YEROO

1. Dhufinsa roobaa fi yeroo qonnaa tilmaamuuf marsaa urjii fi salgan-ji'aatti gargaaramtuu?
 - a. eeyee b. lakki c. yoo eeyee jettan akkamitti?
2. Yero gara garaa tilmaamuuf marsaa addutti gargaaramtuu?
 - a. eeyee b. lakki c. eeyee yoo jettan akkamitti?
3. Seenaa keessatti geeddaramni tokko tokko deebi'anii dhufu jettanii yaadduu?
 - a. eeyee b. lakki c. Ibsa kennaa.

4. Oromon yeroo gara garaa tilmaamuudhaaf akkamitti sirna Gadaatiin gargaarama?
5. Akkaataa naannoo fi haala qilleensaa tilmaamuudhaaf mala bira maal gargaaramtu?
6. Waggaa meeqa nan jiraadha jettanii yaaddu?
7. Nuti namoonni hardha jirru, namoota gara fuulduraa jiraataniif maal dabarsinaaf jettanii yaaddu?
8. Akaakayyuuwwan keessan lafa keessan dhaaluu?

G. MALA AADAA KAN ITTIIN BINEENSA BOSONAA EEGAN

1. Akaakuun bineensotaa naannoo keessanitti argaman maal fa'i?
2. Bineensota firromffattuu (Bineensota akka firaatti ilaaltuu)?
 - a. eeyee b. lakki c. yoo eeyee jettan, maqaa bineensota firromffattanii ibsaa. d.yoo lakki jettan yeroo durii bineensonni firoomfataman naannoo keessan jiraachuu saanii abbootii keessanirraa dhageessaniittuu?
 - a. eeyee b. lakki c. yoo eeyee jettan maqaa bineensota kanaa ibsaa.
3. A. Bineensota bosonaa adamsituu?
 - a. eeyee b. lakki c. yoo eeyee jettan adamoodhaaf bineensota filattan qabduu? Maaliif?B. Ammam ammamitti adamsitu?
 - C. Wayitiilee kam keessa adamsitu?
 - D. Bineensonni murtaa'an kan isin hin nyaanne jiruu?
 - a. eeyee b. lakki c. yoo eeyee jettan maqaa saanii ibsaa.
 - E. Bineensonni sabni naannoo keessanii yeroo murtaa'etti hinyaanne jiruu?
 - a. eeyee b. lakki c. yoo eeyee jettan maqaa saanii ibsaa.
 - F. Bineensonni kana dura nyaattan amma garuu kan hin nyaanne jiruu? Maaliif hin nyaanne?
4. Ummatni naannoo keessanii bu'aa saanii otoo hin ilaaliin akkasumatti jaalala bineensotaa agarsiisuu?
 - a. eeyee b. lakki c. yoo eeyee jttan maaliif?
5. Naannoo keessanitti bineensota kabajaman maqaa saanii naa ibsuu dandeessuu?
6. Bineensi bosonna keessa jiraachuusaa itti fufuu fii dhiisuunsaa geeddarmni fidu jira?

H. AMANTII?

1. Mukoota sababii amantiitiif eegumsa gootuufii?
a. eeyee b. lakkic.eeyee yoo jettan maaliif?
2. A. Uummatni naannoo keessanii Lafti uumama keessaa isa tokko jedhee yaadaa? Maaliif?
B. Uummatni naannoo keessanii Lafti akka dammaqa qabutti lakkaayaa?
3. Hawwaasni naannoo keessanii ilmoo namaa akka damee uumamaatti ilaalaa? Maaliif?
4. Uummatni naannoo keessanii Waaqni jira namnis Waaqa akkuma namaatti quunnama jedhe yaadda?
5. Waaqa eenutu uume?
6. Waaqni akkamitti adunyaa fi waan gara garaa uumuu yaade?
7. Ennaa waan gadhee tokko tokko ilaallu, hunda danda'aa, hunda uumaa fi hunda beekaa kan ta'e *Waaqni* akkamitti waan gadhee uume jechuu dandeenya?
8. Yoo Waaqayyo gaarii ta'e, maaliif cubbuu adunyaa kanaaf hayyamee? Maaliif waa hunda walqixxeessee gaarii hin goone?
9. Walitti dhufeenya *Waaqaa* fi *Lafa* jidduu jiru ibsuu dandeessuu?
10. Dhiiris dubartiinis ayyaantu ta'uu danda'uu?
11. Akka ilaalcha uummata naannoo keessaniitti Lafti kan nama hundaatii? Jechuun kan isa du'ee, kan isa jiruu, yookii kan isa du'ee, kan isa jiruu akkasumas kan isa gara fuunduraatti dhlatuutii?
a. eeyee b. lakki c. Maliif?
12. Sababii jinniin wal quunnameen, namoonni naannoo tokko tokko irraa fagaatuu?
a. eeyee b. lakki c. yoo eeyee jettan fakkeenya kennaa.
13. Hawaasni keessan, bataskaana, masgiidaa fi galma eessatti ijaara? Maaliif?
14. Ayyaanni maalinni?
15. Qaalluun maalinni?
16. Dadhabbiin amantii Oromoo maalinni?

I. Humnaa fi Beekkumsa

1. Aadaa Oromoo keessatti bu'aan mamaksaafi seenaa qoossa maalinni?
2. Qotee bulon fi warii lon horsiisan seera motummaa kan qabeenya naannorratti miidhaa qabuun mormuu danda'uu?
3. Mootummaan eegumsa naannoo kan aadaa deegaraa?
4. A. Warraaqsa bara 1974 dura bosona, bineensota bosonaa, laffa fi qabeenya gara garaarratti eenyutu abboma ture? Akkamitti?
B. Labsi lafa bara 1975 booda bosona, bineensota bosonaa, laff fi qabeenya gara garaarratti eenyutu abboma ture? Akkamitti?
C. Yeroo amma bosona, bineensota bosonaa, laffa fi qabeenya gara garaarratti eenyutu abboma ture? Akkamitti?
D. Akka beekumsa keessaniitti sirna isa kamtu naannoo kunuunsudha gaari ture jettanii yaaddu? Maaliif?
5. Namoota isaan kamtu beekumsa nannoo kan aadaa qaba? Namoon beekumsa addaa mata isaanii naannorratti qaban naannoo kessan jiruu?
6. Hawaasa keessan keessatti beekumsa eenyutu towata? Maaliif? Akkamitti? Beekumsi nama hundaafuu banaadha? Beekumsa argachuun dandettii namni qaburratti hundaayaa?
7. Dubartoonni qabeenya uumamaatti gargaaramuuf mirga qabuu? Dubartoota murtaa'n malee dubartoonni hunduu qabeenya uumamaatti gargaaramuuf mirga akka hin qabne dhag'eera. Waa'ee kanarratti maal natti himuu dandeessu?
8. Hooggantoonni amantii fi nammoonni warri beekumsa qaban uummatanaannoo kanaarratti ol aantummaa qabuu yooki uummata miidhuu?
a. eeyee b. lakki c. yoo eeyee jettan akkamitti? Maaliif?

II. DISCUSSION GUIDE FOR OROMO INTELLECTUALS AND AGRICULTURAL DEVELOPMENT WORKERS

DATE _____ ORGANISATION _____
NAME _____ PROFESSION _____
SEX a. Male _____ b. Female _____
AGE _____ EDUCATION _____

1. How do peasant farmers and pastoralists come to “know”, and how do they become confident in what they know?
2. Why are some peasant farmers and pastoralists more knowledgeable than others?
3. What sorts of environmental knowledge count and who decides when they count?

4. Who are the possessors of indigenous environmental knowledge? male or female? rich or poor? old or young? influential or powerless?
5. Who controls the flow of environmental and developmental information and who imposes an interpretative gloss on its transmission? Does everyone believe what the government says ? Or do peasant farmers and pastoralists believe what the peasant associations say
6. Can the powerless define what counts as knowledge and development?
7. Who is actually promoting and resisting indigenous environmental knowledge? Why?
8. What is unique about Oromo environmental knowledge?
9. Did *Waaqa* create the world out of nothing? or was the world made out of nothing? or Was the world made out of pre-existent materials which the Supreme Being did not make?
10. How does religion influence indigenous environmental ethics?
11. Do the Oromo believe in the reincarnation of an ancestor's soul in a descendant's personality?
12. How do the Oromo explain environmental health?
13. Do peasant farmers and pastoralists show kindness to wild animals quite apart from human interests? Why?
14. Do animals have rights in Oromo world view?
15. What traditional conservation mechanisms exist?
16. How can these methods be integrated into modern policies, institutions and extension programmes?
17. If you had been an Oromo peasant farmer or pastoralist what would you have done to protect the environment?
18. How can environmental protection and development be balanced?
19. How have national laws and government policies either corresponded or conflicted with peasants farmers' and pastoralists conservation practices?
20. What types of policies, programmes or projects could take the indigenous environmental ethic more adequately into account?
21. How is indigenous environmental ethics related to modern environmental ethics?
22. Are indigenous and modern knowledge systems and ethical norms embedded in totally different and incompatible world views?
23. Do you believe that scientific knowledge is more important than indigenous knowledge? Why?
24. Could you tell me the impact of modernisation on indigenous environmental knowledge (for example, in education or in extension agencies) ?
25. What are the challenges and limitations of indigenous environmental ethic?
26. Would you like to propose that peasant farmers/pastoralists should be empowered? Who is going to empower them?

II. QAJEELCHA ODEEFANNOO HAYYOOTA OROMOOTIIF (II, Translated)

1. Qotee bultoonni akkasumas horii horsiiftonni akkamitti waa beeku danda'u? Beekumsa qabaachuu isaaniirratti amantii qabuu?

2. Qotee bultoonni akkasumas horii horsiiftonni tokko tokko isaan kaan caala beektota ta'uu maaliif danda'an?
3. Beekumsa uumamaa isa kamtu fudhatama qaba? Beekumsi kun akka fudhatamu eenyutu murteessa?
4. Beekumsa uumamaa kan aadaa eenyutu qaba? Dhiiramoo dhalaa? Sooressamoo hiyyeessa? Jaarsamoo ijoolleedha? Isa humna qabumoo isa humna hin qabne?
5. Adeemsa odeeffannoowwan naannoo/uumamaa fi guddina ilaalanii eenyutu towata? Dabarsuu adeeffannoo kana eenytuu hika kenna? Namni hundumtuu waan motummaan jedhu hin fudhataa? Yookiimmoo qotee bultoonni akkasumas horii horsiiftonni waan waldaan qotee bulaa itti himu ofitti fudhatuu?
6. Namni humna hinqabne hika beekumsaa fi guddina kenu dandaya?
7. Qabatamaadhaan eenyutu beekumsa uumamaa kan aadaa jajabeesa yookiimmoo mormman? Maaliif?
8. Beekumsa Oromoon uumamaarrati qabuu maaltu adda taasisa.
9. Waaqayyo adunyaa wan hinjirrera uumee? Yookiimmoo adunyaan wan hinjirrera uumame moo wan dura ture kan Waaqayyo hin ummiin irra uumame?
10. Amantin illaalcha uumamaa kan aadaa ammam jabeesera yookimmo dadhabsiseera?
11. Oromoonni nabsi abbootii saani isaan dura darbanii namummaa dhaloota boodaa keessatti deebi'eet bifa gara garaatiin muldhata jedhanii amanuu?
12. Oromoonni fayyaa uumamaa/naannoo (nagaa uumamman walqabate) akkamitti ibsu?
13. Qote bultoonni fi wari loon horsiisan bu'aa saanii otoo hin ilaaliin akkasumati jaalala bineensotaa agarsiisuu? Maaliif?
14. Akka ilaalcha Oromo adunyaatti binneensi fi horiin mirga qabuu?
15. Qabbenya uumamaa qusachuudhaaf mala aadaa akkamiitu jira?
16. Malli aadaa kun attamitti imaammata hammayyaa fi saganta exteenshini fana wal qabachuu dandaya?
17. Otoo qotee bulaa / loon horsiisa Oromoo taatanii qabiyyee uumamaa gara garaa kunuunsuudhaaf maal gootuuyyu?
18. Qabiyyee uumamaa gara garaa kunuunsuudhaaf fi guddinni akkamitti waliin madaalamu?
19. Seerri biyyoolessaa fi qajeelchi mootumma kunuunsa qabiyyee uumamaa gara garaa qotee bulaanfi loon horsiisan godhu fana akkamitti deema yookii akkamitti faallessa?
20. Seera, sagantaa yookii kaayyoo hojjaa (projectii) akkamiitu saffuu qabiyyee uumamaa gara garaa kan aada sirritti ofitti fudhata?
21. Saffuu qabiyyee uumamaa kan aada akkaamitti saffuu uumamaa hammayyaa wajjin walitti dhufa?
22. Sirni beekumsaa kan aadaa fi kan hammayya akkasumas saffuun ooltee bultee ilaalchota adunyaa kan addan ta'e keesat argammu?
23. Beekumsi saayinsii hammayyaa beekumsa aadaarra baay'ee barbaachisaadha jettaniit amantuu? Maaliif?

24. Hammayyummaan rakkoo ilaalcha naannoo kan aadaarratti fide naa ibsuu dandeessuu? (fakkeenyaaf barumsaan, yookimmoo kara agencii qotee bulaa haala qonna jabnaa barsiisuutiin)?

25. Rakkinnii fi hirdhinni saffuu qabiyyee uumamaa gara garaa kan aadaa maalinni?

26. Qotee bultoonni akkasumas horii horsiiftoonni humnaawuu (humna akka godhatan taasifamuu) qabu jettani yaada dhiyyeessituu? Eenyutu isaan humneessa (akka humna godhatan taasisa)?

III. DISCUSSION GUIDE FOR ENVIRONMENTAL ETHICISTS AND THEORISTS

DATE _____
ORGANISATION _____
NAME _____
POSITION _____
SEX a. Male _____ b. Female _____
SPECIALISATION _____
AGE _____

1. Is a new environmental ethic necessary?
2. How does one develop a conservation ethic in today's climate of increasing interest in material goods and decreasing interest in spiritual and ethical matters?
3. Are non-western religions and philosophies possible sources of ecological wisdom? On what basis?
4. Are there common elements among non-western ecological perspectives?
5. How is indigenous environmental ethics related to modern environmental ethics? Is there any evidence that something ecologically positive can be learned from indigenous environmental ethics?
6. Can western moral traditions inspire and facilitate an adequate environmental ethic?
7. Do you think that an environmentally friendly capitalist society can be built in the future? How?
8. Do you think that scientific knowledge is more important than indigenous knowledge? For what reasons?
9. Can peasant farmers and pastoralists learn something from modern environmental ethics?
10. Is it possible to apply the notion of "intellectual property rights" to indigenous environmental ethics?
11. Would you like to suggest that peasant farmers/pastoralists should be empowered? If yes, who is going to empower them? how?
12. What are the challenges and limitations of an indigenous environmental ethic?

APPENDIX THREE: GADAA CHRONOLOGY

NO.	NAME OF <i>ABBAA</i> <i>GADAA</i>	GAADAA PERIOD	MAQAABAAS
1	Gadayo Galgalo	1457-1465	Fullaasa
2	Yaya Fulele	1465-1473	<i>Mardiida</i>
3	Jarso Babo	1473-1481	<i>Daraaraa</i>
4	Dawa Borbor	1481-1489	<i>Libaasa</i>
5	Dida Namadur	1489-149	<i>Sabbaaqa</i>
6	Arero Boru	1497-1505	<i>Moggisa</i>
7	Title Dulacha	1505-1513	<i>Maakula</i>
8	Luku Jarso	1513-1521	<i>Fullaasa</i>
9	Dada Edo	1521-1529	<i>Mardiida</i>
10	Kura Dhala	1529-1537	<i>Daraaraa</i>
11	Dagale Yaya	1537-1545	<i>Libaasa</i>
12	Asis Title	1545-1553	<i>Sabbaaqa</i>
13	Boru Luku	1553-1561	<i>Moggisa</i>
14	Abayi Horo	1561-1569	<i>Maakula</i>
15	Bidu Dhoke Rasso	1569-1577	<i>Fullaasa</i>
16	Oro Dulacha	1577-1585	<i>Mardiida</i>
17	Yaya Ole	1585-1593	<i>Daraaraa</i>
18	Doyo Boro	1593-1601	<i>Libaasa</i>
19	Bacho Nadho	1601-1609	<i>Sabbaaqa</i>
20	Urgumessa Igguu	1609-1617	<i>Moggisa</i>
21	Babo Horo	1617-1625	<i>Maakula</i>
22	Babao Sibuu	1625-1633	<i>Fullaasa</i>
23	Hindhale Doyo Boro	1633-1641	<i>Mardiida</i>
24	Hachu Abiyu	1641-1649	<i>Daraaraa</i>

25	Abu Laku	1649-1657	<i>Libaasa</i>
26	Abayi Babo Horo	1657-1665	<i>Sabbaaqa</i>
27	Ale Kura	1665-1673	<i>Moggisa</i>
28	Wayu Urru	1673-1681	<i>Maakula</i>
29	Morowa Abayi	1681-1689	<i>Fullaasa</i>
30	Goba Ala	1689-1697	<i>Mardiida</i>
31	Dawe Gobo	1697-1705	<i>Daraaraa</i>
32	Jarso Eddo	1705-1713	<i>Libaasa</i>
33	Wale Wacu	1713-1721	<i>Sabbaaqa</i>
34	Sora Dhadecha	1721-1729	<i>Moggisa</i>
35	Dhadecha Robile	1729-1737	<i>Maakula</i>
36	Halake Doyo	1737-1745	<i>Fullaasa</i>
37	Guyo Gedo	1745-1753	<i>Mardiida</i>
38	Madha Boru	1753-1761	<i>Daraaraa</i>
39	Dhadecha Oda	1761-1769	<i>Libaasa</i>
40	Bule Dhadecha Robale	1769-1777	<i>Sabbaaqa</i>
41	Liban Wata	1777-1785	<i>Moggisa</i>
42	Wayu Rale	1785-1793	<i>Maakula</i>
43	Boru Madha	1793-1801	<i>Fullaasa</i>
44	Ungule Halake	1801-1809	<i>Mardiida</i>
45	Sako Dhadecha	1809-1817	<i>Daraaraa</i>
46	Jilo Nencho	1817-1825	<i>Libaasa</i>
47	Sokore Ana	1825-1833	<i>Sabbaaqa</i>
48	Madha Boru Madha	1833-1841	<i>Moggisa</i>
49	Liban Jilo	1841-1849	<i>Maakula</i>
50	Jaldessa Guyo	1849-1857	<i>Fullaasa</i>

51	Doyo Jilo Nencho	1857-1865	<i>Mardiida</i>
52	Haro Adi	1865-1873	<i>Daraaraa</i>
53	Dida Bitata	1873-1881.	<i>Libaasa</i>
54	Guyo Boru	1881-1889.	<i>Sabbaaqa</i>
55	Liban Jaldessa Guyo	1889-1897.	<i>Moggisa</i>
56	Adi doyo	1897-1905	<i>Maakula</i>
57	Boru Galma	1905-1913	<i>Fullaasa</i>
58	Liban Kusse	1913-1921	<i>Mardiida</i>
59	Arero Gedo	1921-1929	<i>Daraaraa</i>
60	Bule Dabassa	1929-1937	<i>Libaasa</i>
61	Aga Adi Doyo	1937-1945	<i>Sabbaaqa</i>
62	Guyo Boru	1945-1953	<i>Moggisa</i>
63	Madha Galma	1953-1961	<i>Maakula</i>
64	Jaldessa Liban	1961-1969	<i>Fullaasa</i>
65	Goba Bule	1969-1977	<i>Mardiida</i>
66	Jilo Aga Adi	1977-1985	<i>Daraaraa</i>
67	Boru Guyo Boru	1985-1993	<i>Libaasa</i>
68	Boru Madha Galma	1993-2001	<i>Sabbaaqa</i>
69	Liban Jaldessa Liban	2001-2009	<i>Moggisa</i>
70	Guyo Goba Bule	2009-2017	<i>Maakula</i>
71	Guyo Morku	2017-2025	<i>Fullaasa</i>

APPENDIX FOUR: THE BORENA CALENDAR: 27 Days

1. *Areerii Duraa and Areerii Bal'oo*

These two days are supposed to be good for the children of elders. A person who was born on *Areerii* is not supposed to cut trees unless he drinks a mixture of milk and water. The two days are associated with the production and reproduction of cattle.

2. *Adulaa Duraa and Adulaa Bal'oo*

Adulaa is good for *Raabaa*. The six *Gadaa* officials are known as *Adulaa*. A person who was born on *Adulaa* is not supposed to till the land and dig a grave. He is supposed to possess a good leadership quality. In Borena, *Hayyuu* and *Qaalluu* do not generally dig graves. They are not supposed to stay at the compounds of the dead person. It is believed that they will die soon if they dig graves. *Adulaa* is also the chosen day for a wedding, any other celebration and for the previous *Abbaa Gadaa* to transfer *Baalli* (a symbol of power) to the new *Abbaa Gadaa*.

3. *Garba Duraa, Garba Bal'aa and Garba Dullachaa*

Garba is believed to be good for the Gona clan in Borena. It is on these days that the Gona celebrate and hold communal prayer. The Borena people generally regard it as a fine desirable day. Although they are good days for weddings, the Gona do not like their girls to be married on these days. If a child is born on this day from Sabbo clan, he is required to move to Gona village.

4. *Bitaa Duraa and Bitaa Bal'aa*

Bitaa literally means left. *Bitaa* is believed to be a bad day for it is characterised by war. The Oromo do not like a son who was born on *Bitaa*. After birth, they take him out and pierce his left ear. He is not allowed to stay with other children in the belief that these children may die. He is required to sleep alone.

5. *Sorsa*

Sorsa is a good day for the horse. A person who was born on *Sorsa* is believed to be fortunate and breed horses and cattle well.

6. *Algaajima*

It is the fate of *Hayyuu*. It is the day on which the names of the elected *hayyuus* are proclaimed. The *Hayyuu* and a person who was born on *Algaajima* are expected to follow similar rules.

7. *Arba*

The literal meaning of *Arba* is elephant. It refers to physical mass and strength. A person who was born on *Arba* is believed to be busy throughout his life, and is not allowed to hunt elephants. The main reason is that persons and elephants that share similar qualities are not supposed to attack one another.

8. *Walla*

Walla is the special day for *Qaalluu*. A person who was born on *Walla* is not supposed to hunt and kill wild animals. The people accept his arguments. There are no sacrifices, no hunting or killing, and no war on this day, because traditionally the people do not want to see blood on this day.

It is believed that if one marries a woman on this day, she can only give birth to one child. For this reason, many Borena people do not want to get married on this day. On the other hand, the *Qaalluu* is required to marry to the *Qaallitii* on *Walla*, since tradition requires particularly the *Qaallitii* of the Karayyu to give birth to only one *Qaalluu*. It is believed that originally the first *Qaalluu* of Oromo was born on *Walla*. It is on this day that the people give gifts to the *Qaalluu*. The people want to do good things on this day.

9. *Basaa Duraa and Basaa Bal'aa*

Basaa is the day of rain. The land is believed to be full of green trees and grass. It is believed that *Waaqa* originally began to provide rain on *Basaa*. It is characterised by sympathy or soft heartedness. A person who was born and a woman who got married on *Basaa* are expected to be kind and weep when they see individuals who are in trouble. It is interesting to note that the Oromo associate the behaviour of human beings with the basic features of nature. Rain and tears have similar features. The rain makes the dry land wet. Likewise, people who are kind have very positive attitudes towards the ill and the hungry, the weak and the dying. They want to solve the problems of such people as the rain saves the land from drought.

10A. *Maganattii Caara*

Maganattii Caara is the chosen day for metals. It is believed that a child who is born on *Maganattii Caara* cannot grow up. Of all the 27 days, the Borena Oromo consider it as an exceedingly bad day. They do not want to perform cultural ceremonies on this day.

10B. *Maganattii Jaarraa*

Maganattii Jaarraa is a good day for cattle. It is believed that originally cattle were born on this day. A person who was born on *Maganattii Jaarraa* is believed to go through the *Gadamoojjii* ceremony. He has a long age and can see his great-grand children.

10C. *Maganattii Biriitii*

Maganattii Biriitii is also the spirit of cattle. It is believed that originally the people divided cattle among themselves on *Maganattii Biriitii*. Those who are born on *Maganattii jaara* and *Maganattii Biriitii* are believed to have long life expectancy. They can escape from firearms.

11. *Salbaana Duraa, Salbaana Bal'aa, and Salbaana Dullachaa*

Salbaana is a fine desirable day for Sabbo clan. The Sabbo clan perform feasts, ceremonies and other good things. They want to avoid anger and revenge. What is required is a peaceful mind and heart.

A Gona person who was born on this day is required to celebrate cultural ceremonies on this day.

12. *Gardaaduma*

Gardaaduma is good day for buffalo. A person who was born on *Gardaaduma* is required to have sufficient containers of milk made from buffalo skin. He likes to breed black bulls. Nonetheless, he is not required to hunt buffalo. *Gardaaduma* is believed to be a good day for hunting and for war. Wedding and other ceremonies are not supposed to take place on this day.

13. *Sonsa*

In Borena, *Sonsa* is associated with Oromo hunters and gatherers called Wata. Wata are believed to be originally given wild animals as their own property by *Waaqa*.

14. *Rurruma*

Rurruma is a good day for hyena. Individuals who were born on *Rurruma* do not go hungry. They have something to eat. They do not look after cattle in the night for the hyena won't attack their cattle.

A woman who got married on *Rurruma* is not required to collect and drop ash outside the house, and go for her cattle when they are lost during the night. It is believed that a hyena does not want to attack her. It is believed that like the hyena, she will give birth to many children. It seems that wild animals and human beings share birth date and do not attack each other. The hyena and the person who are born on this day are believed to live well, and trust each other. The hyena that is associated with negative behaviours is also given positive connotations on this day.

15. *Lumaasa*

Lumaasa is a good day for lion. It refers to the strength of the lion. A person who was born on *Lumaasa* is not supposed to hunt and attack lions. He is supposed to be strong like the lion.

16. *Gidaada*

Gidaada is a good day for cattle. Cattle should not be given to another person nor should they be taken to the market on this day. The ear of the calf which was born on this day is required to be cut as a sign of ownership. A person who was born on *Gidaada* is not supposed to sacrifice animals and cut trees inside his fence. If he does not refrain from doing so, he will be poor. *Gidaada* is a very good day for weddings, celebrations and blessing.

17. *Ruuda*

Ruuda is the day of *Ayyaana holla* (the sheep). *Ruuda* is believed to be the day of peace and goodness. All kinds of celebrations and sacrifices can take place on *Ruuda*. The Oromo sacrifice sheep in order to make peace. The Oromo attach positive values to sheep in their religious system. A person who was born and a woman who got married on *Ruuda* are not allowed to hold the head or the ears of a sheep when it is killed.

APPENDIX FIVE: GLOSSARY OF PLANT NAMES

VERNACULAR NAME	SCIENTIFIC NAME
<i>Abbayyii</i>	<i>Maesa lanceolata</i>
<i>Adammi</i>	<i>Euphorbia candelabrum</i>
Ameessa	Scientific name is unknown
<i>Andoodee</i>	<i>Phytolacca dodecandra</i>
<i>Andorra</i>	<i>Phytolacca dodecandra</i>
<i>Argisa</i>	<i>Aloe spp.</i> (several species of <i>Aloe</i>)
<i>Baddeessa</i>	<i>Syzygium quineense subsp</i>
<i>Bahaa</i>	<i>Olea wehwitsehii</i>
<i>Bakkanniisa</i>	<i>Croton macrostachys</i>
<i>Biddiesii</i>	Scientific name is unknown
<i>Birbirsaa</i>	<i>Podocarpus gracilior</i>
<i>Birreessa</i>	<i>Terminalia brownii</i>
<i>Boggee</i>	Scientific name is unknown
<i>Bosooqa</i>	<i>Sapium ellipticum</i>
<i>Burquqqee</i>	<i>Acacia nilotica</i>
<i>Buruurii</i>	<i>Vangueria apiculata</i>
<i>Cadaa</i>	Scientific name is unknown
<i>Caggoo</i>	<i>Maesa lanceolata</i>
<i>Caakko</i>	Scientific name is unknown
<i>Callangaa</i>	Scientific name is unknown
Canaa	Scientific name is unknown
Ceekaa	<i>Calpurnia aurea</i>
<i>Chirii</i>	Scientific name is unknown
<i>Chobii</i>	<i>Cissus quadrangularis</i>
<i>Coqorsa</i>	<i>Chloris gayana, Cynodon dactylon</i>
<i>Daakkaraa</i>	Scientific name is unknown
<i>Dambii</i>	<i>Ficus thonningii</i>
<i>Daannisa</i>	<i>Dombeya</i> or <i>Grewia</i>
<i>Daqqoo</i>	Scientific name is unknown
<i>Dhakaa</i>	Scientific name is unknown
<i>Dhiqa</i>	Scientific name is unknown
<i>Dhummuugaa</i>	<i>Adhatoda schimperana</i>
<i>Doddota</i>	<i>Acacia gerrardii</i>
<i>Ebicha</i>	<i>Vernonia amygdalina</i>
Ejersa	(<i>Olea africanum</i>),
<i>Enset</i>	Ensete venticosum
<i>Fiincoo</i>	Scientific name is unknown
<i>Fulleli</i>	Scientific name is unknown
<i>Garse</i>	Scientific name is unknown
<i>Gaattiraa</i>	<i>Juniperus procera</i>
<i>Gatamaa</i>	<i>Scheffera abyssinica</i>
<i>Giliboo</i>	Scientific name is unknown
<i>Goraa</i>	<i>Rubus stevdneri</i>
<i>Halchiisa</i>	Scientific name is unknown
<i>Haaloo</i>	Scientific name is unknown
<i>Hambaabeessa</i>	<i>Alibizia schimperiana</i>
<i>Harbuu</i>	<i>Ficus sur</i>

<i>Hargessa</i>	Scientific name is unknown
<i>Harooressa</i>	<i>Grewia velutina</i>
<i>Hiddii</i>	<i>Solanum marginatum</i>
<i>Hindheenssa</i>	<i>Juniperus procera</i>
<i>Hindiduu</i>	Scientific name is unknown
<i>Hoomii</i>	<i>Pygeum africanum</i>
<i>Horooroo</i>	Scientific name is unknown
<i>Ilamoogorii</i>	Scientific name is unknown
<i>Jimma</i>	<i>Catha edulis</i>
<i>Karayyu</i>	Scientific name is unknown
<i>Konamii</i>	Scientific name is unknown
<i>Liqixii</i>	Scientific name is unknown
<i>Lolchiisaa</i>	<i>Bersama abyssinica</i>
<i>Luyaa</i>	<i>Trichilia dregeana</i>
<i>Maraacaa</i>	<i>Clerodendrum myricoides</i>
<i>Meexxii</i>	<i>Phoenix reclinata</i>
<i>Odaa</i>	<i>Ficus gnaphalocarpa</i>
<i>Ogdaa</i>	Scientific name is unknown
<i>Qalliyoo</i>	Scientific name is unknown
<i>Qararoo</i>	<i>Akacaathera schimperi</i>
Qilxuu/ Qilxaa	Ficus vasta
<i>Qobboo</i>	<i>Ricinus communis</i>
<i>Qooccoo sexanna</i>	Wild <i>Ensete ventricosum</i>
<i>Qurquraa</i>	<i>Ziziphus abyssinica</i>
<i>Reejjii</i>	Scientific name is unknown
<i>Rigaa raabaa</i>	Scientific name is unknown
<i>Roqaa</i>	<i>Tamarindus indica</i>
<i>Saphanssa</i>	<i>Acacia Senegal</i>
<i>Sarrii</i>	Scientific name is unknown
<i>Saritti</i>	<i>Asparagus africanus</i>
<i>Siidaa</i>	Scientific name is unknown
<i>Somboo</i>	<i>Ekebergia capensis</i>
<i>Sondii</i>	<i>Acacia gerrardii</i>
<i>Sootalloo</i>	<i>Milletia ferruginea</i>
<i>Soyomma</i>	<i>Vernonia thomsoniana</i>
<i>Suddii</i>	<i>Seriestachys tomentosa</i>
<i>Tuufoo</i>	<i>Cararina eminii</i>
<i>Ulmaayaa</i>	<i>Ekebergia capensis</i>
<i>Urgeessaa</i>	<i>Premna schimperi</i>
<i>Waddeessa</i>	<i>Cordia Africana</i>
<i>Waleensuu</i>	<i>Erythrina abyssinica</i>
<i>Wandabiyoo</i>	<i>Apodytes dimidiata</i>
<i>Warangoo</i>	Scientific name is unknown
<i>Xaddacha</i>	<i>Acacia tortilis</i>
<i>Xarasoo</i>	Scientific name is unknown

APPENDIX SIX: LISTS OF INFORMANTS

PEASANT FARMERS, PASTORALISTS AND RELIGIOUS LEADERS

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	POSITION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Obboo Abdu Kadire	M	70	Peasant Farmer		2000	Sagi & Baki
2	Obboo Abdullatif Mussa	M	55	"		1999	Kamise
3	" Abdurhaman Hasan	M	42	Pastoralist		1999	Ganale
4	" Amante Ibssa	M	70	Peasant Farmer	Religious leader	2000	Gawa Buramo (Dega)
5	" Ambachew Gaba	M	115	"		1999	Sagi and Baki
6	" Ayele Sayo	M	70	"		1999	Sagi and Baki
7	" Bekele Gutama	M	65	"		1999 & 2000	Gumaro Abo
8	" Belete Rufo	M	87	"		2000	Honga Obe
9	" Borbor Bule	M	51	Pastoralist	Oral Historian	2000	Dubluki, Yabelo
10	" Borbor Jilo	M	67	"	Member of the former Gadaa leaders	2000	Borbor
11	" Boru Madha	M	50	"	Abbaa Gadaa (1993-2001)	2000	Wachille
12	" Didu Guyo	M	50	"		1999	Negele
13	" Dima Arero	M	71	"	Gadamoojjii	2000	Web
14	" Dinka Dano	M	70	-		1999	Gore
15	" Doyo Godana	M	76	Pastoralist		2000	Sminto
16	" Farisi Ahmed	M	74	Peasant Farmer		2000	Kamise
17	" Galan Macha	M	60	"		1999	Sagi & Baki
18	" Gizaw Badhassa	M	66	"		1999	Gumaro Abo
19	" Girsha Dagaga	M	95	"		1999	
20	Addee Godana Kose	F	70	Housewife	The Former Qaallitti of Karayyu Clan	2000	Yabelo
21	Obboo Guyo Doyo	M	72	Pastoralist		2000	Web
22	" Hasan Roba	M	50	"		1999	Ganale
23	" Huka Tadecha	M	76	"		2000	Dubluki
24	" Jaldessa Jatani	M	65	"		2000	Sminto
25	" Kadir Mohammed	M	67	"		1999	Ganale
26	" Kampare Godana	M	67	"		1999	Hadessa & Korati
27	" Kararsa Guracha	M	40	"		2000	"

28	" Kello Boru	M	40	"		1999	Bulbul
29	" Kitessa Abadulla	M	86	Peasant Farmer		1999	Tobocho
30	" Koto Duga	M	66	Pastoralist		1999	Bulbul
31	" Kura Tuto	M	51	"	The <i>Qaalluu</i> of Oditu clan	2000	Dubluki
32	" Legese Chali	M	65	Peasant Farmer		1999	Sagi and Baki
33	" Legese Mamo	M	49	"		1999 & 2000	Honga Obe
34	" Liban Jaldessa	M	34	Pastoralist	<i>Abbaa Gadaa</i> (2001-2009)	2000	Borbor
35	" Marga Macha	M	61	Peasant Farmer		1999	Sagi & Baki
36	" Mengiste Alemu	M	56	"		1999	"
37	" Mohammed Abaworke	M	68	"		1999	Tobocho
38	Haji Mohammed Elias	M	70	"		2000	Sagi & Baki
39	<i>Obboo</i> Mohammed Nur	M	86	"		1999	Kamise
40	<i>Obboo</i> Nagara Fite	M	85	"		1998	Ambo
41	" Nura Adi	M	53	Pastoralist		2000	Hadessa & Korati
42	" Nura Dida	M	40	"		1999	Negele
43	" Nura Yabicho	M	69	"		1999	Sminto
44	<i>Addee</i> Nure Sima	F	60	Housewife		1999	Kamise
45	<i>Obboo</i> Said Shana	M	81	Peasant Farmer		1999	Ale
46	" Shifaraw Bushura	M	60	"		1999	Gumaro Abo
47	<i>Addee</i> Shuma Wayessa	F	100	Housewife		1999	Sagi & Baki
48	" Sinbo Bontu	F	88	Housewife		1999	Kamise
49	<i>Obboo</i> Sora Boru	M	70	Pastoralist		2000	Chorkas
50	" Sutuma Rabbo	M	103	Peasant Farmer		2000	Tubi Migira
51	" Tadhi Maliso	M	50	Pastoralist		2000	Web
52	<i>Addee</i> Tajitu Macha	F	45	Housewife		1999	Sagi & Baki
53	<i>Obboo</i> Tadesse Limanah	M	57	Peasant Farmer		2000	Honga Obe
54	" Tolassa Eebo	M	120	"		1999	Kamise
55	<i>Addee</i> Tuqo Sora	F	70	Housewife		2000	Hadessa & Korati
56	<i>Obboo</i> Wariyo Arero	M	75	Pastoralist		2000	Dhassa
57	" Workineh Sayo	M	66	Peasant Farmer		1999	Sagi & Baki
58	" Yasin Karo	M	90	"		1999	Choge

II. FOCUS GROUPS

Group 1

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Gababo Jilo	M	60	Pastoralist	1999	Hadessa & Korati
2	<i>Obboo</i> Haro Duba	M	44	Pastoralist	1999	"
3	<i>Obboo</i> Huka Boru	M	52	"	1999	"
4	<i>Obboo</i> Tache Yabicho	M	67	"	1999	"
5	<i>Obboo</i> Toba Guyo	M	50	"	1999	"
6	<i>Obboo</i> Sora Boru	M	60	"	1999	"
7	<i>Obboo</i> Wariyo Boru	M	50	"	1999	"

Group 2

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Aliye Adem	M	46	Peasant Farmer	1999	Kamise
2	<i>Obboo</i> Ebrahim Abdissa	M	45	"	1999	"
3	<i>Obboo</i> Jamal Mohammed	M	55	"	1999	"
4	<i>Obboo</i> Mohammed Husien	M	62	"	1999	"
5	<i>Obboo</i> Mohammed Sornessa	M	52	"	1999	"
6	<i>Obboo</i> Shafi Adem	M	56	"	1999	"
7	<i>Obboo</i> Zikiriya Ahmed	M	60	"	1999	"

Group 3

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Abera Shuramu	M	58	Peasant Farmer	1999	Gumaro Abo
2	<i>Obboo</i> Desta Birbirso	M	60	"	1999	"
3	<i>Obboo</i> Elias Kumsa	M	30	"	1999	"
4	<i>Obboo</i> Sima Tokon	M	70	"	1999	"

Group 4

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Chulu Alake	M	50	Pastoralist	2000	Hadessa & Korati
2	<i>Obboo</i> Doyo Galgalo	M	59	"	2000	"
3	<i>Obboo</i> Guyo Galgalo	M	85	"	2000	"
4	<i>Obboo</i> Kili Jarso	M	79	"	2000	"
5	<i>Obboo</i> Nura Bojilo	M	65	"	2000	"
6	<i>Obboo</i> Tadecha Jarsa	M	45	"	2000	"

Group 5

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Bule Dulacha	M	56	Pastoralist	2000	Dida Hara
2	<i>Obboo</i> Galgalo Jarso	M	60	"	2000	"
3	<i>Obboo</i> Huka Jatani	M	80	"	2000	"
4	<i>Obboo</i> Kotobe Boru	M	48	"	2000	"
5	<i>Obboo</i> Nura Gababa	M	45	"	2000	"

Group 6

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Boru Kara	M	50	Pastoralist	2000	Dida Hara
2	<i>Obboo</i> Duba Dawti	M	78	"	"	"
3	<i>Obboo</i> Galoo Walabu	M	76	"	"	"
4	<i>Obboo</i> Golicha Wariyo	M	66	"	"	"
5	<i>Obboo</i> Huka Tadecha Mankiye	M	78	"	"	"
6	<i>Obboo</i> Boru Alake	M	68	"	"	"

Group 7

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Obboo Abdi Chicho	M	72	Pastoralist	2000	Dubluki
2	Obboo Alake Wariyo	M	70	"	"	"
3	Obboo Boru Wariyo	M	70	"	"	"
4	Obboo Bule Jatani	M	80	"	"	"
5	Obboo Bule Sora	M	54	"	"	"
6	Obboo Haro Abakuta	M	72	"	"	"
7	Obboo Godana Didha	M	58	"	"	"
8	Obboo Malicha Guyo	M	51	"	"	"
9	Obboo Malicha Jilo	M	51	"	"	"

Group 8

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Obboo Abakusho Wako	M	60	Pastoralist	2000	Web
2	Obboo Alake Bukune	M	75	"	2000	"
3	Obboo Boru Arsama	M	80	"	2000	"
4	Obboo Dulacha Jilo	M	50	"	2000	"
5	Obboo Garso Guto	M	70	"	2000	"
6	Obboo Sora Arero Godana	M	35	"	2000	"

Group 9

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Obboo Amanu Guta	M	80	Peasant Farmer	2000	Dega
2	Addee Asafash Gemetchu	F	63	Housewife	"	"
3	Addee Bizunesh Haile	F	66	"	"	"
4	Obboo Galata Edosa	M	112	Peasant Farmer	"	"
5	Obboo Tolasa Adaba	M	70	"	"	"

Group 10

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Haji Abdissa Homoshe	M	63	Peasant Farmer	2000	Chora
2	" Ahmed Sonessa	M	68	"	"	"
3	" Bacha Mohammed	M	78	"	"	"
4	<i>Obboo</i> Roro Didha	M	65	"	"	"

Group 11

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Alemu Shawul	M	64	Peasant Farmer	2000	Yayo
2	<i>Obboo</i> Argassa Dhima	M	63	"	"	"
3	<i>Obboo</i> Bekele Gijo	M	65	"	"	"
4	<i>Obboo</i> Firissa Waga	M	75	"	"	"
5	<i>Obboo</i> Legese Nagawo	M	57	"	"	"
6	<i>Obboo</i> Umar Firissa	M	82	"	"	"

Group 12

NO.	INFORMANT'S NAME	SEX	AGE	OCCUPATION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	<i>Obboo</i> Lemma Mitiku	M	72	Peasant Farmer	2000	Sagi & Baki
2	<i>Obboo</i> Tadesse Shana	M	72	"	"	"
3	<i>Obboo</i> Mengesha Amante	M	92	"	"	"
4	<i>Addee</i> Tejitu Kitessa	F	60	"	"	"

III. AGICULTURAL DEVELOPMENT AND EXTENSION WORKERS

NO	INFORMANT'S NAME	SEX	AGE	ORGANISATION	POSITION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Mr. Abebe H/Mariam	M	32	Arero District Agricultural Development Bureau	Chief	2000	Arero
2	Mr. Aklilu Molu	M	31	Dire District Agricultural Development Bureau	Extension Agent	2000	Mega Gafarsa
3	Mrs. Azeb Dagne	F	23	Alle-Didu District Agricultural Development Bureau	Home Economist	1999	Gore
4	Mr. Belay Kebede	M	30	Dire District Agricultural Development Bureau	Soil and water protection expert	2000	Mega Gafarsa
5	Mr. Dereje Teshome	M	29	Liben District Agricultural Development Bureau	Forest development and protection expert	2000	Negele
6	Mr. Emiru Altaye	M	43	Arero District Agricultural Development Bureau	Chief	2000	Arero
7	Mr. Endale Tefera	M	32	Metu District Agricultural Development Bureau	Supervisor of development agents	1999	Metu
8	Mr. Getachew Eelago	M	30	Dire District Agricultural Development Bureau	Livestock production expert	2000	Mega Gafarsa
9	Mr. Getachew Mergia	M	47	Liben District Agricultural Development Bureau	Team leader of extension agents	2000	Negele
10	Mrs. Getenesh Tadesse	F	30	Liben District Agricultural Development Bureau	Team leader of government forest	2000	Negele
11	Mr. Gezahagn Tesema	M	30	Alle-Didu District Agricultural Development Bureau	Extension agent	1999	Gore
12	Mr. Kadir Abdo	M	27	Dire District Agricultural Development Bureau	Chief	2000	Mega Gafarsa

13	Mrs Kidist Barihun	F	23	Alle-Didu District Agricultural Development Bureau	Extension agent	1999	Gore
14	Mr. Kinate Gala	M	30	Metu District Agricultural Development Bureau	Forest Development and protection expert	1999	Metu
15	Mrs. Lemlem Berhanu	F	32	Arero District Agricultural Development Bureau	Rural women's affairs expert	2000	Arero
16	Mr. Mengistu Worede	M	31	Liben District Agricultural Development Bureau	Livestock production expert	2000	Negele
17	Mr. Niguse Bulbula	M	31	Metu District Agricultural Development Bureau	Wildlife protection and development expert	1999	Metu
18	Mrs. Sara Arero	F	26	Liben District Agricultural Development Bureau	Forest development and protection expert	2000	Negele
19	Mr. Talila Wokana	M	24	Alle-Didu District Agricultural Development Bureau	Forest development and protection expert	1999	Gore
20	Mr. Tilahun Samu	M	34	Metu District Agricultural Development Bureau	Team leader of Environmental Protection and Land Planning Department	1999	Metu
21	Mr. Ware Bura	M	38	Liben District Agricultural Development Bureau	Chief	2000	Negele

IV. OROMO INTELLECTUALS

NO	INFORMANT'S NAME	SEX	AGE	ORGANIZATION	PROFESSION/SPECIALISATION	POSITION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Mr. Asfaw Tihune	M	46	OBAD	Biologist	Researcher	20/06/99	Addis Ababa
2	Mr. Bekele Kafiyalew	M	36	Illuababora Zone Bureau of Agricultural Development	Agricultural Economist	Team leader of Wildlife and Conservation Department	07/03/2000	Metu
3	Mr. Buzayehu Tefera	M	33	OBAD	Agro-Engineer	Researcher	20/06/2000	Addis Ababa
4	Dabassa Arero	M	65	-	Public Administrator	Pensioner, Researcher	24/09/2000	Addis Ababa
5	Mr. Goshu Sakata	M	40	Borena Zone Bureau of Agricultural Development	-	Team leader of Natural Resources Protection Department	25/02/99	Negele
6	Dr. Gemetchu Megerssa	M	42	Addis Ababa University	Cognitive Anthropologist	Lecturer	20/08/2000	Addis Ababa
7	Mr. Huka Garse	M	42	Borena Zone Bureau of Agricultural Development	Range Ecologist	Team leader of Information and Audio-visual Department	16/02/99	Negele
8	Mr. Solomon Muleta	M	34	OBAD	Agro-Engineer	Researcher	18/08/99	Addis Ababa

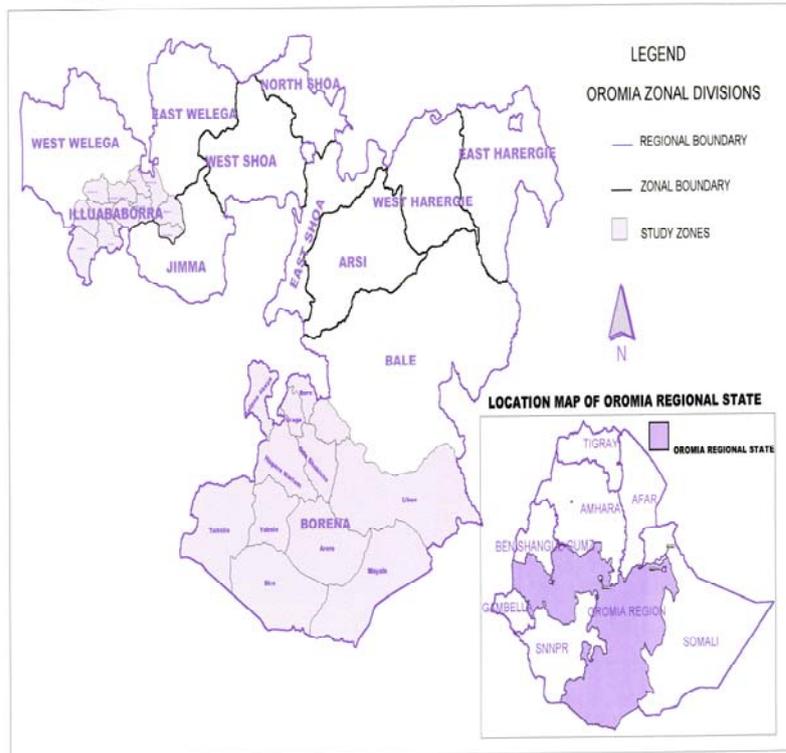
V. INFORMANTS FROM ENVIRONMENTAL PROTECTION AUTHORITY AND BIODIVERSITY INSTITUTE

No	INFORMANT'S NAME	SEX	AGE	ORGANISATION	PROFESSION/SPECIALISATION	POSITION	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Mr. Gedion Asfaw	M	53	EPA	Civil Engineer, Infrastructure Planner and Environmental Manager	Technical Advisor for IUCN	21/09/2000	Addis Ababa
2	Mr. Worku Damena	M	39	EPA	Environmental Lawyer	Head of Policy and Legal Department	21/09/2000	Addis Ababa
3	Mr. Ragassa Feyissa	M	47	Biodiversity Institute	Plant Physiologist and Biochemist	Researcher	10/09/2000	Addis Ababa
4	Dr. Tewolde Berhan Gebre Egziabher	M	61	EPA	Plant Ecologist	General Manager	21/09/2000	Addis Ababa

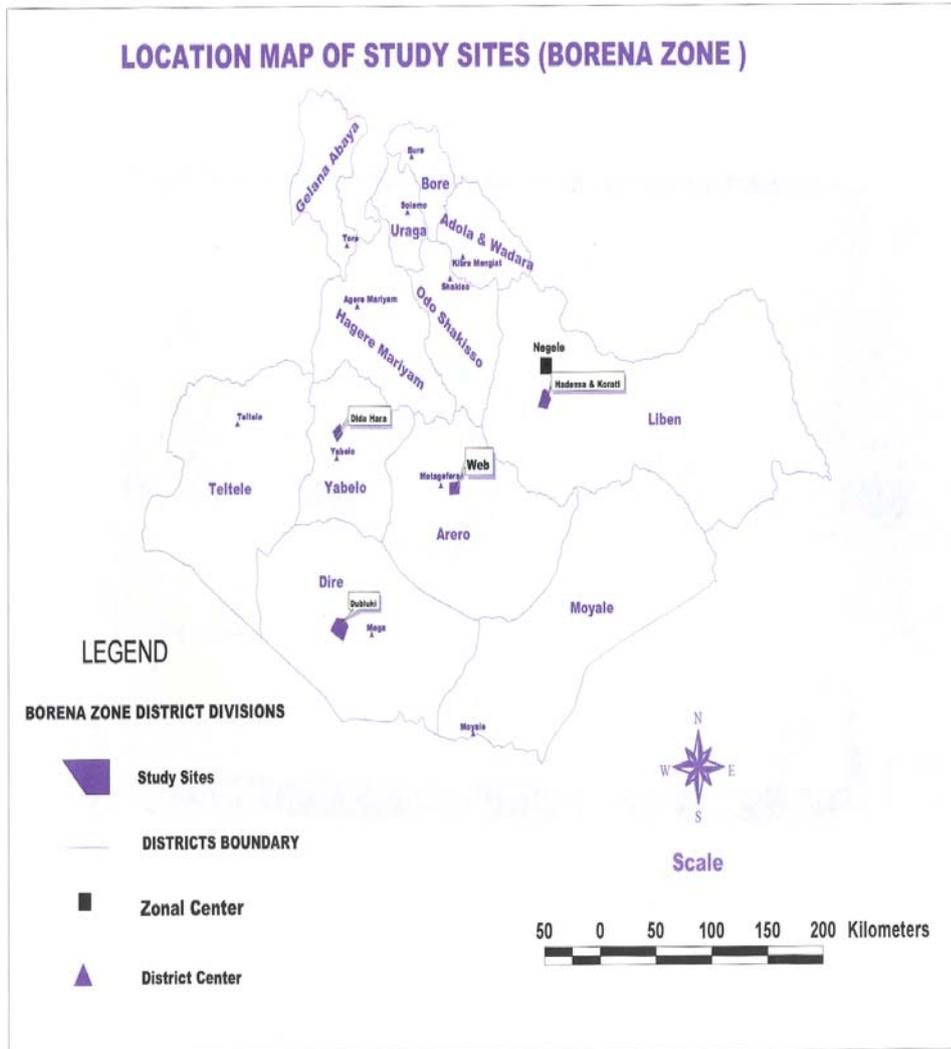
VI. ENVIRONMENTAL THEORISTS

NO	INFORMANT'S NAME	SEX	AGE	ORGANISATION	POSITION	PROFESSION / SPECIALISATION	CITIZENSHIP	DATE OF INTERVIEW	PLACE OF INTERVIEW
1	Dr. Thom Alcoze	M	53	Northern Arizona University, College of Ecosystem Science and Management	Lecturer	Wildlife Ecologist	American (Native)	9/07/2000	Hobart, Australia
2	Mr. Andrew Belsey	M	57	Cardiff University, ENCAP, Philosophy Section	Lecturer	Philosopher/ Environmental Ethicist	British	13/09/1999	Cardiff, UK
3	Dr. Andreas Brenner	M	36	University of Basel, Switzerland	Lecturer	Environmental Ethicist	German	7/09/99	Cardiff, UK
4	Dr. Dahlian Kirby	F	43	Cardiff University, ENCAP, Philosophy Section	Tutor	Philosopher/ Environmental Ethicist	British	18/09/99	Cardiff, UK
5	Professor Marcia Langton	F	49	University of Melbourne, Department of Geography and Environmental Studies	Chair Person of Indigenous Studies	Anthropologist and Geographer	Australian	8/07/2000	Hobart, Australia
6	Mr. Dessalegn Rahmato	M	61	Addis Ababa University, Department of Philosophy (1983-1998). Forum for Social Studies (NGO)	Lecturer Manager	Political Scientist /Philosopher	Ethiopia	20/09/2000	Addis Ababa, Ethiopia
7	Mr. Meika Von Samorzewski	M	34	University of Western Sydney, School of Social Ecology and Lifelong Learning	MA Student	Social Ecologist	Australian and German	10/07/2000	Hobart, Australia
8	Dr. Melaku Worede	M	64	Biodiversity Institute (1979-1993) FAO	Director International Scientific Advisor, Seeds of Survival/ International Member of FAO Panel of Eminent Experts on Ethics in Food and Agriculture	Geneticist and Plant Breeder	Ethiopian	23/09/2000	Addis Ababa, Ethiopia

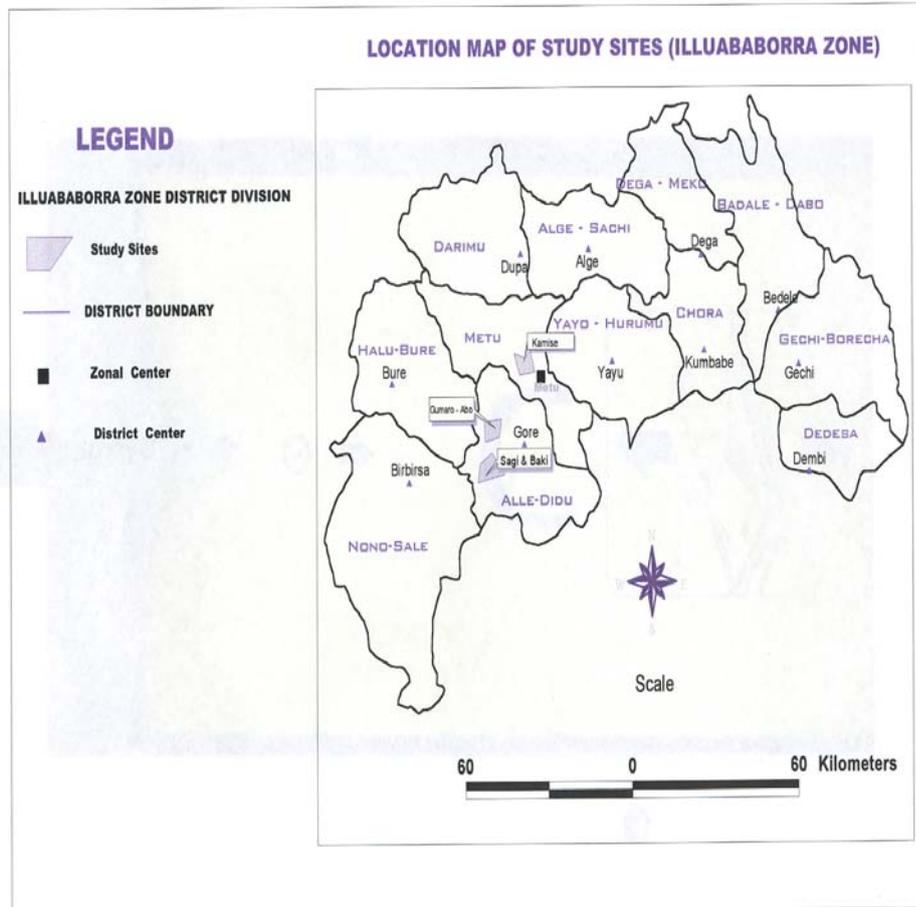
STUDY ZONES IN OROMIA REGIONAL STATE(BORENA & ILLUABABORRA)



MAP TWO 14

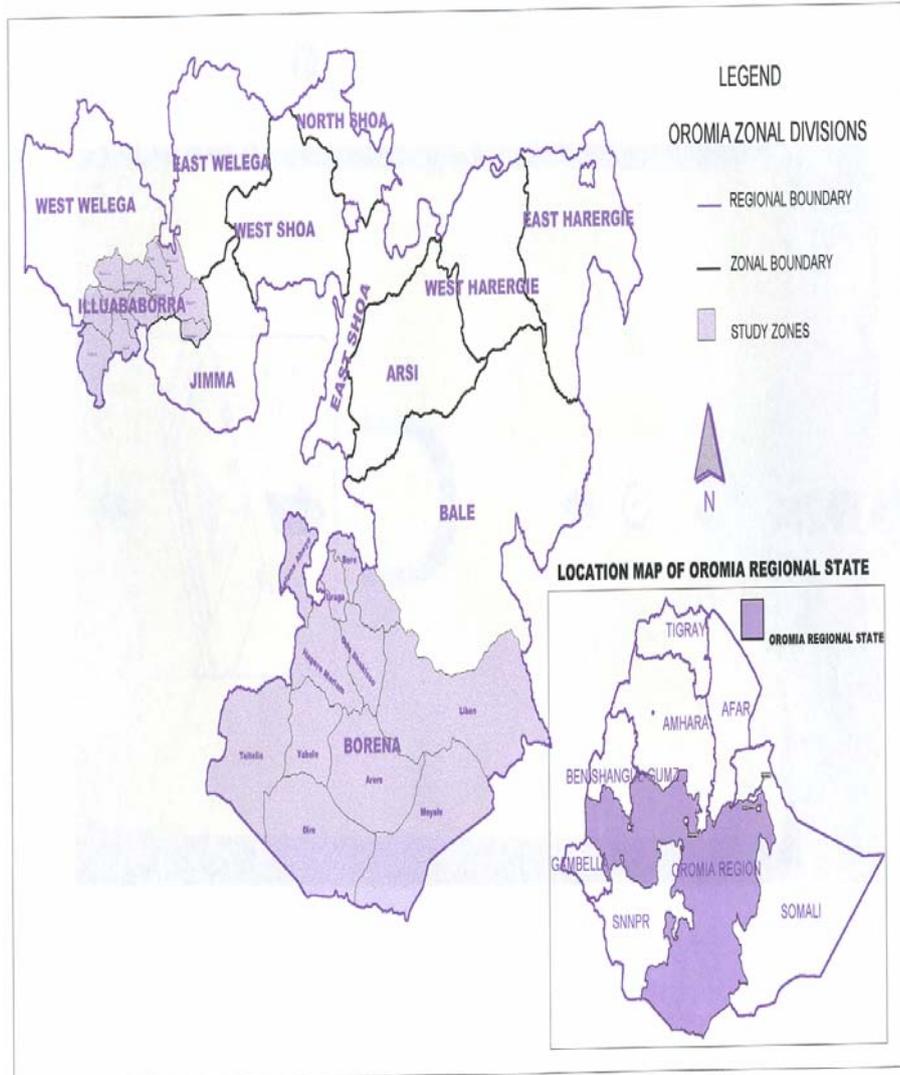


MAP THREE 15



MAP FOUR 18

STUDY ZONES IN OROMIA REGIONAL STATE(BORENA & ILLUABABORRA)



MAP TWO 14

THE COUNCIL FOR RESEARCH IN VALUES AND PHILOSOPHY

PURPOSE

Today there is urgent need to attend to the nature and dignity of the person, to the quality of human life, to the purpose and goal of the physical transformation of our environment, and to the relation of all this to the development of social and political life. This, in turn, requires philosophic clarification of the base upon which freedom is exercised, that is, of the values which provide stability and guidance to one's decisions.

Such studies must be able to reach deeply into one's culture and that of other parts of the world as mutually reinforcing and enriching in order to uncover the roots of the dignity of persons and of their societies. They must be able to identify the conceptual forms in terms of which modern industrial and technological developments are structured and how these impact upon human self-understanding. Above all, they must be able to bring these elements together in the creative understanding essential for setting our goals and determining our modes of interaction. In the present complex global circumstances this is a condition for growing together with trust and justice, honest dedication and mutual concern.

The Council for Studies in Values and Philosophy (RVP) unites scholars who share these concerns and are interested in the application thereto of existing capabilities in the field of philosophy and other disciplines. Its work is to identify areas in which study is needed, the intellectual resources which can be brought to bear thereupon, and the means for publication and interchange of the work from the various regions of the world. In bringing these together its goal is scientific discovery and publication which contributes to the present promotion of humankind.

In sum, our times present both the need and the opportunity for deeper and ever more progressive understanding of the person and of the foundations of social life. The development of such understanding is the goal of the RVP.

PROJECTS

A set of related research efforts is currently in process:

1. *Cultural Heritage and Contemporary Change: Philosophical Foundations for Social Life*. Focused, mutually coordinated research teams in university centers prepare volumes as part of an integrated philosophic search for self-understanding differentiated by culture and civilization. These evolve more adequate understandings of the person in society and look to the cultural heritage of each for the resources to respond to the challenges of its own specific contemporary transformation.

2. *Seminars on Culture and Contemporary Issues*. This series of 10 week crosscultural and interdisciplinary seminars is coordinated by the RVP in Washington.

3. *Joint-Colloquia* with Institutes of Philosophy of the National Academies of Science, university philosophy departments, and societies. Underway since 1976 in Eastern Europe and, since 1987, in China, these concern the person in contemporary society.

4. *Foundations of Moral Education and Character Development*. A study in values and education which unites philosophers, psychologists, social scientists and scholars in education in the elaboration of ways of enriching the moral content of education and character development. This work has been underway since 1980.

The personnel for these projects consists of established scholars willing to contribute their time and research as part of their professional commitment to life in contemporary society. For resources to implement this work the Council, as 501 C3 a non-profit organization incorporated in the District of Columbia, looks to various private foundations, public programs and enterprises.

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