



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF DEVELOPMENT STUDIES

CENTER FOR ENVIRONMENT AND DEVELOPMENT STUDIES

ASSESSMENT OF CULTURAL ECOSYSTEM SERVICES IN ETHIOPIA: THE CASE
STUDY OF EZHA DISTRICTS IN GURAGHE ZONE

BY
GEREMEW ASHENAFI MARU

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA
UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD
OF THE DEGREE OF MASTER OF ARTS IN ENVIRONMENT AND DEVELOPMENT
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ADVISOR
TAMIRAT TEFERA (PH.D)

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APPROVED BOARD OF EXAMINERS

DATE

SIGNITURE

ADVISOR

INTERNAL EXAMINER

EXTERNAL EXAMINER

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Table of Content	Page
Acknowledgements.....	7
Acronyms.....	8
Abstracts.....	9
CHAPTER ONE.....	10
1. Introduction.....	10
1.1. Background of the study.....	10
1.2. Statement of the Problem.....	11
1.3. Research Objective.....	13
1.3.1 General Objective.....	13
1.3.2. Specific Objective.....	13
1.4. Research Question.....	14
1.5. Significance of the Study.....	14
1.6. Organization of the Thesis.....	15
CHAPTER TWO.....	16
2.1. The Concept of Cultural Ecosystem Services.....	16
2.2. Background of Ecosystem Services.....	17
2.3. Nature and Society Theoretical Frame Work.....	19
2.3.1. Social Construction the Environment.....	19
2.3.2. Environmental/Critical Realism.....	20
2.3.3 Human Ecological Theory/Competing Function of the Environment.....	20
2.3.4. Political Economy Theory.....	21

2.3.5 Risk Society Theory.....	22
2.3.6. Ecological Modernization Theory.....	22
2.4 Environmental Ethics and World View.....	23
2.4.1. Anthropocentrism: Development/Exploitationst.....	24
2..4.2 Eco centrism: Conservation Ethic.....	25
2.4.4 Sustainable Development.....	26
2.4.5 Environmentalism.....	26
2.5. Ecosystem Types and their status in Ethiopia.....	28
2.5.1. Ecosystem types and their status in Ethiopia.....	29
2.6. Theoretical Frame work of the Study.....	31
2.7. Gaps in the Existing Literature.....	33
CHAPTER THREE	35
3. Research Methodology.....	35
3.1. Historical Background of the Guraghe Zone.....	35
3.2. Study Area Description.....	36
3.3. Research Methodology.....	37
3.3.1. Methods.....	37
3.3.2 Methods of data collection.....	38
3.3.3. Techniques of Data Analysis.....	39
3.3.4 Sampling Techniques.....	39
3.3.5. Sample Size and Sample Frame Work.....	39

3.3.6.Data Analysis.....	40
3.7. Ethical Consideration.....	40
3.8. Summery.....	41
CHAPTER FOUR.....	42
4.1. Data Presentation, Analysis and Interpretation.....	42
4.1.1. Understanding of the Cultural Ecosystem Services in Ezha Communities.....	42
4.1.2. Use of Tress, False Banana, Woods in Ezha Communities.....	48
4.1.3. Indigenous Practice of Communities to CES.....	61
4.1.4. Challenges of CES.....	69
CHAPTER FIVE.....	82
5.1. CONCLUSION.....	82
ANNEX.....	83

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Acronyms

ACSO:	Authority for Civil Society Organization
CBO:	Community Based Organization
CSO:	Civil Society Organization
CBO:	Community Based Organization
CES:	Cultural Ecosystem Services
ES:	Ecosystem Services
GO:	Governmental Organization
GPSDO:	Guraghe Peoples Self Help Development Organization
MEA:	Millennium Ecosystem Assessment
NGO:	Non-Governmental Organizations
UNDP:	United Nation Development Program
Qicha:	Customary Law
PHE:EC	Population, Health and Environment- Ethiopia Consortium
SNNPR:	Southern Nation Nationalities Peoples Region
SDG:	Sustainable Development Goal
Yejoka:	Council of Elders

Abstract

The ecosystem offers humans a variety of services, such as provisioning, which includes supplying food, fiber, fuel, water, and other resources. Moreover, ecosystems acting as regulators provide precipitation support for the environment, ozone protection. In addition, cultural ecological services consisted of such things as belongingness, sense of home, cultural identity, aesthetic inspiration, and spiritual experience related to the natural environment. However, it would be wrong to consider the cultural services independently. All types of ecosystem services mentioned above interconnected. Cultural service, are closely linked to the provisioning and regulation of services. The objective of this study was to explore and asses the value and services of cultural ecosystem services in the context of Ezha communities of the Guraghe Zone in SNNPR. The researcher employed a qualitative research approach and content analysis methods to enable the researcher to get in-depth and rich information. Primary data were collected using unstructured interview guidelines and filled out by ten relevant personnel or experts from each department. At the same time, the researcher also utilized observation methods to triangulate the information obtained from key informant interviews and two FGD consisted of eight participants conducted with community gatekeepers and council of elders” Yejoka”. Secondary data was also gathered through reviewing legal instruments such as proclamations, code laws, regulations, and guidelines; policy documents; and official reports. Among non-probability sampling methods to identify and select appropriate informants, purposive sampling techniques were employed. The Guraghe communities in Ezha district well understood the value and services of Cultural Ecosystem Services; therefore, the community exerted many efforts to preserve Cultural Ecosystem Services. The Cultural Ecosystem Services provided substantial benefits to Ezha communities like educational integration, social integration, inspiration, sense of place, and aesthetic value. Similarly, the indigenous practices of the communities to preserve cultural ecosystem services were found to be important. In this case, the local customary law and council of elders have been playing an important role in preserving cultural ecosystem services. A number of factors such as overpopulation, local and zonal government development priorities currently challenge cultural ecosystem services of services in Ezha communities, which limit the value and services of cultural ecosystem of services. The findings of this study revealed that cultural ecosystem services in the Ezha district of Guraghe communities were well known by the wider communities, and they exerted extensive efforts to preserve CES. Also, the uses of trees, false bananas, wood, and forests were essential to the survival of the communities. Alternately, population rise, local government attitudes and perceptions of the community were some of the challenges to sustained cultural ecosystem services in Ezha districts of the Guraghe Zone. Keywords: ecosystem services, ecology, educational, Yejoka, population pressures custom and traditions

CHAPTER ONE

1. INTRODUCTION

1.1. BACKGROUND OF THE STUDY

The environment is essential to human life since it provides us with food, clean water, and air to breathe. Additionally, humans use their surroundings to fulfill a wide variety of needs and goals. However, human activities have deteriorated the environmental resources that humans depend on by using them to maintain life and seek particular lifestyles. The idea of ecosystem services (ES), or the advantages that people get from the environment, first emerged in the 1970s to draw attention to the serious environmental issue and the widespread worm infestation (Sona, 2018).

Environment is a place of conflict among peoples of the world mainly because different people outlook and recognize environment in a very distinctive ways. Therefore, its value and interpretation are subjective. These interpretation and meaning for environment is depend on the benefit that human gets environments, for example owner of industry could see environments as sources of wood, tribal groups may consider forests as their home and sources of food and place of ritual practices(Sonali, 2018).

The ecosystem provides several services for human beings, and these services could include provisioning, which includes providing food, fiber, fuel, water, resources, and others. Moreover, ecosystems serving as regulators consist of climate regulation, precipitation; and support for the environment, for example protection from ozone, etc., and finally, cultural services [1] that include recreation, aesthetic enjoyment, physical, mental health benefits, and spiritual experiences (Herdis, H., Joar, S., & Sanne, B., 2017).

Cultural ecological and non-tangible environmental services consisted of such things as belongingness, sense of home, cultural identity, aesthetic inspiration, and spiritual experience related to the natural environment. However, it would be wrong to consider the cultural services independently. All types of ecosystem services mentioned are interconnected. The cultural services, for example, are closely linked to the provisioning and regulation of services.

There is also a very few studies within an African context regarding cultural services of ecosystem. Therefore, these gaps required to be filled as the indigenous communities have a

close and profound relation with this type of ecosystem services. According to Shaun & Bruce (2020), cultural ecosystem services make important services and valuable contribution to human well-being. The majority research in Africa is done South Africa which mainly focus on provisioning of services contribution and cultural services are largely over looked.

In Ethiopia, cultural ecosystem services are widely known in some communities like Gedeo, Guraghe, Amahra, and the Oromia Region. Also, the Ethiopian Orthodox Church is protecting and persevering indigenous forest as a sanctuary of prayer and burial grounds, and the sense of forest surrounding churches is seen as sacred, with the trees symbolic of angels guarding the church (Yosef, et.al 2020). In this aspect, in Ethiopia, the nontangible cultural value of the environment has never been discussed, and authors like Yosef, et.al. (2020) mainly discussed the indigenous practice of environmental conservation in Gedo communities. But, a cultural ecological service from the perspective of wider communities has never been discussed so far. Hence, this thesis focused on discussing the cultural ecosystem services and value of the environment by taking the case of the Ezha district communities of Guraghe Zone, which could be taken as the first academic study in the context of cultural ecosystem services in Ethiopia.

1.2. Statement of the problem

Cultural ecosystem services are typically thought of as the non-material advantages that civilization derives from ecosystems through spiritual enlightenment, brain growth, introspection, leisure, and aesthetic experiences. Cultural ecosystem services, also known as life-fulfilling functions, information functions, amenities and fulfillment, cultural and amenity services, or sociocultural fulfillment, have been incorporated into many other typologies of ecosystem services (Negash, 2010).

Cultural ecosystem services are usually included under non-consumptive direct use values and suffer from poor quantification and integration in plans and intervention. With the exception of recreational and aesthetic values, cultural heritage and educational values, cultural ecosystem services are seldom reflected by economic indicators (MEA, 2005). In addition, CES overshadowed by other ecosystem services, because this services are not immediately the basic the needs and interests of groups, as a result CES received less recognized and the least subject of study.

Research on cultural ecosystem services utilizes a variety of research methods and engages disciplines such as ecology, economics, and the social sciences. There is widespread consensus that a satisfying degree of understanding of many significant features of cultural ecosystem services has not yet been obtained, despite contributions from various disciplinary, methodological, and theoretical viewpoints. Additionally, other authors, like Getahun (2020), are increasingly indicating that cultural ecosystem services merit consideration beyond the confines of a Millennium Ecosystem Assessment category, but they fall short of providing a persuasive solution to this issue.

CES are considered an important component of the ways that humans positively value their interactions with nature, which can translate into support for environmental policies, economic development through tourism and recreation, and direct social benefits such as better health and well-being (Masterson et al. 2019). CES can greatly influence government policy and decisions and guide them towards high economic value but many communities in Africa, specifically in Ethiopia care less about CES benefits, thus increasing the opportunities for enjoyment of other ecosystem services. CES are therefore less regarded as potential motivators and incentives for people to protect and preserve CES. Moreover, incorporating them into decision-making is often still lacking, which may be explained by their misleading reputation of being non-marketable, non-instrumental, non-useful, non-material, non-monetary, non-economical, and non-secular commodities.

Increasing in human population and the resulting anthropogenic activities have led to rapid alterations in the composition, structure, and functions of CES as well as their degradation, increasing the losses of CES values (Mekonnen, et.al, 2020). Livelihoods of people in Ethiopia dependent on their surrounding ecosystems and the services they provide (Mekonnen, et.al, 2020). Therefore, management and reduction of CES modification are required; especially in rural part of the country, this requirement is widely prevalent in Guraghe Zone of Ezha communities. The ever increasing population and climate changes in rural and town of the Guraghe Zone creates significant pressures on CES by over utilizing the natural resources endowments, and various developmental activities in the districts result in alterations of CES.

Specifically, knowledge of CES is limited and inconsistent across the communities and considers the main value of CES that determine social and economic values of these services in the

districts are essential. Furthermore, existing findings reflect inadequate assessments of the benefits of the non-use value of ES to meet a particular utility or intrinsic value (Liu et al., 2010) limited in the study areas. The discrepancy and lack of systemic study on CES are the major gaps in ES studies in Ethiopia, which affect national accounts and decision making. Therefore, the above-mentioned gaps require further investigations at districts and local levels. This study and its results play a vital role in reducing the knowledge gap and identifying the major barriers of CES studies in Ethiopia, particularly in Guraghe Zone.

Despite the tremendous importance of Cultural Ecosystem Services, little consideration is given to assess these types of ecosystem services and the benefit that ecosystem provides to local communities (Emebet, 2020). Therefore, site-specific information for CES is required. Although the majority of community members heavily dependent on other types of ecosystem services, the degree of dependency of local communities on cultural ecosystem services in this specific area are poorly known. Such knowledge is, however, is crucial to understand the importance of CES for supporting local peoples spiritual needs, well-being and others. Because of these research gaps, this thesis work focused on described CES by referencing Guraghe Community of Ezha districts in SNNPR.

1.3. Research Objectives

1.3.1. General Objective

The general objective of this study was to discuss the cultural ecosystem services and values from the perspective of Ezha communities of Guraghe Zone.

1.3.2. Specific Objectives

1. To assess the cultural ecosystem services in Ezha district of Guraghe communities
2. To explore the benefits of cultural ecosystem services of trees, false banana (enset), woods and forests from the perspective of the communities
3. To discuss the indigenous practices of the community how to preserve cultural values of ecosystem services
4. To assess the current challenges of cultural ecosystem services

1.4. Research Question

This study addressed the following research questions:-

1. What is the perception of Guraghe communities to the cultural ecosystem services in Ezha?
2. What are the advantages of cultural ecosystem services of trees, woods, and forests from the standpoint of communities?
3. What are the indigenous practices of communities to preserve the cultural values of ecosystem services?
4. What are the major challenges of cultural ecosystem services?

1.5. Significance of the study

The research will contribute to the knowledge specifically that of cultural services of ecosystem services from the perspective of Guraghe communities specifically in Ezha districts. Many researchers have noted, and commented cultural services of ecosystem are mainly engaged in explaining and discussed the cultural value of services in developed and developing countries.

Cultural services of ecosystem studied developed and developing countries in West and Latin America however the meaning and value of this ecosystems services, in these area have different cultural value. But study of CES in Africa and especially in Ethiopia were not addressed thorough empirical studies also the values and services of CES slightly addressed by referencing the case of South Africa community practices (Mark, et.al, 2016).

Although it is often recognized that nature provides many intangible benefits to people, these benefits are difficult to characterize, let alone measure. There are many things that people understandably resist pricing or trading, treasured landscapes; love and friendship; religious conviction and aesthetic beauty. Yet, CSE play central roles in our lives, and we implicitly make decisions based on their relative value to us. However, many decision-makers and development agents downplay the services and benefits of CES that are truly beneficial to communities and people (Mark, et.al, 2016).

Although research has been conducted on the value of non-tangible, value of ecosystem services in the Gedo communities (Yoseph, M, Aster, G & Getahun, H.2020), they primarily discussed Indigenous ways of environmental protection in this community, from Socio ecological perspective and they mainly discussed the practice of environmental protection and slightly explaining the non- tangible cultural value of this community. At present, there is a limited amount of information regarding cultural value of ecosystem services in Ethiopia especially in Guraghe communities .

Moreover, the researcher choose to study this topic due to my close acquaintance with this community's regarding cultural ecosystem services which helped me to know some of the practices of Ezha communities in Guraghe Zone. I have witnessed that the practice of these communities has been contributed a lot especially during the interaction between natures and society. These experiences initiated this attempt of mine to explore and discussed the cultural services of ecosystem in the communities.

In Environment and Sustainable Development field of study like natures and society as well as cultural ecosystem services is mentioned a key element of the course, hence studying this subject is found to be important and consistent with the subject of environments and development studies.

1.6. Scope of the study

The study is conducted in the Ezha communities of the Guraghe Zone, hence. It may not represent the experience of other districts in Guraghe Zone. It may not represent the experience of other districts in Guraghe Zone.

1.7. Limitation of the study

The researcher noticed some limitations in the course of conducting the current study, particularly on the analysis part. The research couldn't obtain the views and opinions of some key informants outside the community, such as those in the private sector, investors, and owners of extensive farms, religious leaders, and NGO representatives. The researchers felt that it would have been better if these groups had interviewed these individuals and incorporated their views and opinions in the analysis part.

1.8. Definition of key terms

Cultural Ecosystem Services: Cultural ecosystem services are the non-material benefits that people obtain from ecosystems through recreation, tourism, intellectual development, spiritual enrichment, reflection and creative and aesthetic experiences (MEA, 2005)

Ecosystem: An ecosystem consists of all the organisms and the physical environment with which they interact. These biotic and abiotic components are linked together through nutrient cycles and energy flows. Energy enters the system through photosynthesis and is incorporated into plant tissue (MEA, 2005)

Yejoka: The high-level general assembly, or “high court,” of elders responsible for resolving inter-clan and inter-tribe disputes. It is made up of seven assemblymen, or “judges,” from each of the seven “houses” of the Sebat Bet Gurage. For over three hundred years, the Gurage have relied on Yejoka to oversee disputes and implement laws (Emebet, 2017)

Millennium Ecosystem Assessment Framework: The Millennium Assessment focuses on how humans have altered ecosystems, and how changes in ecosystem services have affected human well-being, how ecosystem changes may affect people in future decades, and what types of responses can be adopted at local, national, or global scales to improve ecosystem management and thereby contribute to human well-being and poverty alleviation. The program was launched by United Nations Secretary-General Kofi Annan in June 2001, and the primary assessment reports released by Island Press in 2005

Qicha: Qicha is a collection of laws enacted for the administration of inter-Clan relations and settlement of disputes between the sub-Clan and Clan levels (Emebet, 2005)

Yejoka: At the center of Gurage culture is Yejoka, the high-level general assembly, or “high court,” of elders responsible for resolving inter-clan and inter-tribe disputes. It is made up of seven assemblymen, or “judges,” from each of the seven “houses” of the Sebat Bet Gurage. For over three hundred years, the Gurage have relied on Yejoka to oversee disputes and implement laws (Emebet, 2017)

1.9. Organization of the thesis

This thesis consisted of five chapters. The first chapter is an introduction part which highlights the back ground of the study, statement of the problem, rational and significance of the study, research objective of the study, limitation and scope of the study were discussed. The second chapter discussed review of related literature, concept of cultures ecosystem services theories, research gap and theoretical frame work of the study discussed. The third section described research methodology that consisted of background information of Guraghe zone and Ezha districts, research methodology, sampling methods, technic of data analysis, and ethical issues covered. And chapter's four mainly discussed findings and discussion of cultural value of ecosystem services in Ezha communities. The final chapter covered conclusion and recommendation of the study

CHAPTER TWO

2. REVIEW LITERATURE

This chapter looks into concepts, literature related to cultural ecosystem services and the role that cultural ecosystem services played in the value and norm of the community. It was introduced the subject and discussed the concept of cultural ecosystem services, brief review of the cultural ecosystem services theories and the theoretical framework assessed by referencing the existing literature

2.1. The Concept of Cultural Ecosystem Services

The concept of CES understood as the non-material services that people get from ecosystem services that include beauty, pleasures, beliefs, and identity. In line with this concept, the Millennium Ecosystem Assessment discussed that the benefits that society receives from ecosystems that are not material include improvements to mental growth, consideration, regeneration, and aesthetic experiences, which are known as cultural ecosystem services (CES) (MA, 2005). In addition, the pleasures and satisfaction of CES usually takes place as a result of the interaction of community with ecosystems. These comforts are a result of the diverse and lively interactions between individuals, social and cultural customs, and the environments in which they live (Bryce et al., 2016; Chan et al., 2012a; Fish et. al., 2016; Plieninger et al., 2013). According to Vieira et al. (2018), CES are cultural relativism, can be specific to people or communities (Nahuelhual et al. 2014; Willcock et al. 2017), and have a variety of positive effects on people's physical, emotional, and mental well-being (MA, 2005; Raymond et al., 2014)

CES is intangible and different from other types of ecosystem services, but there is overlap and they are intertwined with each other. In relation to this, Sagie et. al (2016) discussed that CES are distinct from provisioning, regulating, and supporting services; however, they are also intertwined and overlap with them. They are non-substitutable in the way that other ES may be. Once degraded, it is unlikely that they can be replaced by technical or other means. They are also, due to their intuitive and largely subjective nature, non- generalizable. Different people perceive CES differently, depending on their backgrounds, experiences, cultural heritage, age, and gender.

Additionally, cultural services could be defined as the intangible advantages humans derive from ecosystems through spiritual uplift, intellectual advancement, introspection, leisure, and aesthetic experiences (MEA, 2000). They consist of spiritual and religious beliefs, cultural knowledge systems, and cultural variety, which are frequently related to particular CES. This definition was further elaborated by Chan et.al. (2011), who explained that cultural ecosystem services is the non-material benefits that people get from human ecological relations (such as experiences, enjoyment, recreational and talents).

2.2. Background of Ecosystem Services

The notion of ecosystem services was first developed to explain and discussed the effects of ecosystem and biodiversity loss on human wellbeing globally (MEA 2005). The idea of ecosystem focused on to provide services to satisfy societal and economic needs directly and indirectly.

Ehrlich and colleagues (Ehrlich and Ehrlich 1981, Ehrlich and Mooney, 1983) first introduced the concept of ES in early 1980s. By drawing attention to the many services ecosystems provide for human beings, the objective was to raise public interest and concern for ecosystem protection (Setten, Stenseke, and Moen, 2012). Following the United Nations initiation of the Millennium Ecosystem Assessment (MA) in 2001, the concept of ES has gained new relevance and impact as a political and practical tool because the aim of the ES framework is ultimately to enable decision makers to make appropriate management decisions (MA, 2003).

When viewed through the eyes of humans, the benefits and significance of ecosystem services are obvious. In this instance, the MA (2003) discussed that CES relevance is made visible through its anthropocentric¹ definition of ES as ‘the benefits people obtain from ecosystems. Thus, while originating in the ecological sciences, the ES concept puts human needs and preferences in the center of the ecological universe and measures the health of ecosystems based

¹A “centrism” is a worldview or way of looking at things that places some particular value or group at the center. Anthropocentrism is that worldview that considers humans to be the most important thing in the universe, or at least on the planet Earth. In contrast, the bio centric worldview considers humans to be a particular species of animal, without greater intrinsic value than any of the other species of organisms that occur on Earth.

on their ability to provide humans with benefits referred to as services (Katz-Gerro and Orenstein,2015).

2.3. Components of Cultural Ecosystem Services

As a means to operationalize ES, MA established a framework for identification, quantification, and valuation of the ecosystem services. Thus, the MA classifies ES into four main categories with a number of subcategories: supporting, provisioning, regulating, and cultural services. As a result, ES range from the provision of food and clean water to the regulation of services such as flood and disease control, as well as a variety of primarily intangible assets in the category of cultural services. In the decade following the MA, there has been a strong emphasis on the theoretical and practical development of approaches for identifying, measuring, and valuing the services provided by ecosystems (TEEB 2010; CICES, 2017). The following table shows the summary of ES services.

Table1: Ecosystem Services

Ecosystem Services.			
<u>Supporting Services</u>	<u>Provisioning Services</u>	<u>Regulating Services</u>	<u>Cultural Services</u>
<ul style="list-style-type: none"> ○ Nutrient cycling ○ Soil formation ○ Primary production 	<ul style="list-style-type: none"> ○ Food ○ Fresh water ○ Wood and fiber ○ Fuel and others 	<ul style="list-style-type: none"> ○ Climate regulation ○ Food regulation ○ Disease regulation ○ Water purification and etc 	<ul style="list-style-type: none"> ○ Aesthetic ○ Spiritual ○ Educational ○ Recreational ○ Cultural heritage

Sources: Millennium Ecosystem Assessment Framework (2005)

The concept of cultural heritage is usually a missed element in most of the literature, and they gave due emphasis to the other three ecosystem services. Based on this, Daniel et al. (2012) conclude that tangible ecosystem services are more immediately enjoyed and experienced than CES. It is thought that they are essential for raising public awareness and fostering public support for the preservation of CES. It is also one of the services that is hardest to evaluate, both

financially and quantitatively. As a result, CES integration into the ES framework, as well as CES integration into management and decision-making, has been challenging.

On the other hand, there are different subcategories of cultural services used in different ecosystem framework. For example, TEEP (2011) explained CES in to five frame works like aesthetic information, opportunities for recreation and tourism, inspiration for culture, art and design, spiritual experiences and information for cognitive development. Similarly, CICES (2017) categorized CES in terms of four frameworks such as physical, experiential interactions, intellectual, representative interactions, spiritual and/or emblematic interactions and other cultural out puts

2.4. Cultural Ecosystem Services and Theoretical Frameworks

To comprehensively understand the interaction between CES and society, it is very important to explain these relations from divergent theoretical perspectives. Different disciplines like, sociology, anthropology, environmental sciences, psychology, environmental history, and landscape architecture approached differently. These fields provide the theoretical underpinnings and methodological tools to evaluate the nature of human environment interactions and the function of cultural ecosystem services. The following are a few key themes that adequately illustrate relationships between CES and society

2.4.1. Social construction of the environment

CES values, attitudes, and services are socially constructed and learned by individuals or communities at different stages of development. In connection to this, Giddens (2009) discussed how CES is socially constructed and that this is the process through which concepts and beliefs about ecosystems are formed (and reformed) and through which meanings are attached to things and events. This school of thought believes that ecosystem services and their associated problems are socially constructed; thus, understanding the social, political, and cultural processes by which certain environmental conditions are defined and contributing to the creation of a perceived condition of CES is vital.

This implies that all CES are, in part, socially created or constructed by groups of people. Nature never does speak for itself, but people do speak on its behalf. Therefore, social constructionists are interested in investigating how some CES issues are seen to be more significant than others

are. In essence, Giddens (2009) suggested that constructionists ask a series of important questions about ecosystem problems like what is the history of the problem and how has it developed? Who is making the claim that it is a problem?

Social constructionism, therefore, makes a valuable contribution to understand ecosystem services and problems by asking important questions about who makes claims for the existence of ecosystem problems and who opposes them, thus allowing us to situate environmental issues within relevant social and political contexts (Hannigan, 2006). Conversely, social constructionism has been criticized for being uncertain about the central problem at issue (Giddens, 2009; Redclift and Woodgate, 2010). This implies that their posture does not recognize the truth-value of environmental problems. Giddens (2009) concludes that constructionism tells us a lot about people and social interactions but nothing about society environment relations.

2.4.2. Environmental/Critical Realism

There is different literature that explains the problem and services of CES through a combination of natural and social sciences. Environmental/critical realism, for example, emerged as an alternative approach that involves bringing together evidence from the social and natural sciences to better understand why ecosystem problems occur. Critical realism aims to get beneath the surface of the visible evidence to uncover the underlying causes of events and problems (Giddens 2009)

Realists have criticized constructionists for dismissing environmental concerns by reducing them to the relativity of subjective meaning and interpretation rather than relying on objective reality. For instance, Michael Soulé has condemned social constructionism as an academic fad whose rhetoric justifies further degradation of ecosystem services for the sake of economic development and whose relativism can be just as destructive to nature (2015). In essence, the realist view asserts that the physical destruction of the ecosystem can be empirically measured and scientifically monitored, thus avoiding an extreme form of naïve constructionism (Picou and Gill, 2000). As a result, it is argued that environmental realism is motivated by a desire to save the planet, pointing to ongoing ecosystem destruction and a future global catastrophe (Lidskog, 2001).

2.4.3. Human Ecological Theory/ Competing Functions of the Environment

In relation to CES, destruction in particular and ecosystem services in general occur as a result of competing ecosystem functions, such as supply and scarcity of resources. The competing functions of resources and shortages resources supply finally led to the destruction of CES. For example, Catton and Dunlap (1993 cited in Hannigan, 2006) explain the ecological basis of ecosystem destruction. This model specifies three general functions that the ecosystem services for human beings: supply depot, living space and waste repository. Firstly, the ecosystem as a living space is home for man and other organisms. As a supply depot ecosystem provides renewable and non-renewable (water, air, land, fossil fuels) services essential for living. Resource shortages and scarcity is the outcome of resource over use and that finally led to compromise other ecosystem services like CES.

2.4.4. Political Economy Theory

Other ecosystem services that have good monitoring values and immediate use and benefit to communities usually compromise CES. Policymakers and decision-makers have given priority to economic development and investment while disregarding CES. In connection to this, political economic theory explained the paradoxical relationships between economic expansion and ecosystem damage are outlined through illustrations on parts of both Marxist political economy and Neo-Weberian sociology. This idea is based on Marx's thesis of the metabolic rift, which explains how the logic of capitalism accumulation disrupts fundamental mechanisms of natural reproduction and impairs ecological sustainability.

Hannigan (2009) argues that mass production and mass consumerism culture establish what he refers to as a routine of production and that this pattern of tendency tends to cause ecosystem deterioration in the interaction between capitalism, the state, and the environment. According to Hannigan (2009), this treadmill alludes to an economic system's innate urge to continuously generate revenue by stimulating consumer demand for new goods, even if doing so requires growing the ecosystem to the point where it exceeds its carrying capacity or physical constraints to growth.

Large-scale expansion of investment, rapid industrialization, and capital accumulation result in the reduction of ecosystem services and the vanishing of the intrinsic values of CES in particular.

Based on this, Giddens (2009) discussed in modern industrial societies, consumption is linked to economic development; as living standards rise, and people are able to afford more food, clothing, personal items, leisure time, holidays, and so forth. They consume what they don't necessarily need and are hooked on what he termed the "romantic ethic," i.e., the pleasures of purchasing goods and not minding their usefulness. Such a culture of mass consumerism is disastrous. Hence, global industrialization, capitalism, and consumerism threaten ecosystem services on a large scale and CES in particular.

2.4.5. Risk Society Theory

In today's world, an ecosystem service is subject to a variety of risks, which result in the alteration and shifting of the traditional services that communities rely on. This change occurred as a result of constantly changing social, economic, and technological conditions, which increased the risk for ecosystem services. Beck (1992) pointed out a risk society as a society in which the main political conflicts are non-class-based fights over the distribution of technical risk rather than class-based conflicts over the allocation of money and resources.

According to the idea, the traditional institutions economic, political, legal, and technological cannot function in today's reflexive, modernized society, where the very technology that helped fuel social and economic advancement now pose grave dangers. The paradigm of a risk society, in which the risks and hazards produced as part of modernization, particularly pollution, must be prevented, minimized, dramatized, or channeled, is now the norm in Western nations. According to Hannigan (2009), in an industrial or class society, the main concern is how socially produced wealth can be distributed in a way that is socially unequal while at the same time minimizing negative side effects (poverty, hunger). Technological change is advancing at an increasingly rapid rate, creating new kinds of risk and changes.

Currently society is confronted with various types of manufactured risks that are created by the impact of our own knowledge and technology on the natural world. These risks are witnessed to the failure of social institutions, most notably science and new technologies. Such risks exceed both space and time, extending well beyond the geographic source, and temporally, beyond the present generation (Hannigan, 2009). According to this viewpoint, CES in particular, and

ecosystem services in general, are under threat as a result of technological, social, and economic dynamics.

2.4.6. Ecological Modernization Theory

Ecosystem services in general can only be sustained if existing natural resources are used wisely. Ecological modernization theory emphasizes environmental improvements through the transformation of production and consumption patterns with environmentally friendly technologies (Barret and Fisher 2005). Ecological modernization according to Spaargaren and Mol (1992) mean an ecological switch of the industrialization process in a direction that takes into account the maintenance of the existing sustenance base. Hannigan (2009), explained ecological modernization as a historical phase of three stage of modern society like the industrial break through; the construction of industrial society and the ecological switchover of the industrial system through the process of super industrialization made possible by a new technology.

On the hand, Barret and Fisher (2005) suggests that there are two major components of the theory: first, the theory explicitly describes environmental improvements as being economically feasible; indeed, entrepreneurial agents and economic/market dynamics are seen as playing leading roles in bringing about needed ecological changes. Secondly, in the context of the expectation for continued economic development, ecological modernization depicts the emergence of coalitions of political actors promoting the political feasibility of environmental protection. These two components are associated with the growing independence (or loosening of the restraints) of the ecological sphere from the political and economic spheres in state and industrial policymaking (Spaargaren and Mol, 1992).

According to Gidden's (2009) argued that ecological modernization theorists supported modernization has brought economic prosperity but also environmental devastation hence business as usual is no longer possible. In recovering the risky situation it however rejects radical environmentalist solutions such as those advocated by the Neo-Marxists involving de-industrialization. They focus instead on technological innovation and the use of market mechanisms to bring about positive outcomes, transforming production methods and reducing pollution at its source.

According to Giddens (2009), ecological modernization theory suggested five social institutional structures needed to be ecologically transformed. These are: science and technology needs work towards the invention and delivery of sustainable technologies; markets and economic agents must introduce incentives for environmentally kind outcomes; nation/states is required to shape market conditions, put pressure on business and the state to continue moving in an ecological direction and assist in persuading more people to get involved in the ecological modernization of society.

2.5. Environmental ethics and worldviews

Individuals and groups conceive various perceptions of ecosystem services and, as such, develop diverse worldviews and attitudes towards the environment. There are three major environmental attitudes, which inform three major environmental ethics: Each of these ethical positions has its own code of conduct against which ecological morality may be measured.

2.5.1. Anthropocentrism: Development/exploitations ethic

In this environmental ethics, human beings are primarily responsible for all types of ecosystem services. Based on this belief, anthropocentrism is a human centered attitude towards the environment. All ecosystem services responsibility is derived from human interests alone. Only human beings are morally significant organism and have a direct moral standing. The environment is crucial to human well-being and survival; hence man has an indirect duty towards the environment derived from human interest. This is a worldview or attitude which supports the exploitation of the environment for human development without caution. Adherents of this view argue that the environment is self-sustaining and thus human exploitation has no effect on the eco-balance (Defra, 2013).

Early colonialists are of this group, they developed a careless attitude about resources. This was due to the atmosphere of opportunity and rising expectations that accompanied the new availability of land. Nature was seen as an obstacle that society had to tame and overcome in order to make progress (Anna, 1999). This belief and attitude later on aggravated ecosystem degradation and compromise CES at the expense of other quantified services

According to Giddens (2009) for a minority of people, nature and society were seen as distinct, but nature was not seen as in need of taming. Bryan (1991) argued that for early colonizers,

wilderness area and raw natural resources are uncontrolled by man, unproductive and valueless until human labor was mixed with them e.g. the transformation process of crude into fuel. To support their exploitative position they utilize religious rationalization God appointed man to dominate the earth` (see Genesis 1: 28), hence man can't make benefit of vacant land but by habitation and culture.

Furthermore, exploitationst perceive no shortages of raw materials, since these resources are valuable only when they are added with human labor, which is the true scarce resource. They hardly recognize waste as a byproduct in transforming raw resources (Bryan 1991). The attitudes and actions of the exploitationists are guided by the two-fold principles such as axiom of usefulness; this asserts that production of goods for human use is a good thing. It embodies the value of productivity for human use by humans into a product can be replaced by a substitute resource, without significantly increasing cost of production. It formalizes the attitude that waste of raw resources involves no true waste at all. These axioms create an attitude toward growth and development that can't support moral disapprobation of waste of raw products or the systems that produce such products (Anna, 1999).

2.5.2. Biocentrism: Preservation Ethic

Biocentrism is a life-centered attitude towards biological diversity of the environment. The life-centered theory posits that all forms of life have inherent right to exist. It considers nature and all forms of life special in itself. Nature has intrinsic value or inherent worth apart from human appropriation. Biocentrism hence advocates for the preservation of the environment and all life forms free from human intervention (Brayan, 1980). We can see from this environmental ethics that it advocates for the preservation of all types of ecosystem services in order to ensure the various ecosystem services.

Ecosystem preservation, hence is the strict setting aside of natural resources to prevent damage caused by contact with humans or by certain human activities, such as logging, mining, hunting, and fishing, only to replace them with new human activities such as tourism and recreation. This perspective rejected the Axiom of Abundance by the exploitation and development school, but modified the Axiom of usefulness (Brayan, 1998). It sees that nature was valuable only because of its human uses.

According to Brayan (1980), the axiom of usefulness is probed because of its human-centered attitude. He explained that wild nature is spiritually instrumental as a means to inspire admiration. River valleys, for example, are holy places to him, altering the axiom of usefulness, i.e., nature can be preserved by recognizing non-material and non-consumptive human values such as aesthetic, enjoyment, and spiritual fulfillment.

Muir rejected both the axioms of usefulness and abundance because, for one, they ignored human spirituality and, second, they were based on an assumption of anthropocentrism, i.e., they were human-centered. Finally, Muir put forward what he called "axioms of values," which include: some have not clearly articulated recognition of the usefulness of nature to humans; a commitment to the 'spiritual usefulness' of nature to humans; and a belief that nature, in its broadest sense, was God (Brayan, 1980).

2.5.3. Ecocentrism: Conservation Ethic

Ecocentrism is an environmentally centered attitude. It emphasizes an environmental or ecological balance. It maintains that the environment is morally significant in its own right, independent of human (anthropocentric) and animal (biocentric) interests. As a result, radical ecologists' exocentric claims that nature must be placed at the center of moral concern, politics, and scientific study (Sutton 2004; Hannigan, 2009). It is related to scientific conservationism but extends rational consideration to the entire earth and for all time.

Conservationists hence emphasize efficiency of resource use and sustainable development. It recognizes the desirability of decent living standards, but it works towards a balance of resource use and resource availability. This ethic stresses a balance between total development and absolute preservation. It stresses that rapid and uncontrolled growth in population and economics is self-defeating in the end (Hannigan, 2009).

This movement was a reaction to the dominant attitude of exploitationism. They responded to immense destruction with disapprobation, i.e., moral disgust (Bryan, 1991). Most conservationists see natural ecosystems and other species as resources and are concerned mainly with the wise use of resources. Unlike preservationists, conservationists allow for some degree of industrial development, notwithstanding it being within sustainable limits. This view rejects the axiom of

abundance but not the axiom of usefulness. Conservationists emphasize the avoidance of waste in the present pursuit of economic development (Bryan, 1991).

2.5.4. Sustainable Development

Divergent worldviews and attitudes of exploitationists and preservationists, largely, direct and influence perceptions, opinions, actions, and reactions to the environment, influencing positions toward environmental sustainability. Environmental sustainability is concerned with the effect which action taken in the present has on the options available in the future. Hence, developmental pursuit shouldn't jeopardize or compromise the environment and resources for the next generation (Hannigan, 2009).

The exploitationist attitude, for example, certainly is antithetical to environmental sustainability. As such, destruction of the environment has always been the outcome of such a careless attitude. Conservationist and preservationist attitudes ensure environmental sustainability. However, the conservationists allow some level of industrial development that is sustainable; the preservationists fight for total preservation; hence, such an attitude certainly will hinder human development to some extent (Hannigan, 2009).

According to the World Commission on the Environment, Sustainable Development can be defined as development that provides for the needs of the present generation without compromising the ability of future generations to meet their own needs (Asthana, 2012). The concept of sustainable development is consistent with the conservationists' stance on resource conservation. This implies that development processes should, in essence, not only guarantee today's environmental security but also future generations. It advocates for environmentally friendly technologies that don't cause harm to the environment. In this regard, environmental sustainability is synonymous with not just resource conservation but the principles of ecological modernization (Asthana, 2012).

2.5.5. Environmentalism

To ensure the continuity of ecosystem services for communities and people's needs, CES requires the advocacy of duty-bearers and right-holders towards ecosystem services. Climate change and the rising population will have an impact on ECS as time goes on in order to meet the needs and interests of communities. In this connection, environmentalism and environmental

movements are very important to preserve the conservation of ecosystem services and advance the awareness of environmental actors.

Environmentalism is a concern for the planet as a whole. It is a broad philosophy and social movement centered on a concern for the conservation and improvement of the environment. Environmentalism is associated with the color green. Environmentalism can be defined as a social movement that seeks to influence the political process through lobbying, activism, and education in order to protect natural resources and ecosystems. In recognition of humanity as a participant in ecosystems, the environmental movement is centered on ecology, health, and human rights. Through grass roots activism and protests, environmentalists and environmental organizations seek to give the natural world a stronger voice in human affairs (Asthana , 2012).

2.6. Cultural Ecosystem Services in Africa and Ethiopia

Human control of the ES unit has led to rapid changes in the composition, structure, and function of ecosystems (Costanza et al., 1997), such that, in many cases, their capacity to provide necessary services has been either overwhelmed or eroded. In Africa, ecosystem-based studies are limited. The initial stage of ES studies in Africa occurred in 2005 in South Africa (van Jaarsveld et al., 2005). The MEA report (2005) measured the conditions and trends of ESs at multiple scales (Egoh et al., 2012). In contrast, the first ES study in Ethiopia was conducted in 2013 (Giday et al., 2013; Wangai et al., 2016).

According to Wangai et al. (2016), most ES studies have been conducted in South Africa, Kenya, and Tanzania, which have focused on the services category of ecosystem services; more than three-quarters of all the studies have focused on economic valuation and mapping, with only a limited number of studies addressing ES trade-offs and synergies. In contrast, studies conducted in West Africa exhibited a mix of increases in provision and supporting services.

Furthermore, ES protection and realizing the benefits that ES provide to livelihoods face serious challenges because of threats from climate change, recent land grabbing in Africa, and current trends in urbanization throughout the African continent (Egoh et al., 2012; Crossman et al., 2013). These threats to ecosystem services are common in both urban and rural areas, reducing and endangering CES.

Cultural ecosystem services make an important contribution to human well-being. However, research efforts in relation to this ecosystem do not reflect this value, with the majority focusing on provisioning service contributions in developed countries, with cultural services largely neglected in Africa (Egoh et. al, 2012). However, identifying, assessing, and ascertaining CES values is important and as these services and their associated benefits make important and valuable contributions to the well-being and welfare of individuals and natural resource-dependent communities. Ignorance of the nature and magnitude of these benefits in South Africa suggests that current decisions on projects or policies that may significantly impact negatively on CES are at best suboptimal (Egoh et. al., 2012).

The CES types and nature of the benefits enjoyed by the recipient and the CES have been discussed along with other CES services in South Africa and some Western African countries like Ghana, Nigeria, and Niger. However, as expected, these studies did not go into detail about the integration of CES into the various tribes and communities in the respective country (Egoh et al., 2012; Crossman et al., 2013).

2.6.1. Cultural Ecosystem Services types and their status in Ethiopia

Ethiopia is a country that consists of traditional, cultural, and natural diversities. For example, the rift valley that extends from Afar junction to the south west, for example, is home to a diverse range of flora and fauna (Soromessa et al. 2004, Amberber et al. 2014). Alternatively, the country is characterized by mountains as well as medium and flat topographies with different altitudes, climatic conditions, and edaphic[1] differences. This topography has brought extensive biodiversity (Adugna and Abegaz, 2016).

Moreover, various trees, shrubs, and grasses serve as a source of medicinal substances, as well as having recreational and cultural benefits. Based on studies conducted in various countries in the tropics, including Ethiopia, overall ecosystem income from the services contribute substantially to the annual household income (Teketay et al., 2010; Kindu et al., 2016, and Temesgen et al., 2018).

The diverse vegetation types, topography, and ecosystem exhibited different ecosystem strata and provided habitat to an excess of animals and plants (Soromessa et al., 2004; NBSAP, 2005). Ethiopian forest ecosystems are sources of provisioning ecosystem services, including food,

water, energy, recreation, spirituality, and shelter, in both rural and urban areas (Demissew et al., 2003).

The ever-increasing population in rural and urban areas places significant strain on a country's ecosystems by overusing the country's natural resource endowments; various developmental activities result in drastic changes to the ecosystems (Lemenih and Teketay, 2005; Kindu et al., 2016). The utilization of land for farming and grazing significantly affected the ecosystem services of the country.

On the other hand, CES in Ethiopia, especially towards ODAA trees of the Ormo Community, has been discussed. ODAA is a symbol that represents the GADAA system of Oromia. ODAA consists of leaves, branches, a stem and one root. They depend on each other to survive, but nobody carries anyone. There is no corner stone, king, emperor, pope, or sultan but there is/are Abba Gadda(s), Abba Dulla(s), and Abba Mudda(s), who are elected from society but not by God. It represents the diverse society of Oromo with many jobs like time keeping, farming, and defending the system. It is the national symbols of Oromia, which were reinvented over the past few decades courtesy of the sub-nationalist organizations such as the Oromo Liberation Front-OLF and the Oromo Peoples Democratic Party (Tim, 1992).

Odaa is a tree that represents the Gadaa Oromocracy. In the Oromo political system known as Gadaa, candidates are chosen to represent the people for a set term of eight years after competing in a nationwide election. The Oromo elders were instrumental in preserving tradition and culture. As a result, historic sites like Gadaa and Odaa have survived to the present (Tim, 1992).

All meetings for political objectives and conflict resolution have ever occurred under this revered tree, Odaa, according to Oromo oral tradition. When we discuss Bokkuu, Raabaa Doorii, Walgaya Galma, and Hasawaa Guma, they are all celebrated under Odaa, which is also used for additional rituals among other Oromo trees (Tim, 1992). All Oromo perspectives, according to the literature, have long recognized the importance of CES in providing intrinsic value, identity, and a symbol of political structures in ethnic groups.

Many elders express the strong spiritual connections that tie Oromo people to their lands. Oromo Land-Biyya Oromo remains a significant place for Oromo people. As always, the land holds the history and culture of the people, and their spirits remain theirs. Their spirits live on within the

land, joining the spirits of the ancestors. Today, Odaa is simply a symbol of Oromo unity because of not its bigness but the heritage of their survived identity that reconnects their spirit to culture and history (Adugna and Abegaz, 2016).

The enormous branches and leaves of Odaa trees provide excellent protection from the sun. It could also reestablish a connection with natural law. Odaa has been known to the Oromo for its beauty and durability, despite the fact that different symbols have been utilized in various locations within the Oromia zone. One of Oromummaa's symbolic components is called Odaa. Oromummaa is here about history and culture, not about race. Odaa therefore had and continues to play a significant part in the Oromo political system. Additionally, Odaa is a sacred tree that the forebears utilized to hold the spirituality and history of the Oromo people in Oromo land in addition to providing shade for gatherings (Adugna and Abegaz, 2016).

2.7. Theoretical Framework of the Study

This research is analyzed based on Millennium Ecosystem Assessment as a theoretical framework. MEA is a theoretical framework that is applicable to cultural ecosystem services and other types of ecosystem services. Moreover, MEA is normatively based on cultural values, practices, and attitudes and is directed at explaining, promoting, and protecting CES. It is primarily concerned with the societal values, norms, attitudes, and practices of a specific community in relation to CES, thus adapting and utilizing the MEA model is vital to discussing the research findings (MEA, 2005)

According to MEA (2005), under the CES approach, state policy, plans, and programs should be attached in a system of rights and correspond to the duty established by MEA as well as the right of environmental issues and conservation. It aided in the advancement of conducive, empowering the services obtained from CES.

When applied on the ground, MEA has a number of distinguishing characteristics. Some of these vital features of the Millennium Ecosystem Assessment (2005) provide the most comprehensive overview and categorization of cultural ecosystem services. For example, MEA (2005) provided cultural diversity, which provides diversity of ecosystems is one of the elements to recognize the diversity of cultures (MEA, 2005).

Moreover, the MEA mentioned the importance of spiritual services that recognize many religions that contain spiritual values for the ecosystem. And also, MEA explained the knowledge systems that recognize ecosystems influence the traditional and formal knowledge systems developed by different cultures. Also, MEA assessed the educational values of cultural ecosystem services that explained the components of CES on the basis of formal and traditional education in many societies. Also, CES provided inspiration as well as aesthetic values that recognized beauty in various aspects of ecosystems that were marked in the forest, lake, and scenic derives or choice for housing locations.

Similarly, MEA recognized that CES services in terms of social relations impact on the types and character of social relations that are established in particular cultures. CES also provided a sense of place and identity that are related to recognized features of the environment. These services on the maintenance of cultural landscapes or culturally significant species were also provided by cultural heritage values. Recreation and eco-tourism are the other aspects of CES based on the characteristics of the natural or cultivated landscape in certain areas.

This study framework was used to understand the uses of trees, woods, and forests, indigenous practices of communities, and the challenges of CES as stipulated in the MEA framework. The discussion was prompted by considering data findings from respondents and personal observation, which were triangulated against the normative condition of the MEA.

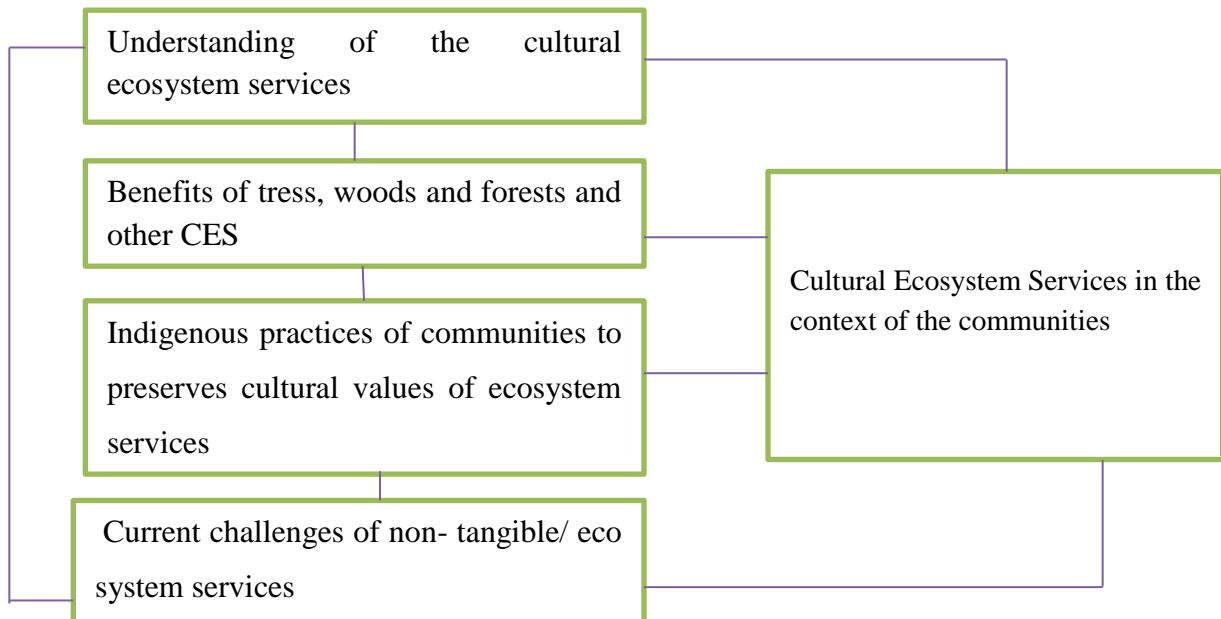


Figure 1: Theoretical frame work of the study which is slightly adopted form the MEA assessment report and model

Cultural Ecosystem Services are necessary to investigate many aspects of a community, such as its meaning and values. In a cultural setting that influences societal values and conventions, it is critical to draw attention to the importance and applications of CES. Additionally, it is thought that CESs does not exist apart from larger communities.

Within a given context, the boundary between CES and other ES is blurred. Cultural ecosystem services and those other systems (e.g. provision, regulation, and other services) are an important feature of ecosystem services and have implications for how one goes on to define the functions and services of ecosystem services.

The change process of environments and ecosystem services results in large-scale social and value modification, which is dependent on context, what is the use of CES, what is the attitude toward CES, and what is its significance? It is also very important to see the existing challenges, both internal and external, need to be discussed. Therefore, the above theoretical framework of study, which is adopted from the MEA utilized to discuss the objective of this study are appropriates.

2.8. Empirical Literature Review

An explanation and description of relevant literature like (Teketay et al., 2010; Kindu et al., 2016, and Temesgen et al., 2018) on this subject were studied in detail, especially in the context of developed countries. There are well-documented materials focused on ecosystem services provided by different scholars. While reviewing this literature, it was found that much of the data was based on the explanation that tangible ecosystem services and also found the variation in the services of ecosystem ; these services are found to be different from country to country, region to region, community to community.

In Ethiopia, the uses of CES have not been discussed by any researcher; however, the study conducted by Yosef (2020) slightly addressed CES in combination with other ecosystem services of Gedo communities. In his studies, he mainly addressed the relevance of indigenous beliefs, sacred sites, cultural practices, and traditional rules in promoting environmental conservation and sociocultural values and further addressed the cultural interconnection between plants and people

in relation to other ecosystem services. However, he could not provide us with a detailed discussion and explanation of CES in the context of the aforementioned communities.

Furthermore, studies Assefa Jaleta (2005) on Oda trees of Oromo ethnic groups have been conducted in Ethiopia, but this study only covered the ritual and political context of CES and ignored the other CES. On the other hand, in the Guraghe Zone, there is sufficient study regarding Enset plants. Most of the studies, such as those conducted by William Shack (1963) and Hailemariam (1991), focused on Guraghe cultures and their relationship to Enset plants as primary sources of ecosystem services. But they barely touched on the CES of Enset and ecosystem services in general; primarily, they dealt with the social and economic importance of the plants. Therefore, studying CES in the context of Ezha is found to be important.

There is sufficient literature with regard to tangible cultural ecosystem services. However, CES has never been discussed or explored, especially in the context of the Ezha district of the Guraghe Community. As a result, it has been determined that exploring and discussing CES in the context of these communities is necessary, including value, attitude, practices, use, and current challenges of the CES.

As a summary, this chapter was organized into seven sections; the first section discussed the concept of cultural ecosystem services; the background of ecosystem services; nature and society's theoretical framework; environmental ethics; and worldviews explained. Moreover, ecosystem services in Africa and Ethiopia, the theoretical framework of the study, and gaps in the existing literature and empirical evidence were also discussed in detail.

CHAPTER THREE

3. RESEARCH METHODOLOGY

The purpose of this chapter is to introduce, the background of the research area, the target population, the research methods, design, including data collection and analysis, and ethical considerations.

3.1. Historical background of the Guraghe Zone

According to William Shack (1966), the history of Gurage is very ancient, as it is part of the history of the country. He provides that the very name ‘Gurage’ and the historical movement of the people can be found within the written document of Ethiopian history, which was written during the period of Amide Tsion. As evidenced within this document, according to William, the meaning of the name ‘Gurage’ represents the people who reside on the left side of the country.

The Gurage socio-ecological landscape is located in south-central Ethiopia, about 155 kilometers South-West of Addis Abeba. The landscape is semi-mountainous, with elevations spanning from 968 to 3593 m above sea level. The Gurage people formed settlements following ecological conditions based on the Jefoure roads and Enset culture. Enset, also known as false banana, is the leading home garden food crop in the landscape, and the system of cultivation is one of the last remaining sustainable, indigenous agricultural systems found in Africa (Tane, 2018).

The Gurage people can be distinguished from other Ethiopian Enset-cultivating communities by their Jefoure road habitation layout. Expectations about the growth of the settlement pattern go back more than 400 years. The Gurage people have different religions and speak different languages and dialects, yet they have many of the same artifacts, technologies, production methods, housing designs, settlement patterns, and economic and social structures in common. They modified Enset (*Ensete ventricosum*) crop farming techniques, yielding an abundant harvest of the root crop that served as an Indigenous staple and/or co-staple in the area (Hailemariam, 1991).

The zone is divided into two reform city administrations, the Wolkite and Butajira city administrations, and twenty administrative woredas (districts) (Guraghe Zone: Department of Culture, Tourism, and State Communication Affairs, 2021). According to Central Statistics

Agency estimates from 2007, there were 1,340,376 people living in the Guraghe zone, 622,253 of whom were male and 658,229 of whom were female. Christianity and Islam are the two main religions in the Guraghe zone, but other native religions were also practiced there, including those of the Gods and Goddesses of Thunder, Fertility, and War known as Waq, Muet, and Demuamit. The economy is based on agriculture, and the region is well known for producing "false bananas" (CSA, 2007).

The Gurage socio-ecological production features in Ethiopia are characterized by a mosaic of different ecosystem types, such as forests, home garden agroforestry systems, cereal crops, grasslands, woodlots, wetlands, surface water, cultural roads, and human settlements. The landscape provides multiple services such as food provisioning, water sediment retention, and ecosystem services (Tefera, 2008).

3.2 Study Area Description

The Ezha district is located in the South Nation Nationality and People's Region (SNNPR) of Gurage Zone. The district consists of 29 Keble [1]. It is 197 kilometers South West of Addis Abeba. Geographically, the study area is located between latitudes of 7 0 59 '30" – 8 0 16 '00" N and longitudes of 37 0 53 '30" – 38 0 10 '00" E. Ezha district has an area of 34,500 hectares (Ezha district agriculture office, 2019). The elevation of the Ezha district ranges from 1950 m to 3200 m above sea level. It is divided into 29 kebeles (the lowest administrative unit). Ezha district is bordered in the South East by the Silte zone; in the South by the Gumer district; and in the north by the Kebena and Muhorna Aklil districts. The major town in Ezha district is Agena (Tefera, 2008).

The total population of Ezha district is 84,905, of which 40,261 are male and 44,644 are female (CSA, 2007). The district has an estimated population density of 187 people per km² of arable land, and the average arable land holding per household is 1.2 hectares, varying from 0.25 ha to 2.0 hectares. More than 85% of households own less than one hectare of farmland (Ezha district agricultural office, 2020). In terms of religion, the majority of inhabitants are Ethiopian Orthodox Christians (65.61%), followed by Muslims (31.47%) and Protestants (2.35%). Concerning sanitary conditions, 70.58% of the urban houses and 24.7% of all houses had access to safe drinking water at the time of the survey (CSA, 2007). Guragigna is an Afro-Asiatic

language that widely spoken in the zone. The district's average annual temperature is between 16.5 and 25°C, and its average annual rainfall is between 900 and 1200 mm. The district agricultural office provided information indicating that rainfall tends to be bimodal, becoming more continuous as elevation increases. Most of the rainfall occurs from June through September, during the "Meher" season (it is most intense in July and August). The "Belg" season, which lasts from mid-February until the beginning of March, is a brief period of rain. The local residents are relying less and less on the short rains for grain production because they are highly erratic and frequently fail.

Small-scale, mixed subsistence farming systems with livestock production as a key component characterize the region's agriculture. Most crop production is rain-fed. Almost all of the cropland is used to grow annual food crops, such as pulses like beans (*Vicia faba*) and peas (*Pisum sativum*), cereals like wheat (*Triticum aestivum*) and teff (*Eragrostis teff*), and root crops like potatoes (*Solanum tuberosum*). A tiny minority of farmers only produce fruits or vegetables. These vegetables are primarily grown in backyard gardens or other rural areas with irrigation. Numerous perennial crops are also produced, including Enset (*Ensete ventricosum*), wood species like *Eucalyptus globulus* and *Eucalyptus camaldunlensis* (Tefera, 2008).

Livestock are also very important to agriculture in the district. Donkeys are the most common pack animals. The availability of feed and water are serious constraints to livestock production in the district. Communal grazing areas, private pastures, and crop residues are the principal sources of basic needs (Ezha district agricultural office, 2020).

3.3. Research Methodology

3.3.1. Methods

To achieve the objectives of the study and because the nature of the problem at hand is mainly descriptive, the researcher used a mainly qualitative approach. This methodology is appropriate for the focus area in order to acquire reliable and accurate information, have a better understanding of the issue under investigation, and gain well-structured information about the Ezha communities' CES. Using both primary and secondary sources of data, it has addressed the objectives of the study. The qualitative research techniques used to gather primary data in-depth interviews and the researcher's personal observations were utilized. Secondary data was also

reviewed to get a better understanding and pertinent information about Ezha communities' CES. The collected data was then analyzed qualitatively using the descriptive method of analysis.

Qualitative research comes from an interpretative perspective and is concerned with interpreting and understanding phenomena through the meanings that people attach to them (Kards, 2013). One of the major uses of qualitative methods is to explore phenomena and experiences from the perspective of individuals, agencies, and actors experiencing them (Linda & Thomas, 2008).

Though the identification and analysis of non-tangible cultural value has been studied in many parts of the world, there has been no study conducted to investigate and explore the cultural services of the Ethiopian ecosystem. Moreover, the rationale and justification for employing a qualitative approach is that, among other things, it enabled the researcher to get in-depth and rich information about the perceptions of the Ezha communities. According to Krueger and Neumann (2006), qualitative research is more concerned with identifying and selecting cases or participants who have a deep and rich knowledge of the research issue in order to provide a good insight (Krueger and Neumann, 2006)

3.3.2. Methods of data collection

For data collection, in-depth interviews with ten key informants and two focus group discussions were employed. Three Officers from environments and protection office, three community gatekeepers, two local administrators, and a council of two elders were purposefully chosen for in-depth interviews. For Focuses Group Discussion (FGD), two groups were selected. Each FGD is composed of community gatekeepers and an elder council that is comprised of four males and four females.

The interview contained mostly open-ended questions to get more elaborated information about the community's role, attitudes, efforts, and challenges in CES preservation and the ways it used to meet research objectives. The interviews have been conducted in their respective localities and school compounds in Ezha districts and Wolkite Town.

Interview questionnaire prepared in such a way that it incorporates each element of the research objective, and indicators employed to measure the research questions and adopted by the researcher's instrumentation. In addition, the interview guidelines are prepared in such a way that

fits with the nature of the expertise and activities of each unit of analysis. After the first draft was prepared in the English language, the researcher submitted the data collection tools to an Advisor in the department of environment and sustainable development.

3.3.3. Techniques of data analysis

The data has been analyzed using the descriptive method of analysis. The data collected through interviews was put into different categorical themes. Major themes were identified, analyzed in line with research questions, and summarized for use in descriptive analysis. The analysis process has followed steps of data reduction, which enables us to sort out the necessary information, display it, and draw conclusions.

Generally, this phase of the research comprises three steps: Data Reduction: This is the selection, focusing, and simplification of collected data. This sharpens the information by sorting, focusing, discarding, and organizing it so that the conclusions are more effectively drawn and verified. Data Display: Data display enables the drawing of conclusions and the taking of actions. The area of narrative text is unstructured and cumbersome, and it may even cause you to draw unfounded conclusions. To reduce this problem, the researcher organized the information and drew conclusions that were more justified. A conclusion illustration/verification: A conclusion appears after data collection is presented and conclusions are verified to ensure plausibility

3.3.4. Sampling Technique

Purposive sampling is one of the non-probability sampling techniques employed to identify and select appropriate informants. Hence, relevant community members, government officials from Guraghe Zone and Ezha Woreda, community gatekeepers, and a council of elders were identified in advance for collecting data. These units of analysis were selected based on the criteria of authority, seniority, and experience.

3.3.5. Sample Size and Sample Frame

According to Anita (2004), in qualitative studies, the purpose is not to be illustrative of the population; rather, the soundness, significance, and insights generated from such studies have more to do with the information richness of the cases that are selected and the investigative qualities of the investigator than with the sample size.

There are no rules or procedures for determining sample size in qualitative studies. In this approach, it focused on what some people want to know, the objective of the subject study, and practical elements that were received well. In order to provide an in-depth understanding of the study, stakeholders were divided into government, community gatekeepers, religious leaders, and a council of elders called "Yejoka."

The major driving factors behind using purposive sampling are that the study was conducted on the meaning and perception of CES among Ezha community members in Guraghe Zone. In this case, it needs a specific area from where the data was collected. It persuaded the researcher that could easily obtain the target population. This is clearly stated in Denscombe (2003), where "purpose sampling" is handpicked for research. The term is applied to those situations where the researcher already knows. As a result, they were chosen with a specific purpose in mind or due to their significance to the issues under investigation.

3.3.6. Data Analysis

The data has been analyzed using the descriptive method of analysis. A qualitative thematic analysis method was used. Using the content analysis method assisted the researcher in identifying the intentions, focus, or communication trends of an individual, group, or institution, describing the attitudinal and behavioral responses of group and individual respondents, and determining the psychological or emotional state of the research groups. These methods also revealed differences in perception of the CES and analyzed focus group interviews and open-ended questions to enrich the information.

3.7. Ethical Consideration

According to Krueger and Neumann (2006), there should be a balance between two values in ethical issues, the pursuit of scientific knowledge and the rights of those being studied or other members of society. As stated by Walliman (2011), working with human participants in research practice always raises ethical issues. Accordingly, people involved in any research should be treated with respect during and after the research. Krueger and Neumann (2003) also stated that participation in social sciences research should never be forced; it must always be voluntary. Accordingly, the researcher did not force anybody to participate in this research. All the

respondents participated in this research process after they fully expressed their willingness to do so, which was acknowledged by their signature on the consent form.

Privacy is the other moral issue that needs to be reconsidered in this field of study. Krueger and Neumann (2006) explained that researchers need to protect the privacy of the subject of the study throughout the study period. When a researcher gives assurance and gives participants confidence, he or she may get the right information or data, so the researcher is required to provide full information about the purpose and objective of the study and must assure that this research is only used for academic purposes. Moreover, the respondents that were identified were not in any way exposed other than for the said purpose. Walliman (2011) also raised two ethical concerns in the research process. The individual values of the researcher relating to honesty, frankness, and personal integrity are the first issue. The second and most necessary aspect mentioned is the issue of confidentiality, anonymity, and courtesy. In line with this, the researcher informed participants to comply with all ethical issues.

CHAPTER FOUR

4.1. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter provided data presentations. Analysis and interpretation of the findings based on key informant interviews and focus group discussions. The findings are interpreted in light of the study's theoretical framework and theories.

4.1.1 Understanding of the cultural ecosystem services in Ezha district of Guraghe Communities

The cultural ecosystem services provided by the districts are well understood by the local's peoples. For example, cultural ecosystem services are essential to both cultural identity and survival. Decision-makers occasionally forsake cultural ecosystem services due to ecological and financial considerations, despite the fact that they are highly valued by a range of stakeholders and continuously get favorable public opinion [1]. This awareness suggests that CES is aware of the potential for spiritual enrichment, cognitive development, introspection, recreation, and aesthetic pleasures that are acquired through environmental services. This key informant conversation mirrors the Millennium Ecosystem Assessment's discussion points and refers to "the non-material advantages individuals derive from ecosystems" as the term for cultural ecosystem services.

In addition, cultural ecosystem services are defined as the non-material benefits people obtain from nature. They include recreation, aesthetic enjoyment, physical and mental health benefits, and spiritual experiences. They contribute to a sense of place, foster social cohesion and are essential for human health and well-being². The beliefs and attitudes of the key informant were consistent with the Millennium Ecosystem Assessment model (2005). In this model, belief and attitudes of human beings towards CES were understood in terms of its services like recreation, enjoyment, and aesthetic values.

The cultural ecosystem services in Ezha can be considered as the services that improve the welfare of rural communities who enjoy green spaces for leisure, Guraghe culture education,

² Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

aesthetic appreciation, and spiritual needs. All of which served as a reflection of the larger community's identity³. The same key informant explained CES is bringing physical and mental health being that signify social belonging⁴, group identity⁵ and social integration.

The concept of cultural ecosystem services understands as a sense of Guraghe community sense of place and belonging. This could be associated with grasslands that cover jeofure⁶ and other Indigenous species such as “Enset”⁷ In line with this finding, CES in Ezha pointed out a sense of belonging and integration with the wider communities. These feelings and attitudes related to the discussion points made by Adugna and Abegaz (2016), and they discussed that a sense of identity and belonging is prominent across many communities. A sense of home or belonging (feeling of home, feeling of belonging) makes communities feel patriotic or reminds them of traditions. Some communities express this in terms of a sense of local rootedness.

Community gatekeepers discussed that the concept of CES is most valued and understood in terms of its function, like spiritual value, serving as a place where the community gathers together to discuss social issues and resolve the conflict⁸. This CES discussion also includes the theoretical framework of the Millennium Ecosystem Assessment model, which focuses on the non-material benefits that communities receive from ecosystems through spiritual enrichment, cognitive development, reflection, conflict resolution and aesthetic experiences (MEA, 2005).

Ezha district communities understand CES in different ways. For example, Ezha communities have a culture and practice of living in harmony with nature. The indigenous ecological knowledge and local government attitude towards non-tangible ecological services of the

³Interview with key informant one (2022) – Environment and Protection Authority Expert at Guraghe Zone 29/03/22, 8:45 am -11 am

⁴Social belonging is a sense of relatedness connected to a positive, lasting, and significant interpersonal relationship. While mere belonging is a minimal or even chance social connection, social belonging factors are characterized as social feedback, validation, and shared experiences

⁵ Group identity refers to a person’s sense of belonging to a particular group. At its core, the concept describes social influence within a group. This influence may be based on some social category or on interpersonal interaction among group members

⁶ Guraghe, have a unique land use system, popularly known as Jefoure which is culturally designed where houses are built along its sides. Jefoure is an open space between lines of villages, and serves as, among others, a public gathering place for different accessions like celebration of holidays, gardening, and public gathering places. Jefoure testifies social cohesion of the Guraghe Communities in Ezha and other districts

⁷ Interview with key informant one (2022) – Environment and Protection Authority Leader at Guraghe Zone 29/03/20, 8:45 am -11 am

⁸ Community gate keepers one (2022) – Ezha districts of Guraghe Zone 29/03/20, 2:pm -3:00 pm

community have been crucial in conserving the districts' CES. However, in recent years, long-standing cultural values and traditional rural practices that are crucial to conserving these services have started to erode because of climate change, population growth, and the attitude of government policies and development ideologies. These changes started to result in a loss of biodiversity and a deterioration of CES and biodiversity⁹

The above point of discussion is similar to the Risk Society Theory. At this moment, CES is subject to a variety of risks that result in the alteration and shifting of the traditional services that communities rely on. This change occurred as a result of constantly changing social, economic, and technological conditions, which increased the risk to ecosystem services. Beck (1992) identified a risk that society frequently faces: threats to ecosystem services, which lead to changes in the preexisting social and economic values of ecosystem services.

Mersha (2018) further substantiated the above points of discussion. He discussed the nationalization of land since 1974 and the expansion of large-scale agricultural investments since the current Ethiopian People's Revolutionary Democratic Front (EPRDF) came into power in 1991, which aggravated the situation. During both of these regimes, the constitution granted the government the right to own land. Citizens only have "use rights" over any land they hold and can be removed at any time if the government deems the land is needed for national development.

Political economy theory explains, similarly to the preceding discussion, that ecosystem services with good monitoring values and immediate use and benefit to communities usually compromise CES. Policymakers and decision-makers have given priority to economic development and investment while disregarding CES. Political-economic theory clarified the contradictory relationships between economic expansion and ecosystem damage in this regard. Disrupts fundamental mechanism of natural reproduction and impairs ecological sustainability (Hannigan, 2009).

In Ezha communities, CES is considered a gift of God that meets the needs and wants of human beings. There is a close relationship between Ezha community traditions and CES and it is considered the home of a sacred site that cannot be marketable. In addition, every Ezha district

⁹ Interview with key informant three (2022) – Environment and Protection Authority Expert Head at Guraghe Zone 23/03/20, 2:30- 3:20 pm

community has a strong practice that CES is the basis of Ezha community culture. Hence, all natural resources, especially in the community of CES, are highly protected and revered for cultural purposes apart from their economic needs¹⁰. That is the way every Ezha community has a strong belief that land is the basis of their livelihoods, culture, and traditions. As a result, all natural resources on it, such as trees, forests, cultural landscapes, birds, wildlife, and natural ecosystems, are essentially protected and revered for cultural as well as economic reasons¹¹

The above points of discussion are similar to the points of discussion conducted by Yosef,et.al (2020) regard to the Gedo community's indigenous environmental conservation. Nature is regarded as a legitimate intermediary between creator God and human beings in the Gedo community, and nature is believed to be the home of many sacred natural sites, living things, and haven niches for various trees, plants, and wildlife, all of which are protected and preserved for the community's economic and sociocultural well-being.

Sutton (2004) and Hannigan (2009) expanded on the preceding points of discussion from the standpoint of eco-centrism ethics. They emphasize environmental or ecological balance. It maintains that the environment is morally significant in its own right, independent of human (anthropocentric) and animal (biocentric) interests. As a result, they claim that nature must be placed at the center of moral concern, politics, and scientific study. It is related to scientific conservationism but extends rational consideration to the entire earth and for all time to ensure the communities and sociocultural well-being.

Similarly, community gatekeepers discussed CES in terms of Jefoure green landscape. He discussed that this green land has multiple uses even if the current climate change and population growth undermine the uses and benefits of CES in Ezha. However, this green land scape is used as a forum to transact traditional court functions; hold leadership meetings; public gatherings and celebrations (such as 'Demera'); attend to activities connected with mourning increased popularity of the 'Idir' institution; and provide aesthetic value to villages¹².Tefera (2008) and Tekle (2004) further substantiate these points of discussion. Jefoure green landscape a typical

¹⁰ Interview with key informant three (2022) – Environment and Protection Expert Head at Guraghe Zone 23/03/22, 2:30- 3:20 pm

¹¹ Interview with key informant three (2022) – Environment and Protection Expert Head at Guraghe Zone 23/03/22, 2:30- 3:20 pm

¹² Interview with community gate keeper(2022)-Ezha Woreda Leader 21/03/2022, 1:30 pm -2:15 PM

identity of Guraghe Community and provided non-tangible services to the community as well as served a point of social integration, provide aesthetic value and used to celebrate public holiday like Meskel festival

Environment and Protection Authority at zonal and district level highly considered CES in Guraghe Zone. CES is widely accepted in the environmental protection authorities and has encouraged incorporation of CES value to support the community's CES needs. The importance of CES is encouraged to motivate and sustain religious and educational values. For example, the environment protection office places a high value on spiritual or religious and educational value is encouraged to be maintained. In addition, recreation and ecotourism are encouraging in the zone and districts¹³

Brayan (1980) went on to support biocentrism or preservation ethics-based practices in environmental and protection authority offices. He discussed attitudes toward the biological diversity of the environment and its inherent right to exist. It considers nature and all forms of life special in themselves. Nature has an intrinsic value or inherent worth apart from human appropriation. He advocates for the preservation of the environment and keeping all life forms free from human intervention. This environmental ethic ensures the sustainability of ecosystem services by advocating for the preservation of all types of ecosystem services. Guraghe Zone and Ezha Districts recognize bio-centric environmental ethics in this context.

He also discussed how the importance of CES has consistently been recognized and how these services contribute to the structure and function of community needs and wants. These CES services use community changes for knowledge, social, and cultural development¹⁴. Using observation checklists, the researcher identified deforestation as having compromised the needs and wants of CES in the Ezha community. For example, water wells and other areas of water sources were granted to water factories in the districts by the Guraghe Zone Investment Bureau. This indicated that CES was considered secondary, and the Authority's primary focus was on tangible ecosystem services.

¹³ Interview with key informant three (2022) – Environment and Protection Expert Head at Guraghe Zone 23/03/22, 2:30- 3:20 pm

¹⁴ Community gatekeepers two(2022)- Ezha community gate keepers 2/ May/ 2022/ 4:34am – 5:45am

The community perceived CES in terms of its symbolic identity. For example, Enset has symbolic values and is essential to the ceremonial and ritual aspects, as demonstrated by the wider community practices in the districts.¹⁵

Eshetu (2021) further enhanced the above points of discussion. He discussed in Guraghe Zone in general and Ezha districts in particular, the number and quality of Enset that one owns determine a person's status. Accordingly, Enset serves as a vehicle for the social organization of people. Acquisition of wealth, rank, and gender roles are associated with the plant. The wealth of a family is exhibited by the amount and quality of Enset they own. In addition, it also serves as a milestone in the description of the Gurage and, at the same time, Ezha's identity. He also discussed how CES in Ezha is considered aesthetically desired by the wider communities. Among CES, for example, Enset as a source of beauty, he discussed that the beauty of the area just after crossing the Wabe River is admirable to any observer, with the mountains and valleys covered by a perpetually green plant called Enset.

Currently, the value and attitude of CES in Ezha districts seem to have changed due to the current overpopulation and local government attitude towards non-material culture. As a result, some of the CES like Jefoure Greens' land size began to shrink. At this moment, Enset diseases that prevailed in the districts and as well as throughout the Guraghe Zone significantly affected CES. Enset was partially, and in some parts, completely destroyed in Ezha¹⁶ This current dynamic of CES is further supported by Belay, et.al, (2020). He discussed *Xanthomonas campestris* is one of the most common bacteria responsible for bacterial wilt disease, which attacks and kills Enset plants at any developmental stage. It primarily causes a serious loss in Enset production in which the farmer has already invested land, labor, and resources for several years. Such situations have caused farmers to replace Enset plants with annual crops in Guraghe Zone. Ezha districts densely populated with very small land coverage. However, such a replacement of Enset by annual crops on such a small plot cannot fulfill the food demand of the districts and affected the cultural value of Enset (Belay, et.al, 2020)

Understanding CES highly appreciated in the districts and most valued in the community. These services of CES functions are contributing to meet the community needs with knowledge, social,

¹⁵ Community gatekeepers two(2022)- Ezha community gate keepers 2/ May/ 2022/ 4:34am – 5:45am

¹⁶ Community gate keepers two(2022)- Ezha community gate keepers 2/ May/ 2022/ 4:34am – 5:45am

and spiritual development. Cultural landscape like Jefoure served as a cultural value of the Guraghe community. However, overtime, this CES altered due to high population in search of agricultural land in the districts

Defra (2013) further supported the above discussion from an anthropocentrism ethic point of view, in which all ecosystem service responsibility is derived from human interests alone. Only human beings are morally significant organisms and have a direct moral standing. The environment is crucial to human well-being and survival; hence, man has an indirect duty towards the environment derived from human interest. This is a worldview or attitude that supports the exploitation of the environment for human development without caution. Adherents of this view argue that the environment is self-sustaining and that, thus, human exploitation has no effect on the eco-balance.

The researcher found that the perception and attitude of the community are an important aspect in assessing CES conservation practices because this affected community and local government response in the Guraghe Zone. These perceptions and attitudes can determine activities and provide a starting point for designing new rules to secure the long-standing traditions of Ezha communities towards CES. Producing this knowledge with local people is also meaningful when CES management officially promotes stakeholder participation. Therefore, the basic tenet is that local communities' perception and attitude to CES enables them to see how community and other stakeholders interpret and preserve CES.

4.1.2. Use of Cultural Ecosystem Services of trees, false banana (Enset), woods and forests from the perspective of the communities

Cultural ecosystem services are a contribution to the non-material benefits (e.g., capabilities and experiences) that arise from human ecosystem relationships. Studies have shown that societies become less dependent on provisioning (e.g. firewood) with higher economic development, while they become more dependent on CES. Cultural ecological services are of critical importance to the FDRE Environment and Protection Authority because they represent complex relationships between ecosystems and humans (Tefera, 2008). Despite their importance, cultural ecological services have been rarely studied apart from tourism and recreation. One reason might be due to the difficulty of quantifying their importance. Current publications of cultural ecosystem services have mainly focused on economic as well as biophysical assessments.

However, the socio-cultural aspects have not been thoroughly discussed (Martin et al., 2014). In the following sub-section, I discussed the use of trees, false bananas, and forests from the perspective of CES in the Ezha districts of the Guraghe community.

Each village in Ezha is home to numerous ethnic groups, each of which has its own sacred tree, particularly the *Podocarpus falcatus*. Every Gurage village has its own Adbar tree, which is thought to be the home of spirits. Adbar trees, or clusters of trees, are considered to form a bridge between the physical and spiritual worlds and are a symbol of calm and stability. Large trees and large areas of forest have long been designated as sacred grounds in the Ezha district of the Gurage Community. These areas are typically adjacent to villages and are strictly protected by "Qicha," a form of local customary law. " Such sacred trees and forests are found in various areas of the district and can never be abused, as a result of which the biodiversity of the area has been protected. Even if the area is small, many such trees and groves may be representative of ancient woodlands, and they are traditions of conservation, which are backed by religious sanctions.

Brayan (1998) further sustained the above points of discussion from the perspective of a biocentrism ethic view; he probed the axiom of usefulness of ecosystem services because of their human-centered attitude. He explained that nature is spiritually instrumental as a means to inspire admiration. River valleys, for example, are holy places to him; nature can be preserved by recognizing non-material and non-consumptive human values such as aesthetic, enjoyment, and spiritual fulfillment.

Desalegn (2002) further discussed the above points of discussion. He elaborated that the Gurage traditional belief, which is called Adbar, provides many protections for local biodiversity. Many groups of people in each village of Gurage have their own sacred trees. Every Gurage community has their own Adbar tree that is believed to be the abode of spirits. Adbar trees, or groups of trees, are a symbol of peace and stability and are believed to be a link between people and spirit.

Albizia schimperiana and *Podocarpus falcatus* are two tree species that are frequently chosen as Adbar, while *Acacia gerrardii* is chosen for its strength. Big and strong trees are known as Adbar. In order to appease the spirit, the Gurage utilized Zigibe as a pillar and spread butter on

the stem. Animal sacrifices take place underneath it, and beverages like tella (local beer) must cover it and Arake (locally fermented alcohol). The kind of animal that is killed depends on how many people attend the Adbar ritual.

If the people think the Adbar is female, they call them eme-be-tachin, and they slaughter a cow. If they think the Adbar is male, they slaughter an ox. The ceremony takes place on 1 May and 12 November (according to the Ethiopian calendar) each year. At this time, the Gurage people sacrifice animals under Adbar trees to maintain a good farming and cropping season as well as avoid any evil spirit that brings epidemic diseases. Nobody can use the Adbar trees because they are highly valued. The Gurage community constructs fences around Adbar to protect it from intruders.

Community gatekeepers in Ezha talked about how eucalyptus trees were frequently utilized to clean the dead before burial in addition to their economic importance. The deceased's body should be cleaned in a spotless, private location with access to clean water and soap. Always wear gloves when handling and cleaning the deceased.

“The body of the deceased should be washed with water using eucalyptus trees. This washing of the deceased person is done frequently at secured places. The entire body of the deceased person is placed on a table, his/ her clothes removed, and the body temporarily covered with eucalyptus leaves so as to get a good smell”¹⁷

The above points of discussion are further supported by the study conducted by Antonio Luigi, (2016). He discussed when a man or woman died; his or her body was washed with water mixed with eucalyptus trees. In most graveyards, the ground is covered with excultated trees.

In Ezha community worldview, God is the creator of all things, including natural resources and human beings. Hence, He gave them the laws of order and harmonious co-existence between, human beings and the natural environment. The findings, thus, reveal that CES like Enset, grass lands, water bodies are important concepts of their worldview about cosmic order. In sum, the data obtained is revealed that in the Guraghe worldview, there is strong dynamic relationship between the physical, the spiritual, and the human worlds. During observations of natural environment especially on forests and Enset garden from April 5-7/2022; at Ezha districts, many big trees in the agricultural fields were observed. Therefore, these series of observations of the

¹⁷ Community gate keepers three(2022)- Ezha community gate keepers 3/ May/ 2022/ 9am – 9:30am

natural environment and forests resources at Yewhniye and Ketena Kebele appeared to confirm data obtained from the informants that the study area society respect big trees in farm land and traditionally they give great respect for their environment. Also local community respect mountain, rivers, and forest and water bodies. Community gatekeepers with 71 years old stated that:

“Traditionally our community /Guraghe/ believed in God, the single almighty God is the creator of the universe. And we believed that environment and all natural resources are created for us by God. Therefore, traditionally we respect, protect and wisely used the natural resources for its sustainability for the next generation”

Hanningan (2009) also supported the above points of discussion based on a sustainable development ethic view. In that, he discussed that there are divergent worldviews and attitudes of exploitationists and preservationists, largely direct and influence perceptions, opinions, actions, and reactions to the environment, influencing positions toward environmental sustainability. He advocated for environmental action that meets current needs without negatively impacting future generations. Hence, developmental pursuits shouldn't jeopardize or compromise the environment and resources for the next generation.

The Oromo ethnic group shares the same attitude and perception, and they believe that Waqa is the creator of nature. Oromo attitudes towards natural resources are highly sentimental. Oromo religion is a discrete religion with a belief in Waaqa/God either directly (through trance personal attachment) or indirectly through natural entities like forests, groves, some huge trees, mountains, and springs. It is only Waaqa who gives life and creates human beings (Misganu, 2020).

As they believe, the responsibility, respect, and morality of conserving and protecting the environment and natural resources is attached and goes in parallel with their indigenous religions. Therefore, they believe that if people respect their natural environments like forests, mountains, rivers, and water bodies, and when they pray to their lord, around the tips of mountains, on the river, or around the seas, their God will hear their prayers and quickly give them the answer to their prayers (Misganu, 2020).

The Guraghe community looks to CES as they have intrinsic worth in themselves. Many of CES and the moral and environmental ethics of the local community have already declined in the

study area due to high population density, poverty, deforestation, and local government attitude, as well as the encroachment of modern agricultural practices.

Giddens (2009) further supported the above findings based on political economic theory. He discussed how large-scale expansion of investment, rapid industrialization, and capital accumulation result in the reduction of ecosystem services and the vanishing of the intrinsic values of CES in particular. Giddens also discussed that in modern industrial societies, consumption is linked to economic development; as living standards rise, people are able to afford more food, clothing, personal items, leisure time, holidays, and so forth. They consume what they don't necessarily need and are hooked on what he termed the "romantic ethic," i.e., the pleasures of purchasing goods without minding their usefulness. Such a culture of mass consumerism is disastrous. Hence, capitalism and consumerism threaten ecosystem services on a large scale, and CES in particular.

During the FGD, participants explained the various types of service trees and other indigenous plants. For example, trees helped the community to enhance satisfaction in the community and brought an excellent odor to the villages. The Guraghe Community as a sign of blessing and good fortunes considers having an enormous number of trees and a vast amount of green land¹⁸.

On the other hand, FGD participants discussed, that Enset provided different CES. It has unique characteristics that make it selective when compared to other crops in the study area. It has socio-cultural significance as a status symbol, high household material culture benefits, and flexibility in farming systems as an intercrop with annual and perennial crops. Enset is also drought resistant, suitable for the preparation of staple and high social value dishes, and provides long-term storage of its products. In addition, it could be harvested at any time of year and used for crop-livestock system integration, the production of high quality fiber, and as a water source for livestock¹⁹.

Tane (2018) further strengthened the same points of discussion. He said, from the social context and CES, which the Enset serves as a status symbol, an indicator of wealth status, and an asset for farmers. Hence, the farmer with many Enset plantations and the farm area occupied by many

¹⁸ FGD discussion with Yejoka Leader (2022)- 3/ May/ 2022/ 1:30pm – 2:30 pm

¹⁹ FGD discussion with Yejoka Leader (2022)- 3/ May/ 2022/ 1:30pm – 2:30 pm

mature and immature Enset plants, both in quality and quantity, is socially considered a rich, proud, superior, and respected person in Ezha. Thus, by looking at the farmer's house and his Enset plantation in the garden, one can measure the status of households.

Conversely, in Guraghe Community CES, the value and services received from forest and other indigenous plants seem to be declining. Community attitudes and practices shifted their minds to the provision of ecological services towards market-value items of the services. In some places, farmers began to replace Enset plant gardens with commercial crops like Chat and other vegetables that have a high market value in and outside of the communities. Also, local government officials allocated peasant land and forest cover areas to private owners and individuals in the name of investment²⁰.

Similar to the above findings, Catton and Dunlop (1993) discussed ecosystem destruction from the standpoint of human ecological theory, arguing that destruction in particular, and ecosystem services in general, occur as a result of competing ecosystem functions such as resource supply and scarcity. The competing functions of resources and shortages in their supply finally led to the destruction of CES. This model specifies resource shortages and scarcity as the outcome of resource overuse, which finally led to the compromise of other ecosystem services like CES.

On the other hand, a key informant explains that Jefoure green land and abundance of forest cover in Ezha symbolize heaven, which is surrounded by the Bojebbar River. The same is true for Ezha woreda, surrounded on all sides by Enset and forests. These aesthetic values are derived from the community's appreciation of the beauty of CES. The Jefoure road design, unique architectural styles, and other attractive features of Enset and forest cover areas were found to be attractive features of the Ezha communities²¹

The Millennium Ecosystem Assessment Model (2005) and theoretical frame of the study further supported the aesthetic value of CES. The beauty of nature, which has intrinsic values for ecosystem services, is one of the key services that humans receive from CES. Humans may derive mental, spiritual, and psychological satisfaction.

²⁰ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²¹ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

The socio-cultural values of CES are the main pillars of Ezha communities' day-to-day interactions. The sociocultural values of Jefoure grassland areas are sources of negotiation and promote unity by binding social groups together and bringing cultural communalities close to one another in Ezha. For example, Yejoka's leader wears their traditional clothing, and celebrates the Meskel and Arefa festivals²².

The Enset plant and its products have played an enormous, social, cultural, medicinal, and economic role in Ezha, as well as a multipurpose role in Ezha. Besides the socio-cultural and economic roles, environmental roles also cause Enset to be important in the day-to-day interaction of Ezha communities. The environmental roles include: controlling soil and water erosion; conserving soil and moisture; increasing soil fertility through continuous manure application; balancing soil nutrients; acting as wind breakers or sheltering the family members, their plants and their animals from the wind and sun; and buffering against climate change²³.

Enset is also likely to affect the macro-environments of an area in a positive manner. It has been commonly observed that species like Enset, with deep roots and leaf canopies of long duration, improve the hydrological dynamics of natures. As the proportion of these species increases with respect to annual species, water infiltration increases and surface runoff decreases, resulting in more water in the soil and aquifers. The result is increased water availability and greater volume and duration of discharge to springs, decreasing the effective length of the dry season²⁴.

The above points of discussion further supported by Tane (2018), he discussed Enset is not only a food crops, but also it has a multipurpose function and crops, of which every part of the plant is utilized. Moreover, Enset served as a sources of pride, regulate environment and conserve soil erosion. Moreover, green Enset leaves is used as a traditional plate to serve food during lamentation and wedding times, an umbrella during the rainy seasons, wrapping material for different products (butter, cheese), baking breads, preventing fire (fire extinguisher) and used

²² Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²³ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²⁴ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

to distribute meat during special holidays like the New Year, Eid Alfeter, Arefa, Easter and Christmas.

Woods and forests benefits communities in various ways, for example, all benefits and services contribute to place value (the value that people derive from their sense of place), heritage value, and cultural identity are uses of woods and forests in the districts of Ezha. Key informant from the community discussed how woods and forests benefit the community in the following ways:-

“Forests, the trees planted in our districts and villages provided an enormous benefit to the communities. The two most common reasons peoples give for planting trees are beauty, shade and tress defiantly do a great job of providing those. But they give us so much more, contributing daily to our well-being and quality of life”

The beauty of woods and forests provide are certainly pleasant to look at, and the shade sure feels good on a hot day. More important use of forests are in the community are increased peace of mind and relaxation, sense of belonging, reduced level of anxiety, depression and aggression and increased comfort.²⁵

Moreover, wood and trees strengthened community by increased outdoor interactions and activities, increased neighborhood/community vitality, pride, identity, and cohesiveness and also encouraging more people to be outside. This enabled the wider communities to exchange views and ideas each other’s. In addition, trees improved water management, air and water quality and reduced the heat.²⁶

On the other hand, beyond the necessities, forests are also a source of fun, excitement, and inspiration. During the Meskel and Arefa festivals each year, the Guraghe community, which comes from towns and cities, visits a number of sites and other protected areas, many of which are forested. Moreover, while they use it for picnics and other recreational activities, forests promote personal well-being and heal the soul, and spending time in forests helps them to relax, inspires creativity, and leads people to develop a greater appreciation for the environment.²⁷

²⁵ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²⁶ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²⁷ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

The Millennium Ecosystem Assessment Model (2005) and the theoretical framework of this study substantiate the points raised above. In that, it provided psychosocial support for the communities, addressing both the psychological and social needs of individuals, families, and communities in terms of aesthetic values, creating a sense of admiration, and making individuals, groups, and communities happier and more joyful.

Forests and their resources hold significance in the cultures and religions practiced by the Guraghe Community. While some patches of forest like "Warka" are considered to be sacred places and serve as venues for cultural events or ceremonies, Trees and plants like "Warka" have symbolic meaning in Guraghe cultures and are often represented in art, folklore, and traditional practices²⁸

All of the debate topics mentioned above further support the Millennium Ecosystem Assessment (2005). CES provides a place for recreation, promotes individual well-being, and benefits the community mentally and aesthetically.

Woods and forests have long played a central role in the socio-cultural life of people throughout the world, symbolizing a range of cultural practices. Clearly, people use forests as a symbol to materialize the abstract concept of human life that is embedded in cultural settings. In particular, the symbolic values of indigenous forests are more significant to understanding the link between forests and indigenous practices among different people. There are times when indigenous forests metaphorically demonstrate people's communal identity, history, and belonging (Paulinevon, 2016).

Among the Ezha community of Guraghe Zone, an indigenous tree like Tid has had deep-ingrained cultural importance and implications ever since ancient times. Indigenous Tid deliver cultural as well as economic functions to the communities. Highlighting the cultural dimensions of local tid trees, strengthen the indigenous mechanisms of conserving forests and trees for different socio-cultural functions.²⁹

²⁸ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

²⁹ Interview with key informant four(2022) – Environment and Protection Expert Head at Guraghe Zone 31/04/22, 3:30- 4:20 pm

The discussion above is similar to that of Gameda (2021) in relation to Guji Oromo, in which he discussed how trees have been symbolizing diverse cultural practices in Guji Oromo. For instance, in some contexts, they metaphorically represent loss, death, decay, and rebirth, kinship continuity, reproduction, and unity, strength, greenness, resistance, and long life. The culture of forest symbolism among the Ezha, as well as stand-alone trees and dense forests in general, are believed to be the most sacred gifts of God to the earth and human kind. They are perceived as a robe of the earth and a holy endowment of human kind, which have to be properly managed and conserved for multiple socio-cultural functions.³⁰

There is a symbolic alliance between local trees like Tid and Eucalyptus trees and festivals like Meskel in Guraghe Zone. This tree has been known for its cultural value and symbolic insinuations. A branch of these tree is commonly cut down and made into a bonfire in front of their house on the Meskel festival to symbolize happiness, peace, longevity, and coexistence among the members of the community.³¹

According to Gedda(2021), the above points of discussion have a similarity with the Oromo culture of Guji . There is a symbolic alliance between a local forest called Mi'essa and a festival like the marriage ceremony in Guji. This tree has been known for its cultural value and symbolic insinuations. A branch of this tree is commonly cut down and placed in front of the groom's door during the marriage ceremony to symbolize love, fertility, peace, longevity, and coexistence between newly married spouses.

From its very nature, the word Mi'essa indicates something that has the value of sweetening other things. As a result, before the wedding day, a branch of this tree is searched for from the nearby locality and brought home by the family of the groom in order to stand it on the left and right sides of the door. The tree is usually stood at the door of the groom's family residence and not at the bride's family house, because marriage is concluded at the groom's family residence. By doing so, the family of the groom celebrates and publicizes the marriage of their son. In general, the Mi'essa tree is symbolically taken as a tree that sweetens the lives of newly married spouses in Guji Oromo (Geda, 2021).

³⁰ Community gate keepers five(20202)-Ezha Districts Community Representative 23/ May/ 2022

³¹ Community gate keepers five(20202)-Ezha Districts Community Representative 23/ May/ 2022

In general, the culture of forests, woods, and green areas in the Guraghe Zone is a symbol emanating from a notion that forests and woods are perceived as sacred gifts of God to humans and land. The perspective that deems forests as gifts of God is not unique to Ezha communities, though the way that forests are perceived as gifts of God differs from culture to culture.

Similar to how people in Pakistan view trees as priceless gifts from God, people in southern Africa view the native Miombo fruit tree as a gift from God because they can use its fruit (Geda, 2021). Additionally, he mentioned how Pakistani trees help to improve the environment. In the case of southern Africa, Miombo trees, this is thought to be a gift from God because it provides smallholder farmers with eatable fruits. The fact that smallholder farmers in the region use the tree's edible fruit as a food source indicates that it is sacred.

Nevertheless, in Ezha case, forests and trees in general are perceived as sacred gifts of God to humankind for careful utilization and preservation for future generations. The Ezha community believes that God does not allow people to subdue and exploit trees for food or profit; rather, he allows and orders the use of trees within a stewardship framework, excluding the utilitarianism approach of immediate benefit.

Giddens (2009) also supported the above argument based on the social construction of the environment. In that case, it believes that ecosystem services and their associated problems are socially constructed; thus, understanding the social, political, and cultural processes by which certain environmental services and conditions are defined and contributing to the creation of a perceived condition of CES is vital. This implies that all CES are, in part, socially created or constructed by groups of people. Nature never speaks for itself, but people speak on its behalf.

The Enset is significant to the people who cultivate it and to their economic, social, and cultural lives. Key sources claim that the Enset cultivation plays a role in the economic or social stratification of the Ezha community. Because it can be used for food, tying objects, building houses, providing shade, and other financial stability, the Enset plant is revered as a spectacular symbol of riches and status in the study areas. Farmers who have a large amount of Enset in their possession boast about their superiority since they can feed their families more effectively.

Conversely, those who do not have as many Enset plants struggle to provide for their family and must engage in other extracurricular activities to make ends meet.³²

The investigation done by Habtamu and Ashenafi(2022) added to the aforementioned finding. They explained how the quantity of Enset determines Gurage's wealth stratification. Farmers who own numerous Enset plants therefore think of themselves as better than they therefore think of farmers who own few Enset plants and work as laborers for the rich and powerful. The enset plant influences the Gurage's social or economic stratification. Due to the Enset plant's several applications as a food source, binding agent, building material, shade source, and other financial security, people also regard it as a splendid symbol of riches or prestige.

A key informant also spoke about The Enset plant has a socialization aspect in Guraghe communities. Adults in the community give the youth the opportunity to learn, understand, and practice the cultivation of Enset. The harvesting process allowed girls to learn and practice the indigenous practices and ways of the Enset cultivation and work culture. Usually, they create cooperation among girls to facilitate ways for girls to find their future husbands; the winner of the competition is blessed and wished a good husband by the community of older women. The community believed that to get a good husband, a girl should be hard working. If she is lazy, her chances of finding a husband declined.³³

Habtamu and Ashenafi(2022) also confirmed that the girls eagerly await the Amichoo-smashing occasion because the competition involves songs, tricks, and fun; it also helps them to familiarize themselves with the different socio-cultural practices of the community, work culture; and, most importantly, it provides an opportunity to find a good husband, as parents mainly arrange earlier marriage. The children had no power or choice in selecting their partner; their marriage was determined by their parents' will or choice.

Discussion results from the Focus Group Discussion showed that the Enset plant could be used as a social integration tool in Ezha communities. They pointed out that the majority of the communities of Guraghe migrated to various parts of the region, but they never lost their connection with Enset plants in the rural part of their districts. Every year in two periods, through

³² Interview with key informant five (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 29/03/22, 2:30- 3:20 pm

³³ Interview with key informant five (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 29/03/22, 2:30- 3:20 pm

either Meskel or Arefa celebration, they gathered around the Enset plant and discussed social issues as well as monitored their Enset farm. Person who do not take care of their farms are considered deviants and ostracized by members of the community.³⁴

Habtamu and Ashenafi (2022) also enhanced the points of discussion made by FGD. They discussed how the majority of the Gurage communities' are migrant communities, particularly to Addis Ababa, but they never lost their rural connection. The impression is that they migrate for seasonal labor, but they return to their place of origin once or twice a year. The reason is for the Meskel or Arefa celebration, and secondly, the attitude to maintaining or cultivating their Enset farm. That is, a person who does not take care of his Enset farm is considered a rootless person (careless, deviant) even if he is well established in the city and has no need for farmland.

The researcher also observed different trees in the middle of the Enset plant, and members of the household supposed that these trees have the objective of preventing their Enset from evil eyes and believed that the trees have some mysterious power to prevent the Enset from total damage. The study conducted by Yemata (2020) also observed the issues, and she revealed that Guraghe communities planned a massive tree in the middle of their Enset plantation with the purpose of preventing Enset from evil eyes, and these trees have some mystical power to protect Enset from damage.

The cultural ecosystem services of trees, forests, enset, and woods in the districts have important uses in the community. These plants served as cultural symbols and provided social, psychological, and mental satisfaction to the communities. The community's longstanding tradition and customs enabled them to preserve CES, even if so many challenges existed in the districts with regard to CES.

4.1.3. Indigenous practices of communities to preserve cultural ecosystem services

The sub section explored the measures that have been employed by the Guraghe community of Southern Ethiopia in Ezha district and discuss the indigenous mechanism for preserving the Cultural Ecosystem Services.

³⁴ Focuses Group Discussion with Council of elders (2022) Guraghe Zone 30/04/22, 2:30- 3:20 pm

According to Lssozi (2012), communities have rich environmental cultures, which can be understood by listening to their myths, taboos, stories, proverbs, and beliefs and by observing their symbols and rituals. For example, among some indigenous African communities, the association of some forests and plants with spirits has enabled environmental sustainability. For example, among the Igbos of Nigeria, there are taboos associated with some rivers and forests to safeguard them from pollution, abuse, and exploitation (Obiora & Emeka 2015). Traditional societies also strictly observe moral order, with people following some ecological ethics such as not defecating near streams where drinking water is fetched. It is believed that contempt for this prohibition attracts severe sanctions from the deity who owns the stream (Obiora & Emeka 2015)

It was also discovered that the Ezha communities have indigenous mechanism to preserving cultural ecosystem. The researcher witnessed widespread use of livestock manure to sustain land and protect Enset plants. In this case, the communities have maintained these Enset for cultural purposes, and they are not to be abused or destroyed carelessly due to their sacredness and reverence.

Sacred trees, like Warka and Zigba forests across Ezha communities, preserved the CES primarily for spiritual reasons. Furthermore, harming these sacred forests is prohibited by Gurage community tradition, and it is commonly believed that any alteration of the forests, such as cutting Warka and Zigaba trees for the construction of houses and Tikule, may result in serious punishment for the offenders³⁵

Similar to the spiritualities of indigenous people, which are generally composed of a body of beliefs, values, and respect closely tied to the local biodiversity and environment, the CES are preserved in the Gedo communities in much the same way. (This spiritual kinship with the natural world and the universe is made visible by designating specific regions (i.e., woodlands, water points, mountains, forests, and certain animals as totemic species). Due to their regard and holiness, these hallowed locations have been preserved for cultural purposes and are not to be misused or destroyed carelessly. For instance, sacred forests are preserved primarily for spiritual reasons all throughout the area. The customs of the local tribes restrict harming this sacred forest.

³⁵ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

The researcher noticed that Orthodox Christian churches in Ezha have a strong tradition of maintaining CES. For instance, the church protects native woodlands as places of worship and for interment. In general, people view the forests that encircle churches as sacred, with the trees serving as a representation of angels watching over the church. These forests, which have been set aside for spiritual purposes, are an essential part of the church since they serve as locations for graveyards, social meetings, and religious events. Several cultural and spiritual landscapes are reserved for ritual or religious purposes in addition to the church woodland.

CES is associated with or connected to other regions of the country's Ethiopian Orthodox churches. For instance, the Ethiopian Orthodox Church has a long history of safeguarding and preserving native forests in the Gedeo communities of Southern Ethiopia as places of worship and for burials. In addition, forests that surround churches are regarded as sacred because the trees are thought to represent angels guarding the church. These forests, which have been set aside for spiritual purposes, are an essential part of the church since they serve as locations for graveyards, social meetings, and religious events. Therefore, these church woodlands serve as showcases for remaining vegetation and wildlife in the region as well as biodiversity hotspots(Yosef, et.al.2020).

Yejoka, the Guraghe Council of Elders, is revered and highly regarded. Every person who resides in the community should be safeguarded and conserved in accordance with the society's anticipated norms, which change from generation to generation. Therefore, it is important to conserve and protect CES from trees, forests, plants, vegetation, animals, and birds without causing harm to them through human activity. The Guraghe communities' customary law established some required laws and enforced CES conservation practices and beliefs. They recognize and share this as a community because it is fundamental to their social, economic, and lifestyle.³⁶

In ways of CES, the Gedeo communities also shared the above practices, and they accepted these practices as the basis of religious and cultural values for their sociocultural well-being. Regarding ownership, in Gedeo's traditional norms (Seera), there are no personal or private conservation practices of CES. Ecosystem services belong to the public, so called "Yaa'a" Yaa'a

³⁶ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

is a group of people who have shared common values, norms, identities, and beliefs within a community (Yosef, et.al.2020).

This group of people has been governed by the traditional rule of "Seera." In the view of community elders, "Seera" is unwritten traditional rules (laws) that govern and guide an individual person or entire people on how to use, conserve, interact with, and respect the surrounding nature, and it has shaped the individual's behavior on how to co-exist in friendly relationships with environmental resources and other human beings. In all circumstances, these unwritten rules, or "Seera," have compelled an individual person to obey all rules and regulations that are associated with human-nature interactions and sociocultural norms in general (Yosef, et.al, 2020).

The community's role in preserving CES in Ezha communities is a vital aspect, According to the gatekeeper's discussion in the study areas, local communities enhanced the preservation of sacred natural sites like church forests and other indigenous plants like Warka and Zigba too. Various belief systems in the districts are inspired by the belief system of the Guraghe community and the traditional myth that has been transferred from generation to generation and is still practiced by the community. The CES was highly respected even before the introduction of modern conservation practices.³⁷

Most of the Enset, woods, and forest sites in the Guraghe Zone can be served by cultural diversities and serve as various ritual sites whereby local people address their sociocultural and psychological needs. As a result, the communities in the study areas enforced the preservation of CES to sustain biodiversity as well as the CES of the communities. The sacred natural site where holy water exists, forests covering Jefoure, Warka, and Zigaba places, and various trees surrounding Enset Plant are socially conserved and respected sites that could sustain CES in the areas.³⁸

The Sidama and Oromo groups took part in the preservation and conservation of CES in a manner similar to this. Examples include flora that are regarded as essential to human life in the society, holy locations in nature, and numerous spots where locals perform rituals to meet their sociocultural and psychological requirements. The revered and socially conserved natural

³⁷ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

³⁸ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

locations, like Wonsho of Sidama and Caatoo of Horro Guduru Wollega, may be significant from a sociocultural and environmental standpoint. There are numerous sacred natural locations in Guji land that have been designated for various traditional rites from the beginning of time (Gemed, 2018).

On the other hand, key informants in Ezha discussed how, while CES is important in many aspects of human social life, these services are currently under threat in many parts of Ezha due to current living conditions and high pollution pressures. This pressure particularly affects CES and sacred natural sites. Hence, he pointed out that government intervention, Yejoka, community-based organizations, and even civil society organizations should be actively involved in the preservation of CES as these services are interlinked with Guraghe traditions and vital for social cohesion.³⁹

Changes in CES can also affect community well-being by altering the complexity of CES. Sustainable development equally includes environmental protection, including biodiversity, economic growth and social equity, both within and between generations. Reductions of CES in the community result in social fragmentation and disintegration. On the other hand, the relationship between the community and cultural ecosystem services in the study area created mutual understanding in order to preserve CES. A community effort to preserve CES has a key role in maintaining CES. This effort of the communities could be served as a showcase in the districts of Ezha as a major stakeholder in development. The community, especially Yejoka, is consulted during Environmental Impact Assessment (EIA) and they become a subject of a study during any development program.⁴⁰

Community engagement in preserving CES demands commitment and significant investment, particularly from governments, CSOs/NGOs, and communities. While it is the local government body that is responsible for the preservation of CES, the task of making CES human rights a reality requires the participation of all sectors of society, including local government.⁴¹

³⁹ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

⁴⁰ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

⁴¹ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

Effective measures of CES can be useful for decision-making at the community level. Community decision-making is based on a shared commitment to build accountability and capacity to achieve results in the preservation of CES. This type of decision-making achieves the best results when it uses timely, relevant, and reliable data, involves community stakeholders, supports communities in establishing and monitoring progress of CES preservation, reflects community priorities, and engages multiple networks to support well-being.⁴²

Based on the Millennium Ecosystem Assessment framework, fruitful implementation of CES preservation calls for the engagement of various stakeholders, which should be designed and managed vigorously. Such a system consists of a set of laws, policies, and regulations; a set of functions and services required from all concerned sectors, particularly community-based organizations, and civil society organizations, leaders of various religious institutions, education, and health. International instruments, particularly the various conventions that are widely accepted by the international community, demand governments undertake all appropriate legislative, administrative, and other measures that are necessary to install a coordinated mechanism for the implementation of CES preservation recognized in the various conventions (MEA, 2005).

The researcher observed that some of the water in the study areas was regarded as sacred. In this case, sacredness is associated with either the whole or part of the water sources. Water sources are commonly perceived as living areas for supernatural power, which are usually clustered around churches or mosques. During religious festivals and in the absence of rainfall, priests and Muslim leaders visit the place of the water to pray for rain. Because of a common belief in the community that the sacred water should be kept pure, the majority of the community representatives indicated that purity results in no bathing, washing, or dumping of waste materials into the water; thus, community members are discouraged from undertaking any development activities in such areas. Violating this norm attracted sanctions from spirits and punishment from the leader of the community. In fact, the indigenous norms of the Guraghe community also discourage the unwarranted destruction of wetlands.

⁴² Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

Guraghe community engagement in the preservation of holy water has a similarity with the study conducted by Kennedy (2016) with regard to the peoples of Tonga in Zambia. In this particular community, water sustainability and preservation for a longer period have a strong foundation. In this aspect, the water sources are perceived as habitats for gods, such that some tend to be upgraded into shrines. Most of the traditional leaders, together with the elderly representatives, during seasons of drought or delay in the onset of rain, visit the shrines to pray for rain. Because of a common belief that rain spirits abide in these areas, the water sources are kept "pure". Violating community efforts in the preservation of CES pertaining to holy water, this norm attracted sanctions by spirits and punishment by traditional leaders (Kennedy, 2016).

The researcher observed that, traditionally, the Ezha community in the Guraghe Zone uses wood fuel as its main source of energy. Trees like Warqa and Zigba that surrounded churches and Enset gardens were allowed to use only dried parts of the plant for firewood. Most Yejoka noted that when collecting dry firewood, extreme carefulness should be exercised, as certain trees are sacred and should not be used as fuel despite being dry. It was also found that only those species that were in abundance and were not fruit trees were generally considered for firewood. From the findings, we can indicate that the leaders of the Ezha community in particular and the general community members largely contributed to the preservation of CES with regard to this particular tree.

Kennedy (2016) claims that the majority of communities make extensive use of dead trees and stumps as fuel. The community must carefully examine and consider the large dimensions of the sacred trees and woods. He talked about how local residents and elders are crucial to the preservation of CES of trees and woods that are revered. He also said that women's and men should be extremely cautious when gathering dry firewood since some trees were sacred and should not be used as fuel even though they were dry. Additionally, it was discovered that only species that were plentiful and weren't fruit trees were typically thought of as firewood.

The entire discussion point made so far has a similar environmentalist point of view. In this connection, environmentalism and environmental movements are very important to preserve the conservation of ecosystem services and advance the awareness of environmental actors. Environmentalism is a concern for the planet as a whole. It is a broad philosophy and social movement centered on a concern for the conservation and improvement of the environment and

seeks to influence the political process through lobbying, activism, and education in order to protect natural resources and ecosystems. In recognition of humanity as a participant in ecosystems, the environmental movement is centered on ecology, health, and human rights. Through grass roots activism and protests, environmentalists and environmental organizations seek to give the natural world a stronger voice in human affairs (Asthana , 2012)

Further observations discovered that the Ezha community culture prohibits local trees like "Tid forests" from cuttings because of their aesthetic value in their villages. It is widely believed that cutting this tree would cause the villages to become less attractive. In-depth interviews with elderly respondents revealed the underlying rationale for the Tid forest ban is the beauty of the countryside, villages, and Guraghe traditional houses.

It was further found that conservation of CES by the community has been widely practiced by the Ezha community in their preservation of CES natural environments. The researcher observed widespread use of CES preservation and service to sustain. It is also worth discussing the role of the community efforts to preserve and protect indigenous plants and trees that were mentioned in the previous section of this part of the discussion.

Communal efforts in Ezha respect planting and preserving indigenous plants and trees that have CES. The researcher observed, and indeed, through the testimony of most of the elderly respondents, that the best of CES is preserved and respected by the communities by mentoring and coaching the next generations where practices of the community to preserve CES against deforestation are strengthened.

Furthermore, as previously discussed some of the CES, such as Enset, water sources, and trees, are highly valued and respected. It is also a custom of the Guraghe communities not to have crop fields along water courses or dam catchment areas. According to most of the elderly and traditional leaders, it was believed that eroded soils from the fields would increase siltation, resulting in the dried out of these water sources. In addition, they conserve vegetation along river banks. These practices not only protect water catchment areas but also serve as measures for minimizing flooding and soil erosion.

Additionally, it is forbidden to defecate outside in the vicinity of the holy water source's catchment region. According to the study, expulsion must take place in a toilet or a hole

excavated in the ground that must be covered over after usage. Kennedy (2016) also found that washing at or close to water source was frowned upon among the Tonga people of Zambia. Communities are also not allowed to access water sources, and it is not permitted to toss things into watersheds. Similar prohibitions against washing near water gathering points apply to the Tonga people. In reality, the Akans of Ghana forbade the disposal of human and industrial garbage into waterways in case the offender suffers the wrath of the gods or local authorities.

Ecological modernization theory is consistent with Ezha's community efforts to preserve CES. In that case, Barret and Fisher (2005) suggest that environmental improvements are economically feasible; indeed, entrepreneurial agents and economic/market dynamics are seen as playing leading roles in bringing about needed ecological changes and improving ecosystem preservation. In addition, ecological modernization theory emphasizes environmental improvements through the transformation of production and consumption patterns with environmentally friendly technologies.

Ezha community efforts to conserve CES have proven to be very practicable in terms of the sustainability of ecological services and environmental protection. CES conservation efforts can thus benefit from their context-specific local knowledge and institutional mechanisms for effectiveness. This is because the Ezha communities have cultivated and used ecological services in a sustainable manner for centuries by supporting the maintenance of CES. Therefore, conservationists should ensure that they incorporate indigenous people's practices into CES conservation. Local governments and stakeholders like environmental and protection authorities should also integrate indigenous knowledge into environmental policies and take advantage of this knowledge to minimize environmental degradation (UN, 2013). Finally, a genuine partnership regarding scientific and indigenous knowledge towards CES preservation is found to be important.

4.1.4. Challenges of cultural ecosystem services

Different services have been offered to larger communities by ecosystem services⁴³. Although it is commonly recognized that ecological services contribute to human well-being, the majority of studies have concentrated on the services' measurable advantages. The less obvious advantages of CES to the community are mostly disregarded. However, because there is no precise CES measurement, issues still surround CES. For instance, a qualitative study by Dickinson & Hobbs (2017) identified important CES traits and the difficulties the community has in conserving and sustaining CES. For instance, they explored how factors such as rapid population increase, a lack of diverse sources of income, altered community agriculture methods, and overgrazing had an impact on ecosystem services in general and CES in particular.

The most frequent challenge of CES is that it's often impossible to distinguish between several aspects of CES services, such as entertainment, aesthetic, or cultural and educational, and in many cases, the motivation, attitude, and practices of local government hindered the perseverance of CES. Different CES sites like rivers, wetlands, natural springs, and forests cover areas diminished, especially in third world countries like Africa. Government policy and decision-making compromise the ecological value⁴⁴ of ecosystem services.

At the same time, the increase in the global human population and the resulting anthropogenic activities have led to rapid alterations in the composition, structure, and functions of the ecosystems as well as their degradation, increasing the losses associated with ES values. The livelihoods of people in several developing countries are highly dependent on their surrounding ecosystems and the services they provide. Therefore, management and reduction of ecosystem modification are required; especially in developing countries. This requirement is even more urgent in the current conditions.

⁴³Ecosystem: A dynamic complex of plant, animal, and microorganism communities and their non-living environment interacting as a functional unit (MA, 2005). For practical purposes it is important to define the spatial dimensions of concern.

⁴⁴ Ecological value: Non-monetary assessment of ecosystem integrity, health, or resilience, all of which are important indicators to determine critical thresholds and minimum requirements for ecosystem service provision (TEEB, 2010)

Human domination of ecosystems has led to rapid alterations in their composition, structure, and function. Due to frequent resource conflicts, political instability, degradation, droughts, diseases, urbanization, industrialization, and inadequate knowledge pertaining to human-environment system dynamics and interrelations in all directions, ecosystem services are affected. Water balance and ecosystem stability, and results in a potential loss of the associated ES values (MEA, 2005). Thus, evidence-based discussion and findings in the context of community practices on ecosystem services, especially in the context of CES challenges, need to be discussed.

The preservation of CES faced different challenges in the districts of the Guraghe Zone. Increased use of forest resources and the decline of forestland base affected the preservation of CES and sustainable management of the use of these services. These forest trees are normally the keystone of CES in the districts of Ezha. The continued existence of these natural forests was critical for many floral and faunal species, which could serve as key services of CES, such as landscape preservation. However, as time passes, local government authorities threaten these natural forests and further enhancement to restore ecosystem services in all aspects needs to be reconsidered⁴⁵

In the above points of discussion, similar to Melkie (2020), he discussed that there are a number of challenges in the preservation of CES. For example, forest resources in Ethiopia are rapidly declining because of environmental degradation, agricultural expansion, overgrazing, and overharvesting of species. He also mentioned that the decline of CES in general is one of the most serious challenges facing humankind and the community. The CES, from time to time, both in size and quality, has been diminished. Deforestation, forest degradation, and free grazing systems appeared to be the most significant threats to CES in particular, and to ecological services in general.

According to the FGD results, a number of problems, including high pollution pressures, agricultural growth, and resettlement on common property, have an impact on ecological services⁴⁶, making it more difficult to maintain CES. All kinds of ecological services provided in the districts are put under pressure by this interrelated pressure on CES. The findings also showed that Ezha's local government approach toward ecological services had been significantly

⁴⁵ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

⁴⁶ Focuses Group Discussion Result 2: Ezha Districts of the Guraghe: 7/June/ 2022

burdening those services. The decline of ecological services appears to have accelerated due to substantial degradation of land, water, forests, and rangelands.

According to Melkie (2020), CES in Ethiopia, which is heavily influenced by various factors like population pressure, agricultural expansion, migration, rapid urbanization, resettlement, climatic change, and environmental pollution, further strengthens the findings of the FGD. Most critically, the sustainability of CES has been severely hampered in most regions of Ethiopia by high population densities.

In Guraghe Zone in general and Ezha districts in particular, the value of CES from ecology has been considered backward and has inhibited the development of the rural communities. Until recently, the role of the community in preserving CES protection and indigenous knowledge of utilizing these services has not been given sufficient attention among community gatekeepers, local government administration, and zone government agencies⁴⁷.

The expansion of industry in the districts, as well as the growth of trees and other plants for market purposes, has posed challenges to indigenous preservation practices. Government policy in the zone and climate change affected the preservation of CES. Being influenced by these associated elements, the communities now use natural resources as objects for exploitation and profit making. Even if consultation with community gatekeepers and council of elders in the preservation of CES is discussed as an important aspect, indigenous practices regarding CES have not been practical for CES.

Similar to Ezha communities, the Bale community of the Oromo ethnic group shares the same experiences. According to Ketema and Irshad (2019), discussed indigenous institutions, oral traditions, cultural practices, and religious institutions preach the moral obligation of humans towards the preservation of CES and the environment, but the decision made by the local government largely ignored the long-standing tradition of the community. On the other hand, decision makers compromise environmental ethics and relations between the community and the natural world. Moreover, the resettlement of people from various regions of the country is considered to have brought and is still instigating the challenges of CES preservation in the areas.

⁴⁷ Focuses Group Discussion Result 2: Ezha Districts of the Guraghe: 7/June/ 2022

During fieldwork and experience, it is very important for everyone to recognize that rural poverty and conservation of ecological services are interrelated. Rural poverty in Ezha puts stress on ecological services and causes overexploitation of the natural environment, which leads to the decline of moral obligation and customary practices among the people. People tend to consume ecological services like food, water, timber, forest, and enset regardless of the non-tangible services of ecology to remain alive. In Ezha, livelihood activities are directly and indirectly based on natural resources, and this put pressure on CES and causes ecological stress. These would prevent people from having identity, spiritual function, and aesthetic value.

According to Niranjandev (2016), ecological services are directly impacted by the level of poverty in the communities, and poverty worsens the effects of services like food production, livestock, support functions, and CES on the environment. Ecological services and the current community practices for CES preservation deteriorate because of soil erosion, land degradation, and deforestation. She also stressed how those living in poverty have a tendency to consume all of their resources excessively when their survival is in jeopardy. However, they frequently overlook the fact that those with less privilege are the most susceptible to the negative consequences of environmental deterioration and climate change.

According to key informants, the Guraghe Zone is known for its wealth of ecological services and biodiversity, which results from the altitude of the zone, especially Ezha Woreda. However, the communities' dependence upon natural resources, land cultivation, and demographic expansion has degraded ecological services, especially CES. As a result, the Woreda faces many environmental challenges, including deforestation, soil erosion, declines in soil fertility and water quality, and loss of ecological services. Besides, he adds, major CES challenges together with deforestation include the spread of invasive Enset diseases, which significantly challenge CES. Social and economic challenges can both contribute to and be aggravated by these challenges. This leads to a cycle of poverty and forced communities to disregard CES⁴⁸

The researcher also noted the increment in population leads to the increased demand for agricultural land and fuel wood. People have vastly encroached on forest areas, resulting in a high rate of deforestation, with sacred trees never escaping. The natural high forests were cleared

⁴⁸ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

for agricultural expansion in the past. It is estimated that unless action is taken to change the traditional development path, large areas covered by forest might be deforested in the near future, and this would significantly affect CES.

According to Lemlem (2017), deforestation and the resulting environmental degradation have remained a major problem in Ethiopia and are a key challenge to ecological services and sustainable development. The removal of trees and other land cover exposes the deterioration of ecological services and reduces the value of non-tangible ecological services. Therefore, in countries like Ethiopia, where the lives of many rural communities are directly related to natural resources and ecosystem services, they could face a threat.

In Ezha, the communities heavily rely on traditional sources of energy such as fuel wood, charcoal, animal dung, and crop residues. Traditional sources of energy account for almost half of total energy demand, while the share of modern sources of energy like electricity is very low. This leads to the marginalization of CES, which includes the use of forest and wood lands, grass lands and water sources.⁴⁹ According to Lemlem (2017), in Ethiopia, the community, especially in rural areas, overlooks CES as the major sources of energy are obtained from forest as well as animal dung. This condition compelled them to compromise the value of CES.

During the research fieldwork the problem of water scarcity in Ezha and even Wolkite town has been facing a serious shortage of water for almost two months. According to the key informants, water availability in Ezha has drastically reduced in rivers, streams, and reservoirs in the districts. For example, climate change, in conjunction with human activities triggered by climate related disasters, reduced the water volume of the Bojabar wetland. Water resources are also under threat. The great fear and challenge of meeting the demands of the escalating population and water factory in the districts aggravated the scarcity of water. And this has led to desperate actions that culminated in de-vegetation and less attention to CES in the districts⁵⁰

Lemlem's (2017) works also support the above discussion. She stated that water availability in Ethiopian rivers, streams, lakes, and reservoirs has significantly decreased. For instance, climate

⁴⁹ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

⁵⁰ Interview with key informant six (2022) – Environment and Protection Officer at Ezha- Guraghe Zone 12/04/22, 9 am- 10:20 am

change in conjunction with human activities triggered by climate-related disasters reduced Lake Haromaya, Tana, & Ziway, and River Awash water resources are also under threat. There is great fear and challenge of meeting the demands of the escalating population and its demand for water for food production, irrigation, domestic, municipal, industrial, and energy uses. These practices and attitudes forced Ethiopians to pay less attention to the non-tangible use of water.

The local government was not collaborative to preserve the CES in the districts. Like water sources, the threat of infection by diseases and deforestation received less attention from the local government. The reason behind it was that the local government had given priority to the development of investment and factories as well as the creation of rural employment opportunities in the districts. This general policy of the government directly affected CES, and the community's attitude and practices changed in the course of the time towards CES.

Based on the MEA Frame Work (2005), one of the frame works to preserve CES is to strengthen coordination and collaboration of actors to demand improved CES. However, efforts by the government to create a more enabling environment for CES conservation at the local level were not much more effective. The local government could achieve this by building strong relationships with communities, community-based organizations, and councils of elders and peasant associations in the districts. Local actors and the government work together to make CES conservation activities more effective.

Moreover, as per MEA (2005), local governments and their partners should create alliances with other stakeholders such as international institutions, the donor community, academia, and the media. These partnerships helped to shape public opinion and influenced decision makers to preserve CES. An important consideration when targeting CES is the increased involvement of stakeholders and awareness of the wider communities, including between the communities and government counterparts, found to be important.

Government practices in the preservation of CES have limited the involvement of community members, leaders of communities, and stakeholders to engage in the preservation of ecological services in Ezha. Because of this, operating environments for community members that include CBOs, religious leaders, and council elders are characterized by being restrictive and highly controlled by the zone investment bureau. The challenges that partnership and networking faced

emanated from four major causes: the limited space placed in CES, the exclusion of communities' members, decision-making power given to governments, and the absence of collaboration and development work.⁵¹

Political economics theory, which examines the connection between capitalism, the state, and the environment, is comparable to the topics covered above. When it comes to mass production and consumption, culture establishes a pattern of production that exacerbates environmental deterioration. Hannigan (2009) contends that an economic system's urge to generate profits by stimulating consumer demand for new goods will cause ecosystem degradation.

The Ezha and Guraghe Zone environment protection offices have also made great strides in improving CES, but there is still much to do. Communities, CBOs, and other concerned bodies are vulnerable to widespread abuse and exploitation of ecological services, including CES. Poverty, coupled with a lack of adequate and appropriate local institutions, including government sector offices working around CES conservation, has continued to disempower the wider communities.⁵²

Similarly other key informants pointed out that coordination among community agents remains a challenge at both the zone and district levels, owing to the weakness or dysfunction of existing coordination structures (such as the environmental protection office at all levels). Practices for assessing CES in the context of wider communities' attitudes and norms were rare and unsystematic⁵³

The other major challenges to CES protection in Ezha are the lack of resources and technical capacity of the environment sector office. Key informant discussed how it is critical to educate various duty bearers in order to combat the apparent lack of awareness and understanding of CES principles and provisions among key actors and stakeholders.⁵⁴In addition, in the districts, the challenges of CES are reinforced by a complex intersection of factors at multiple levels of

⁵¹ Interview with key informant one (2022) – Environment and Protection Expert at Guraghe Zone 29/03/22, 8:45 am -11 am

⁵² Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

⁵³ Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

⁵⁴ Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

socio-ecological framework, from structural inequalities related to poverty, to powerful social norms related to CES and ecological dynamics among the communities, family and schools. And also, there is no inclusive program that raises and develops the awareness of the wider communities to CES⁵⁵. Lemlem(2017) further supported that unwise use of ecological services at all levels leads to compromised CES. Partnership and networking with communities and government collaborative work has never been reflected in the preservation of CES in Ethiopia.

In Ethiopia, at the national level, they have faced budget constraints in preserving CES. At the zonal and district level, the environmental and protection authority offices provide the resources necessary for the operation of the environmental protection and conservation programs, but this office is heavily dependent on donor funding for most of its activities, so this creates a problem in ensuring environmental protection activities and CES (Lemlem, 2017).

Similarly, key informants also discussed that local government, especially environmental protection offices, was not actively involved in the protection of CES. Sector office partners in the zone lack transparency, accountability, and trustworthiness in their planning and implementation of investment. Moreover, most of them are not ready to involve key actors and stakeholders across sectors and do not want to understand the importance of CES. Their conception and practice do not extend to meaningful CES protection.⁵⁶

Tefera (2008) and Tekle (2004) claim that in order to effectively implement CES protection, protect on the ground, and advocate for the rights and interests of larger populations, the environmental protection office needs an adequate financial budget. On the other side, local environmental protection offices in the Guraghe Zone are very dependent on government funding, which might make them a vehicle for carrying out government policies and goals. Government environmental protection office and community efforts for CES preservation receive little domestic backing.

According to the Millennium Ecosystem Assessment Framework (2005), community advocacy and awareness-raising for CES preservation, including community members' rights challenged

⁵⁵ Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone
29/03/22, 8:45 am -11 am

⁵⁶ Interview with key informant one (2022) – Environment and Protection Authority Leader at Guraghe Zone
29/03/22, 8:45 am -11 am

by government priority agendas, typically influence community attitudes and practices. As a result, government sectors' offices through the wider community need to create a fertile ground to influence the government. This implies that government development policies in one way or another influenced the practices and preservation of CES.

According to the social construction theory of the environment, all environmental problems are, in part, socially created or constructed by groups of people. Therefore, social constructionists emphasized ecological services as well as environmental problems created by the group of people those significantly affected communities. Similarly, the CES problem partly created a group of people who assumed political office and government authority (Giddens, 2009).

Risk theory suggests that old traditions like economic, social customs, legal and technological advancement that formed the basis of social and economic progress now create massive threats. According to Hannigan (2009), the modern industrial or class society in which the central issue is how to socially produce wealth instead of preserving customs and tradition and how modern technology advances to exploit the services of the natural environment is a central point. So, based on the above, it could explain the relationship between communities and CES service challenges.

According to the key informant discussion points, flora and fauna, attractive land scapes, cultural resources, and rivers could be served as the main sources of ecotourism⁵⁷ in the districts. The unique natural and agro-forestry ecosystems of Ezha district, presence of different cultural attractions, and the existence of Desalegn Lodge in proximity to the beauty of the landscape could be seen as an opportunity to promote ecotourism in the area. As to the results of this study, the low level of community benefit, inadequate community participation, absence of ecotourism plan, and unsustainable use of resources were the major challenges of ecotourism development in the districts.

Of the various challenges of CES identified in the area, inadequate benefit sharing like spirauls and aesthetic value for communities was the main challenge, followed by inadequate community participation in the planning and management of CES in the area. The lack of a CES plan and

⁵⁷ Ecotourism is a form of tourism in which natural areas are the prime attractions. It is a responsible travel concerned with conservation of the environment and benefit of the local people

strategy were the main challenges that prevented the effective implementation of CES in the area. Unsustainable and improper resources, insufficient infrastructure and awareness problems, and inadequate skilled manpower in the areas of environmental conservation are other challenges hindering CES⁵⁸

As evidenced by community elders, social structures like "Kecha" and other indigenous traditional systems are particularly decisive, culturally structured, and solidified institutions for preserving and protecting the natural resources, social values, and cultural landscapes among the Guraghe communities. For instance, the indigenous legal enforcement mechanism endorsed by the council elder to address environmental issues and the preservation of native trees in all districts is found to be important. However, in some areas of the districts like Sheramo and Wasamar Kebele, the communities neglected the existing social values and collective practices of the communities in addressing and protecting CES, mainly because of poverty and ecological service degradation⁵⁹. These native trees are highly degraded in farming landscapes and they are only found in ritual sacred sites⁶⁰.

According to Yosef et al. (2020), the above findings of the study are similar to Gedo communities in that their indigenous social system has been playing an important role in preserving and protecting the ecological services like social value of the environment, cultural landscape, spiritual and religious value, knowledge system, and educational value of CES. Moreover, in the same ethnic group, the elderly also advocate the preservation and protection of native trees in the community. However, as time goes by, the native trees that have inspirational value, aesthetic value, and cultural inherited services are highly degraded due to the search for land for farming practices.

In Ezha, "land" is regarded as an essential life provider and dwelling place for all life on the earth and is perceived as a natural gift of Creator God to their ancestors, and it should be protected through generation via acceptable manners and norms. For such reasons, all natural resources (such as trees, forests, plants, vegetation, animals, and birds) within the "land" should be conserved and protected without the damage caused to them through human activities. However,

⁵⁸Interview with key informant one (2022) – Environment and Protection Expert Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

⁵⁹ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

⁶⁰ Community gate keepers two (2022) – Ezha districts of Guraghe Zone 30/04/20, 10:30am -11:30 am

the community unwisely uses the land resources without considering their value for sociocultural well-being⁶¹

Gedo communities, who accept that land is the basis of economic and sociocultural well-being, also similarly acknowledge this. Regarding ownership, in Gedeo traditional norms (seera), there are no personal or private land ownership rights. "Land" belongs to the public, so called "yaa'a". Yaa'a is a group of people who have shared common values, norms, identities, and beliefs within a community. In all circumstances, these unwritten rules or "seera" have compelled an individual person to obey all rules and regulations that are associated with human-nature interactions and sociocultural norms in general. However, due to environmental degradation, over population, and development policies of the government, the community began to overlook their ancestors' values and norms (Yosef, et.al.2020).

The Ezha district landscape is distinguished by a variety of CES sources, including but not limited to recreation services, cultural diversity, spiritual and religious values, sources of knowledge, and educational values. However, due to the massive investment practiced in Ezha, the local people were inhibited from accessing the above CES. According to the key informant, psychological needs, sustenance of biodiversity services, and cultural identity that are related in the form of CES seem to be declining in the districts⁶²

Healthy ecosystems benefit humans in various ways. However, the increase in the global human population and the resulting anthropogenic activities have led to rapid alterations in the composition, structure, and functions of the ecosystems as well as their degradation, increasing the losses associated with ES values. The livelihoods of people in several developing countries are highly dependent on their surrounding ecosystems and the services they provide. Therefore, management and reduction of ecosystem modification are required; especially in developing countries, this requirement is even more urgent (Gemed, 2018).

The local customary law clarifies who does what and how in the endeavor of preserving CES. In this law, every Ezha is traditionally obliged to protect non-tangible CES, which are embedded in

⁶¹ Interview with key informant one (2022) – Environment and Protection Authority Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

⁶² Interview with key informant one (2022) – Environment and Protection Authority Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

the overall social practices of the Guraghe peoples. However, the mandates of practically dealing with some technical issues like passing customary punishment and making strict scrutiny of the status of CES are given to the council of elders, and this makes them ineffective to address, monitor, and control CES at the local level.

The researcher also recognized that Enset diseases continue to be major issues for Ezha communities. This forced them to find alternative sources of income. According to the key informant, the overall significance of this plant declined, and most farmers in the districts resorted to the cultivation of cash crops such as "chat" and vegetables.⁶³

According to Habtamu and Ashenafi (2022), Enset in Sebat Bet Guraghe was a source of social status and economic classification among the members of the Guraghe communities. Furthermore, Enset provided inspiration, aesthetic value, and improved social integration and cultural heritage for the Guraghe communities. However, sadly, the new emerging diseases of Enset plants seriously affect the plant that served the community for several years.

To summarize all the discussion points in this section, the chapter is organized in four sub-sections. The first sub-section deals with understanding the cultural ecosystem services from the perspective of the communities based on the data collected in the field. Following that, the use of trees, false bananas (Enset), woods, and forests was discussed. Then, indigenous efforts of the communities to preserve the cultural value of the ecosystem as well as challenges to the community to preserve CES are presented in the last subsection.

⁶³ Interview with key informant one (2022) – Environment and Protection Authority Leader at Guraghe Zone 29/03/22, 8:45 am -11 am

CHAPTER FIVE

5.1. CONCLUSION

This study's main goal was to provide an overview of the value and services provided by cultural ecosystems from the viewpoint of Ezha communities in the Guraghe Zone.

For achieving the research objective, both primary and secondary data were gathered. An unstructured interview questionnaire was used to gather primary data, which the relevant key informant or expert from different stakeholders and community representatives filled out. Reviewing legal papers such as books, thesis, article, guidelines, policy documents, and official reports used for the collection and utilization of secondary data

The data has been analyzed using the descriptive method of analysis. The data collected through interviews was put into different categorical themes. Major themes were identified, analyzed in line with research questions, and summarized for use in descriptive analysis. The analysis process has followed steps of data reduction, which enables us to sort out the necessary information, display it, and draw conclusions.

This study has used a qualitative research methodology with qualitative content analysis. In the social sciences, qualitative research techniques are commonly employed. Through the interpretive meanings that people assign to situations, qualitative research aims to comprehend them. Finding phenomena and experiences from the perspectives of the people, groups, and actors involved in them is one of the key uses of qualitative approaches. The researcher complemented and double-checked the data obtained through focus group discussions and key informant interviews using observational techniques.

Among non-probability sampling methods to identify and select appropriate informants, purposive sampling techniques employed. As a result, relevant local governments, community gatekeepers, and experts were identified ahead of time for the purpose of data collection. These key informants are selected based on the criteria of authority, seniority, and experience.

The study identified CES and services in the Ezha districts. The communities' attitudes and practices concerning CES are well known and evident in the way they engage with one another on a daily basis. This understanding transcends from generation to generation through the council of elders and community gatekeepers. These practices and attitudes of the community

towards CES are deeply rooted in social organization, custom, and tradition of the communities. However, the researcher noted that as time goes by, understanding, practices, and attitudes of the communities towards CES change because of external and internal factors such as population pressures, climate change, local government policy, and the expansion of agriculture's land.

On the other hand, in expanding and widening the understanding of the communities, the elderly, and community gatekeepers, and Yejoka are playing an important role in preserving and handing over the value and services of CES from generation to generation. In this aspect, customs and traditions of the communities such as "Qicha" are also playing an important role in maintaining the value of CES.

Similarly, the benefits of trees, false bananas, and woods and forests are essential. In this case, the CES of trees, false bananas, woods, and forests were found to be an important aspect of CES in providing dignity, identity, spiritual enrichment, cognitive development, recreation, and aesthetic services, and served as a point of integration among Ezha communities. In the context of well-being and health, the CES provided inspiration and a sense of place to the Guraghe communities. This feeling and sense were particularly reflected in the value of the false banana and the Jefoure landscape of Ezha, Warka , Zigba and Eucalyptus tress . These CES services are a recognized feature of Guraghe communities and the preservation of historical features of CES in the districts.

Ethiopia's Orthodox Church is protecting and preserving an indigenous forest as a sanctuary of prayer and burial grounds. The sense of forest surrounding churches is seen as sacred, with the trees symbolic of angels guarding the church. In addition, there are different CES that benefit the communities in relation to forests, woods, and false bananas, which include aesthetic information, recreation, peculiar features of culture, art, and design, spiritual experiences, and information for cognitive development. To ensure the continuity of CES in the Guraghe community, the roles played by the council of elders, community gatekeepers, and Ethiopian Orthodox church were found to be very important. The local custom and practice are held by the wider community's enhanced value and services of CES, especially in the context of forests, false bananas, and woods and trees. In general, the culture of forests, woods, and green areas in the Guraghe Zone is a symbol emanating from the notion that forests and woods are perceived as sacred gifts of God to humans and land.

The Guraghe Zone's indigenous customs must be taken into account in order to preserve the cultural values of ecological services, by spreading knowledge and controlling bad behavior in the community. The long-standing tradition, community gatekeepers, and council of elders are helping to preserve CES in this case. These social groups pass down the society's traditions from generation to generation while encouraging the next generation to uphold the CES toward sacred trees, native species, and forests. Council elders and community gatekeepers have made substantial contributions to keep CES, but it appears that their influence and institutional and informal social control are waning

The sustainability of ecological services and environmental protection has been shown to be very practicable because of the Ezha community's efforts to conserve CES; therefore, for effectiveness, efforts on CES conservation can learn from their context-specific local knowledge and institutional mechanisms. This is because the Ezha communities have supported CES preservation for generations while cultivating and using ecological services in sustainable ways. This suggests that in order to maintain CES in Ezha, a sincere relationship involving scientific and indigenous knowledge is crucial.

Regarding the current challenges of cultural ecosystem services in Ezha manifested in different forms and content, the major challenges of CES in preserving and ensuring the continuity of the service in the districts were government priorities, other ecological services, overpopulation, and the decline of agricultural land.

Inadequate benefit sharing for communities was the greatest issue among the many CES difficulties found in the districts, followed by insufficient community involvement in the planning and implementation of CES in the area. The biggest obstacle to the efficient utilization of CES in the area was the absence of a CES plan and strategy. Other obstacles to the protection and preservation of CES include incorrect and unsustainable resource use, poor infrastructure, and a difficulty with awareness, and a lack of competent human skill in the field of environmental conservation.

The researcher identified the key contributions of community gate keepers and council of elders in ensuring the protection of CES in this research paper, and even local administration is playing an important role in technical support and mainstreaming of ecological services in government

sectors, even if these efforts of local government are not uniform across sector offices. Furthermore, the challenges of the community in promoting the protection of CES were not effective. In this case, CSO (Civil Society Organization) was not involved in direct advocacy of CES at grass-root level.

From the findings and discussion, the role played by local government, community and community representatives to ensure CES protection is vital for the survival of CES. On the other hand, there were challenges in preserving the CES in Ezha. This implies measures should be taken in order to solve the challenges indicted above and enhance CES protection in the districts. Based on this, the following key points could be addressed:

1. Community members and local government should strengthen the core values of the community and longstanding practice across all levels. It should strengthen customary law by establishing mechanisms, procedures, and remedies for implementing CES protection at all levels;
2. Creating a space for local-based institutions to engage them in meso-level advocacy activity. The Guraghe Zone environmental platform, for example, is one of the good platforms established at the zonal level and could serves an entry points;
3. Local governments and other stakeholders should conduct awareness creation programs to preserve CES at the community and local government level to avoid resistance and boldly work on rights and advocacy at zonal and district level;
4. Community members, gatekeepers, and other local partners should expand their strategic partnerships. For example, creating strategic partnerships with districts and zonal environmental protection offices will be a good intervention areas to fully scale up and strengthening the protection of CES;
5. There are no national laws and regulations that enforce the private sector to consider CES in their day-to-day activities. It needs attention by policymakers to have a clear policy and strategy on the role and responsibility of the private sector in respecting and protecting CES.
6. Civil society organizations that want to pursue the practice through joint activities, discussion, problem-solving opportunities, information sharing, and relationship building with community

gatekeepers, government organizations, and a council of elders also could contribute to the practices for long-term viability of CES

7. Improve the community's livelihood, and birth spacing could be one way to keep CES in the area. Most of the CES in the districts have been destroyed in search of land for cultivation and grazing.
8. The regional and zonal mainstream media institutions should be engaged in capacity building and also in the promotion of CES. The media's involvement could strengthen the media's role in promoting CES, thereby improving trust between the government and communities.
9. Multi-sector platforms of different levels will be an important strategy for scaling up CES inclusively and in a participatory manner. This will be an instrument that will help bring the actors from the diverse sectors and stakeholders together with the intention of implementing, integration, partnership, collaboration, coherence, and complementarity. This arrangement of multi-sector engagement will use to harness vertical and horizontal integration within and between CSOs, CBOs, communities, and government. Multi-sector platforms of all kinds can help stakeholders share information, develop a common understanding of CES problems, apply lessons learned to their respective sectors, identify complementarities, negotiate for common outcomes, and collaboratively decide on the future of CES.

ANNEX

Annex I

The Value and Services of Cultural Ecosystem Services

Measurement of Indicators used to measure question # 1:

- Perception of the community towards CES
- Response of the community to CES
- Knowledge of the community to CES
- Attitude of the community to CES
- Level of integration to CES
- Ways of the community engagement towards CES

Measurement Indicators used to measures Question #2

- The type of services from CES
- Value of CES
- Ways and management of CES
- Most values services of CES
- Relationship and Coordination with local government to ensure the sustainability of CES
- Level of acceptances to CES;
- Community approach to the services of CES;
- Role of community gate keepers and council of elders to ensures sustainability CES

Measurement Indicators used to measures Question #3

- Community responses to CES
- Ways of conservation practice to preserves CES
- Involvements of stake holders to ensures the preservation of CES
- Church role in preserving CES
- The role of community gate keepers and council of elders
- Actual practices of the community to preserve CES
- Local and Zonal level government roles to preserve CES
- Government attitude and practices to preserve CES

Measurement Indicators used to measure Question #4

- Government response to address challenges of CES;
- Community engagements in addressing CES challenges;
- Community responses in addressing the challenges;
- Internal and external challenges of CES;
- The role of community gate keepers and council of elders in addressing CES challenges
- Participation of the various stake holders
- Attitude of the community to address the challenges
- Attitude of the local government to address CES challenges
- Practices of the indigenous peoples to CES
- Involvement of private sectors. CBOs and CSOs

Annex II

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Annex III

List of Informants

- Abduljelil, Bedewi. (2022). Program Team Leader, Guraghe Peoples Self Help Development Organization (GPSDO)-12/06/22, 2:00pm-3:13 pm
- Miheret, Zeberga (2022)- Zone Environment and Protection Sectors – Head of Sector Office Unit-5/05/22, 10: 23- 11:47 am

Anonymous (2022)- District Environment and Protections Officer , Federal Supreme Court-
24/04/2022- 11:15- 1:30 pm

Anonymous (2022) – Community Gate Keepers, Ezha Districts -6/06/22, 9:35- 10:11 am

Lihune, Kereta (2022)-V/Head of Sector Office – Environment and Protection Sector Office
29/04/22, 2:00 pm -2:30 pm

Tekle, Geberyesus (2022) -, Districts Environment and Protection Office -29/04/22, 8:45 am -11
am

Feta, Boagle (2022). Community Gate Keepers. 20/06/2022, 2:30 pm -3:21pm

Azmach, Yirga Gebere – Leader of Council of Elders-26/06/2020, 9:12 am -10:54 am

Mesfin, Fuji (2022). Private workers and economists, 26/05/22, 1:30- 2:34 am

Haile, Reja (2022). Kebele Leaders at Wasamar, - 07/04/22, 10:00-10:50 am

Marokos Teklie (2022)- Environment and Protection Officer at Zonal Level -17/05/22, 9:45-
10:33 am

Annex:IV

Addis Ababa University

College of Development Studies (CDS)

Center for Environment and Development Studies

The major aim of this research topic is to explore the value and services of cultural ecosystem services from the perspective of Ezha communities of Guraghe Zone

I. Interview Guide to Environment and Protection Sector Office at Zonal and Districts Level

My Name is _____ and I come from _____ I am here to discuss the value and services of cultural ecosystem services from the perspective of Ezha communities of

Guraghe Zone. This is voluntary based response. There is no right and wrong answer. All comments, positive and negative are welcome. I would like this to be open discussion, feel free to express your opinion honestly and openly. In order not miss any points of the interview/ discussion, I will be using a tape recorder if you allow. I would like to confirm you that all your comments are confidential and used for the research purpose only.

Date of interview _____

Interviewer name _____

Background information _____

Organization: _____

Responsibility: _____

Interview Question on assessment of cultural ecosystem services in Guraghe Zone in the context of Ezha Districts

Segment One: Understanding of the cultural ecosystem services in Ezha district of Guraghe Communities

1. Briefly introduces yourself?

2. Could explain major role and responsibilities of your sector offices?

3. Could you discuss the meaning of cultural ecosystem services in your localities?

4. In what way you understand cultural ecosystem services?

5. Could you discuss the link between cultural ecosystem services and your sector offices in to preserves the values of these services?

6. How your communities perceive cultural ecosystem services, Please discuss in detail.

7) Could you discuss the dynamic of cultural ecosystem services in terms of value of services meaning and change?

8) To what extent your sector office values cultural ecosystem services. Please discussed in detail?

Segment Two: Benefits of tress, false banana (enset), woods and forests from the perspective of the communities

1. Could you discuss the use of trees in your communities?

2. Could you explain the importance/use of trees, false banana in your localities? Please discuss in the context of cultural ecosystem services?

3. How woods and forest benefit the communities? Please discuss in the context of cultural ecosystem services?

4) What is the various uses of cultural ecosystem services in Ezha communities?

5) How false banana, woods, forest and woodlands benefits CES in the context of Ezha communities?

6. Could you discuss the importance of false banana in the context of Cultural Ecosystem Services

Segment Three: Indigenous practices of communities to preserve cultural values of ecosystem services

1. Can you explain the existing indigenous practice/s of communities to preserve cultural value of ecosystem services?

2) What are the roles of communities to preserve cultural ecosystem services in Ezha communities?

3) Could you discuss involvements of various stakeholders in Ezha Districts to preserve cultural ecosystem services? Please discuss in detail?

4). Is there any changes that affected indigenous practices of Cultural Ecosystem Services practices in your community?

5). What are the efforts of community to preserve cultural ecosystem services in your locality?

Segment Four: Challenges of Cultural Ecosystem Services

1) What are constraints of cultural ecosystem services in your communities? Please discuss in detail?

2) To what extent stakeholders respond to cultural ecosystem services challenges in your communities?

3) How does your practice influence cultural ecosystem services in your districts? Please discuss in detail

4) What are the specific constraints of Cultural Ecosystem services?

5) What are the areas of local government collaboration in preserving cultural ecosystem services?

6. How does the local government see the challenges of CES in your districts?

7. How the wider communities responded to CES challenges in your communities?

8) What are CES issues in your districts? Please discuss in detail

9. Any other comments

In depth Interview guide for selected community gate keepers

My Name is _____ and I come from _____. I am here to discuss the value and services of cultural ecosystem services from the perspective of Ezha communities of Guraghe Zone. This is voluntary based response. There is no right and wrong answer. All comments, positive and negative are welcome. I would like this to be open discussion, feel free to express your opinion honestly and openly. In order not miss any points of the interview/discussion, I will be using a tape recorder if you allow. I would like to confirm you that all your comments are confidential and used for the research purpose only.

Date of interview_____

Interviewer name_____

Background information

Organization:_____

Responsibility: _____

Interview Question related to the value and services of cultural ecosystem services from the perspective of Ezha communities of Guraghe Zone

I. Segment One: Understanding of the cultural ecosystem services in Ezha district of Guraghe Communities

1. What are the role and responsibility of Environment Protection Authority at districts and Zonal Level? Please discussed in terms of Cultural Ecosystem Services

2. What are the attitudes of your offices to CES in the districts? Please disuses in detail

3. How do you value CES of Environments in your sector office?

4. Does your sectors office most valued CES in the districts?

5. What are the current practices of CES in your localities?

6. Could you discussed the practice and attitude of the communities to CES?

Segment Two: Benefits of tress, false banana (enset), woods and forests from the perspective of the communities

1. What is the importance of trees in your localities? Please discussed in detail?

2 Could you discuss the use of woods and forests in Ezha communities?

3. What are the uses of false banana? Please discussed in detail in terms of cultural ecosystem services

4. What are the contributions of sector office in your localities to preserve CES?

5. How the communities understand the value of CES in Ezha communities?

Segment Three: Indigenous practices of communities to preserves cultural values of ecosystem services

1. Do you explain the practice of indigenous communities to preserve CES?

2. How sector office enhanced CES to preserve the services?

3. Could you explain the practice of the communities to preserve CES?

4. In what way your community members enhanced the practice of CES in Ezha?

5. How members of the community enhanced CES in Ezha? Please explain in detail

Segment IV: Challenges of Cultural Ecosystem Services

1. What are the existing challenges of CES? Please explain in detail?

2. How do the communities respond the current challenges of CES in your districts?

3. Could you discuss the involvements of stake holders in preserving CES in Ezha?

4. What are the attitudes of governments to preserves CES in Ezha?

5. Does community members respond to the challenges of CES in Ezha? Please discussed in detail

6. What the community's efforts to preserved CES in Ezha?

Any other information

In depth Interview guide for selected Council of Elders (Yejoka)

My Name is _____ and I come from _____ I am here to discuss the value and services of cultural ecosystem services from the perspective of Ezha communities of Guraghe Zone. This is voluntary based response. There is no right and wrong answer. All comments, positive and negative are welcome. I would like this to be open discussion, feel free

to express your opinion honestly and openly. In order not miss any points of the interview/ discussion, I will be using a tape recorder if you allow. I would like to confirm you that all your comments are confidential and used for the research purpose only.

Date of interview_____

Interviewer name_____

Background information

Organization/Agency_____

Responsibility: _____

Interview Question related to the value and services of cultural ecosystem services from the perspective of Ezha communities of Guraghe Zone

I. Segment One: Understanding of the cultural ecosystem services in Ezha district of Guraghe Communities

1. What are role and responsibility of “Yejoka” at districts and Zonal Level?. Please discussed in terms of Cultural Ecosystem Services?

2. What are the attitude of Council of Elders towards CES in the districts?. Please disuses in detail

3. How do you value CES of environments in your communities?

4. Does “Yejoka” most valued CES in the districts? Please explain in detail

5. Dose Yejoka involved in enhanced CES in the districts? If you said “yes” Please explain in detail

6. Could you discussed the practice and attitude of the communities of CES of the environments

Segment Two: Benefits of tress, false banana (enset), woods and forests from the perspective of the communities

1. What are the most values of trees in your localities? Please discussed in detail?

2 Could you discuss the use of woods and forests in Ezha communities?

3. What are the uses of false banana? Please discussed in detail in terms of cultural ecosystem services

4. What are the roles of Yejoka in preserving CES in your localities?

5. How the communities understand the value of CES of the environments?

Segment Three: Indigenous practices of communities to preserve cultural values of ecosystem services

1. Do you explain the role of council elders in preserving CES?

2. How do you mobilize the communities to preserve CES?

3. Could you explain the attitude of the communities to preserve CES?

4. In what way council of elders enhanced the practice of CES in Ezha?

5. What are the achievements of council elders in preserving CES in Ezha? Please explain in detail

Segment IV: Challenges of Cultural Ecosystem Services

1. What are the challenges of “Yejoka” in preserving CES? Please explain in detail?

2. How do you respond the current challenges of CES in your districts?

3. Could you discuss involvements of Yejoka in preserving CES in Ezha?

4. What are the attitudes of governments to preserves CES in Ezha?

5. Does government mitigates the challenges of CES in Ezha? Please discussed in detail

6. Any other information_

Observation Check List

- Practice of the cultural ecosystem services
- Available forest, enset, wetlands, wood lands
- Engagement of the wider communities
- Preservation forest
- Constraints of the communities
- Environmental conservation practices
- Ritual practices
- Interaction of the communities with ecosystem services
- Practice of stakeholders
- Yejoka meeting and consultations

Focus Group Discussion Guide – On Cultural Ecosystem Services with “Yejoka”

Note to Facilitators: The overall objective of this exercise is to elicit in-depth qualitative feedback on the value and services of cultural ecosystem services from the perspective of Ezha

communities of Guraghe Zone. Before starting the discussion please make sure that respondents are comfortable and at ease, and explain the objective and format of the discussion. Next, proceed to have all participants sign the image consent form.

1. Understanding of the cultural ecosystem services in Ezha district of Guraghe Communities

Question for discussion	Probe
In general, what do you think of Cultural Ecosystem Services?	What is it about? What do you think are its use
Please tell us how you perceive the use of Cultural Ecosystem Services?	How you benefit out of the services?
What do you find most engaging / interesting / inspiring to Cultural Ecosystem Services in your communities	Aesthetic Value, identity, spiritual
Over all how do you see the various cultural ecosystem services?	Inspiring, entertaining

2. Benefits of tress, false banana (enset), woods and forests from the perspective of the communities

1. In general what are the benefits of cultural ecosystem services?	Example:-Tree, false banana, woods and forests
2. What aspect of CES services most benefit by your communities?	Discuss most valued CES and Why?
3. Have your appeal to the zone and woreda environments protection authority to maintain CES services?	To whom? In what occasion? Are you successful?
4. How your communities ensure the continuity of CES in Ezha?	Protect indigenous plants(Tress, false banana, woods and forests)

5. What are the roles of “Yejoka” in preserving CES in your localities?	Influencing local government, advocacy of the service , strengthen enforcement mechanism
6. What are the importance of false banana in the context of Cultural Ecosystem Services?	Connection of Enset with Guraghe communities

3. Indigenous practices of communities to preserve cultural values of ecosystem services

1. In general what is the practice of the community in preserving CES?	Conservation of CES?
2. What importance of CES in preserving CES?	Example of enset, forest and wood lands
3. Which ways of indigenous practices ensures the sustainability of CES? Would you like to be? Why?	Example; Through religious person, local government and Yejoka
4. What influence you to preserve CES in your communities?	Influence on attitude, behavior (anything they have done/will do differently?).
5, What recommendations do you have to make indigenous practices of communities better to preserve CES?	Re-greening, community mobilization, advocacy

4. Challenges of Cultural Ecosystem Services

1. Generally what are the existing constraints of the communities to preserve CES in your localities?	Deforestation, lack of attitude and awareness
2. What are the specific challenges of CES in your communities?	Absence of rain fall, lack of attention
3. How do you cope with the existing CES challenges in	Example, preserving of CES,

your communities?	influencing local government
4. What are the responses of stake holders to preserve CES in your localities?	Example: local government, environment protection authority, Yejoka
5. What are the impact of CES constraints in your localities?	Example: Identity, spiritual, aesthetic

Declaration

I the undersigned, declare that this thesis is my original work, has never been presented in this or any other university, and that all resources and materials used herein, have been duly acknowledged

Name: Geremew Ashenafi

Signature: _____

Place Addis Ababa University, Ethiopia

Date of Submission: _____

This thesis has been submitted for examination with any approval as a University Advisors

Name: Dr. Tamirat Tefera

Signature: _____