The Practices and Challenges of Environmental Issues Coverage in State Broadcast Media: Ethiopian Broadcasting Corporation (EBC) in Focus

TADESSE ALEBIGN

SUBMITTED TO ADDIS ABABA UNIVERSITY

GRADUATE SCHOOL OF JOURNALISM AND COMMUNICATION

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN JOURNALISM AND COMMUNICATIONS

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Acknowledgement

I am very grateful to my advisor, Dr. Negeri Lencho, for his valuable guidance, advice and direction by extensively reading and editing my thesis, and also for referring me to important books while I was writing the literature review.

Many thanks also go to the staff of Ethiopian Broadcasting Corporation (EBC), for their support in providing data as respondents of the study. They also deserve my gratefulness for locating news and program archives and other documents that were valuable sources of information for the study.

I would also like to extend my heartfelt gratitude to my friends, particularly Mebratu Worku,Shubba Ubeydi, Belay Zeleke and Zeray Habete who really made a great contribution to the success of my research.

My appreciations also go to my younger brother, Engineer Wudineh Alebign and my Mother, Abebu Menber: for being there whenever I needed their words of encouragement. I also thank the rest of my family for believing in me and for being always ready to provide the moral, technical and material support throughout the course of the study.

Last but not least, I would love to express my profound thanks to all my colleagues for their love and support without which I would not make it to this level of achievement.

Abstract

The Practices and Challenges of Environmental Issues Coverage in the State Broad Cast Media: Ethiopian Broadcasting Corporation (EBC) in Focus

Tadesse Alebign

Addis Ababa University, 2015

This research attempts to examine the practices and challenges of environmental coverage in the Ethiopian Broadcasting Corporation (EBC). Specifically, the study explores the extent of coverage of environmental issues in EBC's news and programmes. It also looks into the frames within which environmental news and programs are often positioned in the corporation`s practices of environmental journalism. The research also identifies major sources of information for EBC's environmental news and programmes as well as challenges related to covering environmental issues at EBC. Development journalism as a model whereas social responsibility and framing were used as theoretical frameworks for the research. Methodologically, both qualitative and quantitative methods of research have been employed in this study. Qualitatively, practices and challenges of environmental coverage in EBC have been examined through in-depth interviews with environmental journalists in the Corporation. In addition, content analysis of environmental news and programmes to determine the volume of coverage environmental issues. Findings generally indicated that EBC has given inadequate coverage to environmental issues in its news packages and programmes. Its environmental journalists have also lacked professional training in environmental journalism although they have various levels of journalism training. This seems to have limited their potential for vibrant engagement in environmental reporting and program production. Moreover, EBC's claim to pursue 'development journalism' lacks the incorporation of critical reporting to promote development endeavours in the country. As a result, EBC's news stories and programmes on environmental issues are often put within a positive frame highlighting progress with problems regarding the environment getting an insignificant focus. The limited sources of information to access environmental news, mainly events, meetings, campaigns, etc., appear to have undermined the opportunities for journalists to engage in comprehensive reporting and programming practices through consulting more critical sources. For better addressing of environmental issues, EBC

needs not only to increase its coverage of environmental issues but it should also discharge its social responsibility through critical journalism that enables environmental journalists to engage in critical reporting to reveal environmental concerns of huge social significance.

Contents

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The environment is one of the key concerns for many cities and countries around the world. By definition, the environment encompasses surroundings in which an organism operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation (Flemstrom, 2003).According to World Wildlife Fund (WWF 2010), the environment also refers to the complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon individual organisms and communities, including humans, and ultimately determine their form and survival. It also views environment as the aggregate of social and cultural conditions that influence the life of an individual or community. Apparently, all definitions emphasize the importance of the environment for life. In an attempt to define development, Bass (2006) identifies four criteria of good development: increasing the asset base and its productivity per person, empowering poor people and marginalized communities, reducing and managing risks, taking a long-term perspective including subsequent generations. He then argues that the environment is central to all these constituents of good development.

Despite its vitality for our ecosystem, the environment has not, however, been given appropriate care and protection. In fact, we have been polluting our planet's air, water, and land; depleting environmental resources; and accumulating a lot of waste. In this regard, Anand (2013, p.4) points out that ten major environmental issues are at stake at global level: (1) Depletion of natural resources (2) Water pollution (3) Air pollution (4) Ground water pollution (5) Toxic chemicals & soil pollution (6) Ozone layer depletion (7) Global warming (8) Loss of bio-diversity (9) Extinction of wildlife and loss of natural habitat (10) Nuclear wastes and radiation.

International concern about climate change has led to the Kyoto Protocol, negotiated in 1997, which contains legally binding emission targets for industrialized countries to be achieved during the commitment period of 2008-2012. The United Nations, (1998), in its Kyoto protocol to the United Nations Framework Convention on Climate Change, Article 2, refelected:

1. Each Party included in Annex I, in achieving its quantified emission limitation and reduction commitments under Article 3, in order to promote sustainable development, shall:

(a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:

(i) Enhancement of energy efficiency in relevant sectors of the national economy;

(ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, forestation and reforestation;

(iii) Promotion of sustainable forms of agriculture in light of climate change considerations;

(iv)Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;

(v) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;

(vi) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;

(vii) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;

(viii) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;

This agreement defined the next steps to be taken to reduce emissions and identified a series of important issues about the future course of climate change policy. In this regard, Bernstein, Montgomery and Rutherford (1999 p.376) write the following.

> Industrial countries agreed to limit their greenhouse gas emissions, averaged over the 5-year period from 2008–2012, to specific percentages of their 1990 or 1995 emissions. The percentages range from 92%—for the European Union and some other countries—to 108% for Australia. Developing countries undertook no commitments to limit their emissions and insisted on deleting from the Protocol any proposed procedures under which such commitments could be made. Flexibility mechanisms included coverage of six greenhouse gases, provisions for international emissions trading, credits for reforestation and other actions that remove greenhouse gases from the atmosphere 'sinks', and a Clean Development Mechanism under which industrial countries could finance and gain credit for emission reductions in developing countries.

However, the Kyoto global warming agreement reveals the difficulty of finding universal solutions to environmental challenges. Poor countries like Ethiopia are the most vulnerable to the consequences of environmental problems. Environmental problems cause more suffering among the poor with overcrowded urban areas increase the risk of disease, with shortages of wood for fuel and other purposes making it more expensive for the poor to buy these consumptions, with soil erosion and deforestation causing declining crop yields, and with environmental damage increasing the impact of flood and other disasters (World Vision,n.d). According to Haile (2004), Ethiopia has been synonymous with disastrous famine since the 1980s. In the years since, drought and famine have continued to plague the country. Population growth is one of the most critical drivers shaping the country's future, as its social infrastructure and agricultural land are unable to efficiently support its growing size of population, and thus many Ethiopians remain trapped in a vicious cycle of poverty, disease, and hunger.

Roba (2012) notes that lack of awareness among the general public and decision makers in the country could negatively impact adaptation and mitigation efforts related to environmental change. The role of the modern media is one of the most important factors underlying the knowledge of environmental problems. This can only be done on condition that the media are accessible to a large proportion of the population, a specific period of time is allocated to environmental issues, and people are interested in the information on ecological issues provided by the media so that they view or listen to the corresponding programs, news as well as read newspaper articles or other written publications dealing with environmental issues (McQuail 1994 as cited in Roba, 2012).

1.2 Statement of the Problem

Global warming and climate change are the hot and prioritized environmental problem topics in the global mass media. Both the government and the people depend on communication and mass media not only for disseminating information, but also for setting the agenda for development and other related activities. Hence, mass media become a powerful tool for disseminating information and diffusion of innovations on how to mitigate environmental problems.

Due to depletion of natural resources and burning of fossil fuels, there is a great threat to the environment. It is high time to save the depleting natural resources and discourage the irrational usage of natural resources by focusing on Sustainable Development and the media can play a great role in supporting such a commitment at individual as well as at institutional levels.

In this regard, Yadav and Rani (2011, p.1-2) writes:

> Media plays a vital role in educating and enlightening the people and the governments to protect and preserve natural resources in the interests of future generations and the climatic chaos. Sustainable Development is attained by protecting the environment in a judicious use of natural resources. Countries both the rich and the poor have an equal stake in this stewardship of the earth. The very survival of our planet depends upon it. In this regard media plays a pivotal role in creating awareness and bringing the positive behavioral change among people in mitigating the anthropogenic climate change. Hence, the role of Communication and Mass Media is immense in climate change and sustainable development.

The environmental policy of Ethiopia (EPA 1997) views natural resources as the foundation of the country's economy. Smallholder peasant agriculture, in some areas including forestry, is the dominant sector accounting for about 45 per cent of the GDP, 85 per cent of exports and 80 per cent of total employment. However, Ethiopia, like other African countries, is increasingly being affected by environmental problems. According to Mogues (2007), over the past several decades, Ethiopia`s potent combination of high population growth, unsustainable land use and ambiguous land ownership policies have led to the rapid loss of biomass, increased soil erosion, and creeping desertification. Climate change has intensified these environmental problems by altering the region`s rainfall patterns. As a result, recurring drought and famine have led to the displacement or death of millions of Ethiopian citizens. The hardship and poverty that the vast majority of Ethiopians endure testify to the suffering caused by these environmental disasters.

The government's efforts are only one aspect of this process in working toward sustainable development. Meaningful change in sustaining development and protecting the environment, however, needs the entire community to be actively involved. This is where environmental journalists play an essential role, by providing timely information and well-researched perspectives on environmental issues, and creating a "green" consciousness throughout society. The environmental policy of Ethiopia, in this regard recognizes the important role that the mass media play in creating and promoting environmental awareness. (Environmental Protection Authority, 1997).However, studies conducted on the practices and challenges of environmental journalism in Ethiopia are very limited.

This study has consulted some local and international media researches related to the media coverage of environmental issues. However, the researcher believes that such studies have their own limitations as they are not fully cognizant of the national context in which environmental journalism is practiced.

The study on environmental journalism in the Asia-Pacific region argues that the region`s size and importance demands much more attention to environmental reporting because of the impact of a range of threats (Konrad-Adenauer-Stiftung 2012). The study also identifies that, environmental reporters still remain the poor cousins despite the overwhelming evidence accumulated in the study that environmental matters are as important, if not more important, in some countries facing disaster. Some problems he enlisted include the disappearing of small, low lying pacific island states because of rising sea levels, scarcity of drinkable water in places like Bangladesh despite annual floods; chronic health problems in some industrialized Chinese cities and the list goes on. Therefore, there is an urgent need for environmental journalism to make more efforts to provide wider media coverage responsive to the magnitude of environmental problems in the region and to also step up the performance of many media and relevant organizations already involved in covering environmental issues to varying degrees (Konrad-Adenauer-Stiftung 2012).

Environmental journalists may meet a variety of challenges while reflecting environmental concerns in their reporting. In the aforementioned study on environmental journalism in the Asia-Pacific region, for instance, posits that the physical threats faced by such journalists in Asia, in particular, are very real. Environmental journalists are facing the same threats now as

human rights; political and economic journalists were 10-20 years ago. Often, environmental journalists are isolated in their jobs. The best protection for these journalists is to publicize their stories if they are being challenged by vested interests (Konrad-Adenauer-Stiftung 2012).

In this study, the researcher has also tried to look at other local media studies on coverage of environmental issues in Ethiopia. In his study on the effectiveness of AwdeGeter radio program, Eyob (2006)notes that, the study was undertaken to evaluate whether Awdegeter, a bi-weekly program aired by Radio Ethiopia, is effective through the eyes' of farmers, with particular emphasis on its coverage on environmental issues.

Eyob`s study is an audience research, focused particularly on farmers, and did not examine perspectives of the industry, journalists, editors and media managers. His study has also ignored, to some extent, the major challenges that environmental journalism has faced.

Some local studies are also conducted on print media coverage of environmental issues in Ethiopia. Temesgen (2007) attempted to analyze the coverage of environmental issues in the *Addis Zemen*, a state owned Amharic daily. However, Temesgen's study seems to have been limited by the problems related to less accessibility of the newspaper to the general public, illiteracy, and narrow scope of the study.

Therefore, in critical consideration of the gaps in studies conducted so far, the current study attempts to examine the state of environmental coverage in Ethiopia, focusing on the practices and challenges experienced in the Ethiopian Broadcasting Corporation (EBC).

1.3. Objectives of the Study

1.3.1. General Objective

The general objective of the study is to examine how the Ethiopian Broad Casting Corporation (EBC) practices environmental coverage and to explore corroborated challenges of the practices.

1.3.2. Specific Objectives

The specific objectives of the study include:

- To explore how much coverage EBC gives to environmental issues;
- To identify EBC's sources of information and news on the environment:
- To assess the way EBC frames environmental issues; and

- To investigate the challenges of covering environmental issues in the corporation.

1.4. Research Questions

In consideration of the objectives, the study seeks to provide answers for the following basic research questions:

1. How much coverage does EBC give to environmental issues?

2. What sources does EBC use to obtain environmental information from?

3. How does EBC frame environmental issues?

4. What are the challenges in the coverage of environmental issues in the corporation?

1.5 Scope of the Study

This study focuses only on the Ethiopian Broadcasting Corporation (EBC), and specifically investigates the practices of covering environmental issues in the news and programs run by the corporation.

1.6. Significance of the Study

The researcher believes that the results of the study will give interested researchers and media practitioners an insight into the relationship between media and environmental issues. Since very little has been researched in this regard, this study will make an organic contribution to an academic understanding of the issue of practicing environmental journalism in Ethiopia. The study will also be significant to the electronic and print media in Ethiopia in that it will not only attempt to identify the roles they are expected to play on environmental issues and the actual roles they are playing to protect the country`s environment, but also identify the challenges these media are facing when striving to practice environmental journalism. Therefore, they could learn from the challenges and change their practices to the better.

CHAPTER TWO

LITERATURE REVIEW

2.1. A Brief Background of the Ethiopian Broadcasting Corporation (EBC)

Both government and non-Governmental Organizations consider radio and TV to be important instruments to reach a large audience in both urban and rural areas. It is assumed that national radio and television platforms like ones run by the Ethiopian Broadcasting Corporation (EBC) have a great potential to play a role in covering pressing environmental issues affecting audience perceptions about and actions on the environment. Broadcast media (radio and television) in Ethiopia have the means, if they will, to put this highly important topic on the national public agenda and create knowledge and awareness among Ethiopian citizens.

EBC administers publicly owned radio and television stations, namely Ethiopian Radio (ER), Ethiopian Television (ETV) and FM Addis 97.1 Corporation website www.ebc.et. EBC disseminates its news and programs nationwide and overseas via its radio channels, television station and online. The Ethiopian Radio launched its regular programming in 1935 while the Ethiopian Television /ETV/ was inaugurated in 1964 as it is officially notified in the corporation`s website. However, prior to its inauguration, ETV had transmitted the first and historic assembly of the Organization of African Unity (OAU) held in 1963 in Addis Ababa. Ethiopian Radio and ETV were merged in 1995 forming the Ethiopian Broadcasting corporation /EBC/, which is directly accountable to the House of People's Representatives.

Currently, EBC has a wider range geographical coverage than it had before. As stated in EBC's special edition,*Hidasse* magazine (2006), an in-house publication, there are three main broadcast stations through which its news and programming get to the mass audience, namely the Ethiopian Television, National Radio of Ethiopia, and F.M Addis 97.1.

The National Radio of Ethiopia (NRE) gets its message across the public through medium wave in Metu via 684KHz-438Mb; Arbamminch via 828KHz-362Mb; Bale through 972KHz-308Mb; Mekele via 1044KHz-287Mb; Bahir Dar via 594KHz-505Mb; Dessie via 891KHz-336Mb; Harar via 855KHz-350Mb; Addis Ababa and its area via 873KHz-343Mb.Moreover, NRE reaches its overseas audience through 989KHz-303Mbit. Besides, through transmitters in NegeleBorenna,

Gode, Jimma and Tendaho the national radio is escalating its coverage. This resulted in reaching additional mass audiences. Furthermore, through hot bird, Nile sat, and Galaxy sat satellites and on the Internet. The National radio of Ethiopia transmissions are reaching all over the world.

Apart from covering a huge portion of the country's geography, the Ethiopian Television (ETV) utilizes Hot Bird, Nile sat and Galaxy sat satellite facilities to avail its transmission to its audiences in the Middle East Africa, Europe, North America and Canada, and it is also accessible through live streaming on the Internet.

Regarding F.M Addis, the other component of EBC, the transmission gets underway through 97.1MHz to audiences in Addis Ababa and its vicinities; 88.7MHz to its audiences in most of northern Ethiopia; 101.2MHz to its audiences in most of southern Ethiopia; 97.1MHz to audiences in Dessie; 94.5MHz to the Gambella Regional State; 97.1MHz to Adama and its vicinities; and 88.7MHz to the Afar Regional State respectively.

According to information obtained from EBC's Human Resources Department in January 2006 E.C, the corporation has 2079 employees of whom 402 are journalists working in different sections, and 163 journalists are assigned in *News and Current Affairs* section, which is the focus of this study. Some 181 journalists work in *Educational* programs and 58 are engaged in *Entertainment* programs.

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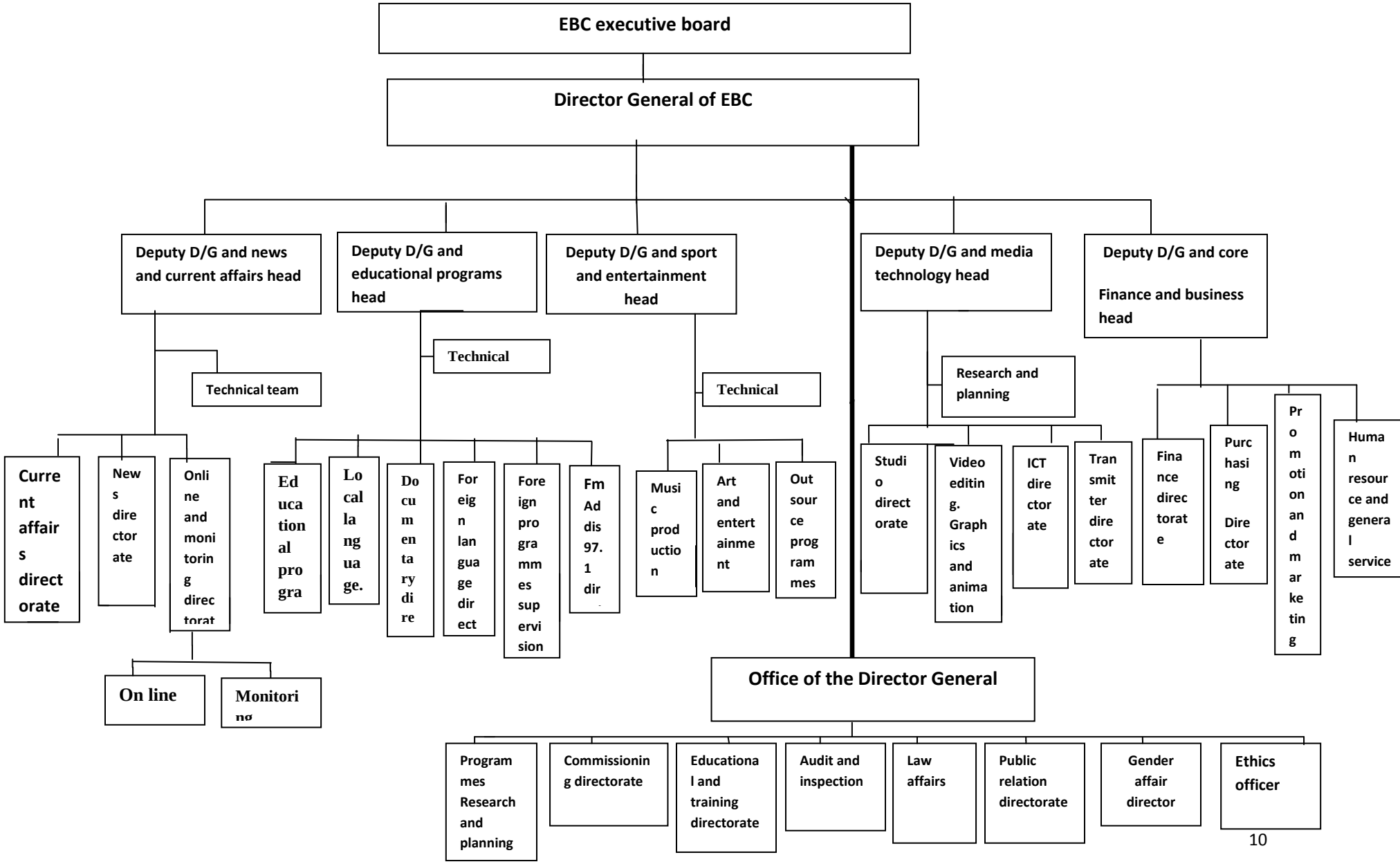
Table 1--- Organizational Structure of the Ethiopian Broadcasting Corporation (EBC)



2.2. Clarifying the Environment

Nowadays, the word environment is frequently being used in various spheres of discussion in general and on television news and programming and in newspapers articles in particular. Everyone seems to be speaking about the protection and pre-serration of the environment. Global summits are being held regularly to discuss environmental issues (Mondal 2014).During the last hundred years, the relationship among environment, social organization and culture has been discussed in sociology, anthropology and geography. All this shows the increasing recognition given to issues around the environment. After all, it is a fact that life is tied with it (ibid).

The traditional understanding of nature has been that it is a system created by God for the sustenance of humans. The general belief was that the Earth was the hub of the universe and man had a central place in it. It was also believed that the environment was a static entity with little or no possibilities of change (Kumar, 2013). This had been the dominant view until the advent of enlightenment in the early modern history. However, with the growth of scientific thinking and reason, it came to be gradually accepted that neither the Earth was at the axis of the universe, nor the Humans were the core constituents of the Earth. Science also established that there has been continuous change in the nature of environment all along the history of the Earth, though the speed of change differed for different components of nature and even this speed had not been uniform. This holds true for the evolution of both living and non-living components (Kumar, 2013). The understanding and use of the word "environmental" quite often tends to be associated with some kind of human impact on natural systems. This context distinguishes it from the word "ecological," which can be characterized as a concept of interdependence of elements within a system (Morelli, 2011).

Literary, environment means the surrounding external conditions influencing development or growth of people, animal or plants, living or working conditions etc. (Singh 2006,). In fact, the concern of all education is the environment of man. However, man cannot exist or be understood in isolation from the other forms of life and from plant life. Hence, environment refers to the sum total of a condition, which surrounds a point in space and time. The scope of the term Environment has been changing and widening through time. In the primitive age, the environment consisted of only physical aspects of planet earth's land, air and water as biological

communities. As time went on, man extended his environment through his social, economic and political functions (Singh 2006,).

According to Kumar (2013.), the industrial revolution heralded a completely new era in which the term ‘environment’ attained new dimensions. The present day concerns of Environmental pollution, decay of bio-diversity and the green-house effect have necessitated a redefining of the concept of the man-nature relationship. The concept of “environment” has evolved since it started to become a global issue in the early 1970s.At first, it was a kind of global recognition that the Earth’s ecosystems are in fact fragile, and that human beings have been contributing much to its degeneration. When countries started to join efforts to strike a balance between improving the quality of human life and protecting the environment for the sake of future generations, a new awareness materialized (Awan2013).The social and economic welfare of human beings is closely linked to their environment. Any change in the socio-economic fields will have an impact on the earth’s environment and vice versa, whether positively or negatively, immediately or eventually. And in many cases, negative results are irreversible (ibid).

Burgess (1990)(in Roba 2012) notes that the word "human" brought environmental issues into the domain of human development from their former 'home' among ecologists and activists. During the 1970's, much of the debate about the environment was centered on the idea of ‘limits to growth'. Economists proposed that as the world was using resources at a greater rate than they were being renewed, economic growth would soon be restricted. These ideas led to the formulation of the concept of sustainable development, bridging the human, social, environmental and economic dimensions of development. The concept recognizes that the downward spiral towards exhaustion of resources is not inevitable and rational environmental management (Burgess 1990 cited in Roba 2012).

Corollary has been the problems related with the modern concept of development and resultant compulsions of conservation (Kumar, 2013). In their attempt to conserve the dwindling bio-diversity, humans started demarcating fragile ecological zones ranging from forests, wet lands, bio-sphere reserves, mangroves, etc., as reserves to preserve not only the flora-fauna but also the physical attributes of ecological niche itself. It often led to conflicts with communities like forest-dwellers sustaining on such resources. Similar kinds of conflicts could be located on the sites for big-dams and ancillary activities which necessitated displacement (Kumar,

2013).History reveals that the human race was once afraid of nature and the natural forces. Human beings have worshiped nature and considered nature as superior to human race. Enormous increase in human population, nevertheless, raised the demand for development and increased the consumption of various natural resources resulting in environmental deterioration ("basic concepts;nature,n.d)

Various mitigation efforts have been underway in response to increasing abuse of the environment committed mainly by human beings who would have otherwise been major beneficiaries of conserved environment. Environmental protection and conservation activities need to take a holistic approach considering various aspects. As cited in Roba(2012), UNCED (1992) formed the basis of Agenda 21, which finally moved the debate from being about how to stop "mining "resources, to recognition of long-term sustainability and achieving sustainability needs, to the social, economic and environmental aspects of development. This placed environmental matters squarely within the domain of human development, and led to an understanding of the underlying importance of the environment as it relates to people.

For the sake of clarity and to identify a definition that is best suited to this study, it is logical to review some different definitions and ideas surrounding the environment worked out by different scholars and cited in different publications. One elaborate definition of the environment is presented below.

> Our existence, lifestyles and growth depend entirely on the sun and the earth. The energy from the sun is called solar capital. In the same way, the planets, air, water, fertile soil, forests, grasslands, wetlands, oceans, lakes, wildlife, minerals and natural purification and recycling process are treated as Earth's capital. We use the term 'environment1 to describe, in the language of G.T Miller, The Plant's fife - support system for us and for all other forms of life'. In effect, the environment is me sum-total of solar capital and earth capital. It also includes the thing created by humans ("basic concepts; nature ",n.d).

The environment may be broadly understood to mean our surroundings. It can be divided into non-living and living components (Kumar, 2013). The environment, Kumar further states, provides resources which support life on the earth and which also help in the growth of a relationship or interchange between living organisms and the environment in which they live. It is important to realize that humans enjoy a unique position in nature due to their exceptional ability to influence and mould the environment. Until recently, the term 'nature' was used

synonymously with the word 'environment'. It had been generally believed that nature is what man has not made (Kumar, 2013).

Singh (2006) writes that the environment comprises various types of forces that are physical, intellectual, economic, political, cultural, social, moral and emotional in nature. The environment is the sum total of all the external forces, influences and conditions, which affect the life, nature, behavior and the growth, development and maturation of living organisms. As cited in Roba(2012), Dalelo(2007)defines the environment as surroundings. In its ecological sense, the environment includes the biotic and abiotic factors and the interactions between them. This definition goes beyond defining the environment and looks at the processes involved and concludes that without the environment it is impossible to survive. The environment and humans are interrelated ecologically, and people are part and parcel of the environment, and they actively interact with its components (Otiend, 1991cited in Roba 2012). According to Defra (2007), the natural environment is a precious resource. It provides not only the essentials of life – air, water, food and fuel – but underpins our health, wellbeing and prosperity. By protecting and enhancing the natural environment, we can also significantly improve our quality of life.

The definitions suggested by different authors have nearly similar ideas and reflections on the environment. That is because what these definitions vividly show is that environmental affairs and activities entertained and carried out by various bodies with the latter's recognition to the cross-cutting nature of the environment and issues surrounding it. The consideration of common features in these definitions can help the research in informing it on the main activities and issues involved in relation to the environmental awareness creating and mitigating endeavors made by concerned institutions, etc.

2.2.1. Types of Environment

Different scholars and publications classified environment in to different types. Nature (n.d), there are three broad types of environment, namely, biotic (living), abiotic and cultural.

i) Biotic (living)

The word biotic has to do with living organisms. Biotic elements refer to the biological component of the ecosystem, consisting of population of plants, animals and micro-organisms in complex communities. The biotic factors also include organisms, viruses and other parasitic organisms that cause diseases. They are parts of an organism's biotic environment. The biotic

component of the ecosystem consists of three distinct groups of organism, the producers, consumers and decomposers. The producers are those organisms capable of photosynthesis, production of organic material solely from solar lift and carbon dioxide. This organic material serves as a source of both energy and mineral nutrients. Both are required by all living organisms. Examples include both territorial and aquatic plants such as phytoplankton. The consumers are organisms whose very survival depends on the organic material manufactured by the producers. The consumer represents animals of all sizes ranging from large predators to small parasites, such as mosquitoes and flies. The nature of the consumers' dependence on the producers takes various forms. Some consumers (herbivores such as rabbits) are directly dependent on primary producers for energy. Others (carnivores such as tigers) depend indirectly on primary producers. The last group of living organisms is the decomposers. These include micro-organisms such as fungi, bacteria, yeast etc. as well as a diversity of worms, insects and many other small animals. They all rely on dead organisms for their existence and survival. In their efforts to survive and obtain energy, they decompose materials released by plants and consumers to their original elements (C, O, H, N, S, P). This is what keeps material cycling within the ecosystem. The biotic community together with the physical environment forms are an interacting system called ecosystem (Nature n.d).

ii) Abiotic

Abiotic factors include the flow of energy necessary to maintain any organism, the physical factor that affects it and the supply of molecules required for its life functions. Other physical factors include climate, temperature, precipitation, including its types (rain, snow, hail) around and seasonable distribution, types of soil present (sandy or clay, dry or wet, fertile or infertile). All forms of life require atoms such as carbon, nitrogen and phosphorous and molecules such as water to construct and maintain themselves. The organisms constantly obtain these materials from environmental by eating food or taking them us through the process of photosynthesis. In the ecosystem, the abiotic (non-living) \components perform 3 important function water and oxygen for organisms. 2nd, they act as a reservoir of the 6 most important elements for life, carbon(C), hydrogen(H), Oxygen (O), nitrogen (N), Sulphor (S) and phosphorus (P). These elements constitute 95% of all living organisms. 3rd, the Earth contains only a fixed amount of these elements. Thus continual functioning of the ecosystem requires one thing at least. These

elements have to be recycled because they are critical to the welfare of the ecosystem as a whole (Nature n.d).

iii) Cultural

The stage of development that human beings have attained in the path towards progress will determine their culture as a way of life. Human interaction with the environment also influences the ecosystem. People of different cultures view their place in society from different angles. Among the factors that can shape their views are religious understandings, economic pressures and fundamental knowledge of nature. Due to this diversity of background, different cultures put different values on the natural world. But the general attitude has been one of development rather than preservation. Technology has been the key player in human progress. It has also increased the quantity of environmental degradation. Human interaction with the environment has increased very fast of late. For example, the greenhouse effect is thought to result from energy consumption, agricultural practices and climatic change. It is now felt that we have entered an era characterized by global change that arises from the interdependence between human development and their environment. So limitation related to self-conscious and intelligent management of the earth is one of the greatest challenges facing humanity today. Humans also cause extinction of components of the environment in indirect ways. The building of dams, for instance, changes the character of rivers, making them less suitable for some species (nature n.d, p.5).

2.3. Overview of the Global Environmental Issues

Two of the most pressing challenges facing the world are eradicating poverty and ensuring that prosperity and well-being are sustainable. Around 1.3 billion people still live in extreme income poverty and the human development needs of many more are still not met. Two-thirds of the services provided by nature – including fertile land, clean water and air – are in decline and climate change and biodiversity loss are close to the limits beyond which there are irreversible effects on human society and the natural environment (European Commission, 2013).

Environmental degradation is not a new thing, as it has been happening all over the world for centuries. The problem is that it is now occurring at a much faster rate, thereby not leaving enough time for the environment to recover and regenerate (Natural Resources and Their Management 2002).The world today is confronted with many different emerging environmental

issues including new problems to solve and new solutions to evaluate and possibly implement (UNEP, 2012). ‘Global Environmental Issues' is a phrase that refers to the effect on the climate caused by human actions, in particular on the fire of fossil fuels (coal, oil and gas) and large-scale deforestation, which cause emissions to the atmosphere of large amounts of 'greenhouse gases', of which the most important is Carbon dioxide (Anand, 2013).

According to Wider (1992,), the environment is a commodity. Whatever other value a society may impute to an environmental resource, it will typically also impute an economic value to it (Wider1992). Over time, this value to a community will change. It may find no such value to begin with; it may acquire a sudden increase in value due to technological change, and so forth. A pervasive problem in all societies is that the economic value to a person or household of an environmental resource differs, and typically falls short of its value to the community as a body collective. This implies that the incentives individuals and households have for protecting the resource bases are less than what is collectively found desirable. This is what is meant by an environmental problem (ibid). The term environmental degradation is used to describe a situation in which a part of the natural environment is damaged. It can be used to refer to damage to the land, to water or the air. Environmental degradation can also mean a loss of biodiversity and a loss of natural resources in an area (Natural Resources and Their Management 2002).

Environmental degradation is a serious threat to the lives of people, animals and plants, making it imperative that we stop further degradation from occurring (Natural Resources and Their Management, 2002).According to Anand(2013.), one of the primary causes of environmental degradation in a country could be attributed to rapid growth of population, which adversely affects the natural resources and environment. The simultaneous occurrence of rising population and environmental deterioration make sustainable development difficult to materialize. The existence or the absence of favorable natural resources can facilitate or retard the process of socio-economic development. The greater demands placed on the environment by an ever increasing human population is putting a great strain and drain on the earth’s limited natural resources (ibid)

In the economic history of the twentieth century, environmental issues gradually became more prominent. During the Great Depression of the 1930s soil erosion drew attention, and in the 1950s and 1960s concerns about pesticide use and air pollution emerged. Only in the last decades

of the twentieth century, however, did environmental degradation gain recognition as a fundamental challenge to the whole economic growth process. In the global economy of the twenty-first century, by contrast, environmental considerations will be a determining factor in shaping economic development (Resources, Environment, and Economic Development, 2005).

Watson(n.d.)explains that there is now a wide range of local, regional and global environmental issues that are affecting our ability to meet the basic human needs (e.g. adequate food, energy and clean water) of the large majority of the world's population. The key global issues include: climate change, loss of biodiversity, stratospheric ozone depletion, unsustainable forestry, and land and water degradation. By some estimates, humankind uses more than 67% of the planet for primary productivity (Wellford 1998 cited in Roba, 2012). According to Sammalisto (2007 as cited in Roba 2012), people are using the earth resources faster than the latter can be renewed. Society has already confronted a host of global environmental challenges including loss of biodiversity, climate change, water and land degradation, among others, and, through persistence and ingenuity, it has found many solutions to these challenges. Now, the question is whether society has the right capabilities to implement these solutions, meet the global environmental challenges and support a burgeoning Green Economy (UNEP, 2012).

Simonis (1998) notes that globally or universally occurring environmental problems can be approached in entirely different ways. The literature often refers to the "environment formula" according to which global environmental impacts (I) are caused by world population growth (P), increasing affluence (consumption of goods and services (A), and environmentally unsound technology (T).Environmental problems, such as the worsening of the greenhouse effects, the diminishing of the ozone layer and, to lesser extent, the problem of acid rain are global in nature and they concern the entire planet due to their amplitude as well as their consequences like environmental changes, desertification, and the death of the forests. Burgess (1990 cited in Roba 2012) specifies that the accumulation of greenhouse gases, mainly carbon dioxide, is irreversible for periods covering hundreds of years. These global environmental problems like deforestation, global warming and pollution of water bodies or industrial pollutions are public evil, that is, a globally negative effect on the economy causing multiple costs. For environmental historians, the rise of the environmental movement comes at the end of a story that begins before 1900. The first protests against pollution, the first efforts to conserve natural resources, and the first

campaigns to save wilderness all occurred in the late nineteenth century(Rome,2003). Allen (1999 as cited in Roba 2012), states that about 153 environmental treaties in the context of the United Nations environmental program have been put in place. Alongside these multilateral agreements, there exist bilateral agreements, independent of the United Nations, which are meant to solve the global environmental problems. The industrial nations had given priority to environmental protection, and this started in 1972, when the first United Nations (UN) conference on the human and environment was held in Stockholm, Sweden. This was the first initiative towards global environmental management and resulted in another United Nation conference on environmental development. Since the Stockholm Conference on the Human Environment (1972), achievements have been made in protecting the environment through the creation and strengthening of institutional mechanisms. Such Mechanisms have been established to address sectoral environmental issues, as well as the inter-linkages between the environment, development and economic concerns. However, despite these advances, the state of the environment continues to decline and the divide between developed and developing countries continues to expand (International Environmental Governance n.d.).

United Nations, (2013,) states that an important sustainable development challenge arises from unsustainable consumption and production patterns that have evolved in developed countries, a pattern that is increasingly being followed by developing countries. For example, per capita greenhouse gas emission levels in developed countries are 20-40 times greater than needed for stabilization of the atmospheric greenhouse gas concentration. The per capita ecological footprints in developed countries are 4-9 times greater than their bio-capacity. The high degree of inequality that accompanies and promotes these patterns makes them socially unsustainable and constrains achievement of the human development goals.

Global environmental change such as climate change and the degradation of ecosystem services is heightening risks and reducing opportunities, especially for poor and vulnerable populations. Such change is taking place in an increasingly globalized, urbanized, interconnected and fast-moving world amidst shifting geopolitical power balances (Ivanova,M, et al. 2012).Wang, S and Hynes, W (2012) states that developing countries can play a key role in achieving global green growth in two major ways. Firstly, the potential economic and social impacts of environmental degradation are particularly important for developing countries. They are the most vulnerable to

climate change and tend to be more dependent than advanced economies on the exploitation of natural resources for economic growth. According to UNFCCC (2011), the least developed countries (LDCs) are acutely vulnerable to a variety of external shocks, including natural disasters. They are susceptible to global environmental challenges such as climate change, climate variability and extreme events, which, inter alia, exacerbate desertification and loss of biological diversity. In addition many developing countries face severe economic, social and ecological threats from energy, food and water insecurity to climate change and extreme weather risks. They also face risks from premature deaths due to pollution, poor water quality and diseases associated with a changing climate. All of these factors undermine their development (Wang, S and Hynes, W, 2012).

Africa is one of the most vulnerable regions in the world to climate change. This vulnerability and the limitations of poor countries to adapt to climate change challenges have been highlighted this was emphasized in the 2001 Climate Change Summit. the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) established how human activity (burning fossil fuels and changes inland-use) is modifying the global climate, with temperature rises projected for the next 100 years that could affect human welfare and the environment (Desanker, 2002 cited in Roba 2012). Ekaete (2001) also notes that desertification affects 46% of African countries and about 485 million of its people. In Ethiopia, at the beginning of the 20th century, around 420,000 square kilometers (35 percent of land) was covered by trees but recent research indicates that forest cover is now less than 14.2 percent due to population growth (The Africa Society, 2008). The horrific famines that occurred in Ethiopia in the 1970s and 1980s were exacerbated by deforestation, leading to thousands of deaths. This is because, with deforestation, rains are less likely to soak into the soil and replenish ground water. On the whole, Ethiopia loses about 1,410 kilometers of natural forests each year. If the number continues to grow, the future of the country will be bleak (ibid).

Due to these environmental problems, global level conferences stressed the importance of awareness creation through education and media as means to achieve sustainable development in the long run (Ekaete 2001cited in Roba 2012). Environmental education projects are common nowadays and are also an integral part of many natured protection projects (SURF-nature, 2011). In the 1960s, awareness of the negative impacts of mankind on the natural environment rose, and

environmental policies and programmes were developed world wide. People became more aware of their own impact on the environment in their everyday life and, in parallel, their influence on the way their local community is run (SURF-nature, 2011).According to Bıcakcı (2013,), the global climate change and environmental destruction have been raised to a level of major concern in recent years. However, public environmental awareness and education still need to be enhanced so as to take significant precautions against all anti-environmentalist activities.

In addition, the scale and persistence of global environmental problems require sustained collective efforts to meet internationally agreed goals. Responses at national and regional levels are already available, but addressing the underlying drivers of global environmental degradation, rather than the pressures or symptoms, would require the sustained evolution of rules, institutions, economic systems and values to transform the current approach to environmental management (Ivanova, M, et al. 2012). Currently, environmental problems are rarely tackled in an integrated fashion. The connectedness of climate change, water resource depletion, desertification and biodiversity loss, for example, makes isolated governance responses inadequate and potentially counterproductive. A more integrated approach to substantive issues and spatial scale demands a new adaptive governance framework (ibid).

2.4. Global Communication on the Environment

The evaluation of different environmental problems indicated that environmental communication is the basis for awareness creation about the environment through a complex interactive and iterative information system. Environmental Communication is the planned and strategic use of communication processes and media products to support effective policy making, public participation and project implementation geared towards environmental sustainability (OECD 1999). Environmental communication transforms the power generated by policy makers and project managers into action (GTZ, 2006). It is the missing link between the subject matter of environmental issues and the related socio-political processes of policy making and public participation. It works best in combination with other instruments like economic incentives, laws and regulations or sectoral planning. It bridges ‘hard’ technical know-how and ‘soft’ action-oriented practice change. Problem identification, agenda setting, policy formulation or management cannot do without properly defined communication support (ibid).

Habermas (1994 as cited in Roba 2012), explains communication strategies should be designed for populations that are exposed to different environmental problems and who may not hear and understand environmental information. Both the cause of environmental problems and possibilities for addressing them depend on human perceptions, attitudes and behavior, which are linked to values, preferences and beliefs about the world. Communication is a key to analyzing the relation between all of these aspects. This also plays a central role in shaping our understanding of the natural world and the role of humans there in (Carvalho,A, 2009).

According to OECD (1999,p. 6), on the basis of Agenda 21, the Dachas declared environmental sustainability as one of its strategic goals in "shaping the 21st Century: The Contribution of Development Cooperation". Capacity Development in Environment (CDE) increasingly emerges as a key approach to this end, involving multi-faceted communication processes in inter-institutional cooperation, and interaction and consensus building between a wide range factors. However, many implementing agencies realize that environmental projects and action plans often have limited success because the innovations and solutions they offer are not fully 'owned' by the people concerned (ibid).

Mudgal,S ,et al (2012), states that the rationale behind communicating environmental information to consumers is to induce behavioral change so that they make smarter, more sustainable consumption decisions. In order to make consumers decide to change their behavior, three conditions have to be met: adequate knowledge; positive attitude to change; and access to sufficiently attractive alternatives (infrastructure, goods) (Bio-intelligence service).In addition, communicating specialist knowledge on complex environmental problems, such as climate change, to policy-makers poses diverse challenges. It is important to devise ways to make scientific uncertainty and its implications for policy-making meaningful to all (Carvalho,A , 2009).

Environmental communications is one of many forms of communication that are engaged in social debate about environmental issues or problems. The dominant structure of the prevalent environmental communication framework hinges not only on the separation between environment and communication, but also between the communicator and the audience (Stables, 1998 cited in Roba 2012). In the current debate on sustainable development, communication and education as the driving forces of environmental learning processes have an impact on at least

two levels. Firstly, perceptions of the environment are to a large extent determined by cultural contexts, visions, lifestyles and value judgments which are acquired through communication. Secondly, criteria and options for decisions regarding sustainable practices are a result of public discourse and transparently communicated alternatives. Ultimately, sustainable development cannot be based on behavioral manipulation alone but relies on a shared vision which will help civil society to develop adequate skills to manage its environment (OECD 1999).

2.5. Historical Perspective of the Media and the Environment

In the area of environment, the earlier premise of an open and unlimited global space for individual nations or states to explore and exploit for maximum economic growth was turning out to be unattainable. The finite nature of the global space and its limited caring capacity received increased attention both in academic literature and the media industry. The environment has now become part of a complex ecosystem, which is fragile and threatened by severe disruption from the competing forces of over population, resource exploitation, over consumption, and industrial pollution (Roba 2012). During the last few years, several attempts have been made to write overviews of world history from an environmental history perspective. One such perspective, which is frequently used, is the relationship between population growth and resource use. This development has been seen as a sort of co-evolution where new resources allow the population to grow, while population growth on the other hand spurs a more effective resource use. At the same time, however, new limits to growth have evolved on a global scale. Crucial factors in this development have been the control of epidemics, technologies to collect, store and transfer information and the introduction of the fossil fuel regime during the last two hundred years (Swedish National Agency for School Improvement 2004). A global ecosystem approach was not without competitors, but both the biocentrism and the humanist perspectives were foreign to the perceptions of the international development elite and recognizing the offences against nature as just another sign of the supremacy of technological expansion over people and their lives would go against the grain of development aspirations. The discourse, then, moved to efficient management of the environment to serve the needs of development (Speth, 2004 cited in Roba 2012).

In exploring human nature/environment connection we consider the natural circumstances and powers that affect and sometimes determine the actions of human groups. In excess of an

extensive era of time in history this connection operates at two dissimilar stages; at one stage it wields power as a widespread ongoing procedure, and at the other it acquires the form of the connection of specific human groups to their ―immediate environments (Rai Technology University, n.d). Kumar (2013), states that the relationship between nature and man was redefined with the advent of agriculture. Till the beginning of agriculture, the sources of food had mostly been naturally available products and man had no control over their availability. An important contribution of agriculture has been the cultivation of cereals. In the initial stage the agriculture was highly unreliable and as a regular source of food did not meet the demands of man. In information transition from the hunter-gatherer stage to the agriculture stage was an extensive drawn procedure (Rai Technology University, n.d). The development of technology/apparatus to augment the manufacture was also a gradual procedure and it was only after the development of irrigation technology that agriculture acquired a key role in food manufacture. Furthermore, better management of agriculture ensured food security and provided humans with surplus time since agriculture was a seasonal activity. Likewise demand for improved tools and technology for better irrigation to ensure larger production led to depletion of locally available raw materials for tools (for example stone, as man moved away from foothills to open plains (Kumar 2013).

A qualitative and epoch-creation shift in the nature-human interface became apparent with the onset of industrial age. The stage of technology of industrial age liberated man from physical labor and introduced the use of abiotic sources of energy that replaced human and animal energy (Rai Technology University, n.d). Since the ancient past thermal energy had been used in direct application, but during the Industrial Age it was used to mechanize tools. The Industrial Age witnessed the conversion of thermal energy to mechanical energy and thus enhanced the possibilities of greater exploitation of natural resources)(Kumar 2013, p.6).According to Rai Technology University (n.d), the connection of harmony and a tacit coexistence with nature now gave method to human endeavor to totally harness and use natural possessions. The greater use of energy led to major problem of environmental pollution. The greater consumption and generation of energy induced a ‘greenhouse effect’. However, what has been a more bothersome fall-out of this process is the development of materials not naturally available in the world, i.e., polymers (Kumar 2013). The chemical revolution of the 1930s and 1940s urbanized an artificial material which was not biodegradable, therefore hard to destroy and decompose. At the similar

time, the wider applications of the material at industrial and domestic front at low Cost of manufacture encouraged its wider circulation (Rai Technology University, n.d). However, the problem of decomposition of the material made it a major cause of concern for the scientific community (Kumar 2013). Similarly, the question of the viability of nuclear fuel as a source of energy has been a major issue of concern. The production of non-natural radioactive substance for energy production has been a major scientific and technological development, but again the decay or the proper and cost effective decomposition of the residue has been a major technological failure (Kumar 2013).

According to Sarwar(2008),we the human beings, in our desire to make our lifestyle better, have caused serious threats to the survival of much of biodiversity. Increase in global human population (the Population Division of the United Nations predicts that the world's population will increase from 6.23 billion people in 2000 to 9.3 billion people in 2050) and its consumption of already half of the entire food, crops, medicines, and other useful items produced by earth's organisms, has endangered biodiversity. Unequal distribution, overexploitation and consumption of natural resources and other forms of wealth on the planet is another factor that is greatly putting biodiversity at risk. Similarly, Vitousek *et al*. 1997 (cited in Gaston reports 2005)states that the most important agent of change in the spatial patterns of much of biodiversity at present is ultimately the size, growth and resource demands of the human population.

The impact of this significant loss in biodiversity through human activity and meddling has in consequence led to the loss and fragmentation of natural habitats, which includes clearing forests for timber or plantations, overgrazing, draining wetlands and the flattening of grasslands and coral reefs. Additionally, excessive exploitation has pushed some species including tiger, giant panda, black rhinoceros, cod and several whale species to the verge of extinction (Sarwar, 2008). Moreover, the human impact of climate change is happening has become a clear and present danger to date and it requires urgent attention. Events like weather-related disasters, desertification and rising sea levels, exacerbated by climate change, affect individuals and communities around the world. They bring hunger, disease, poverty, and lost livelihoods — reducing economic growth and posing a threat to social and, even, political stability. Many people are not resilient to extreme weather patterns and climate variability. They are unable to protect their families, livelihoods and food supply from negative impacts of seasonal rainfall

leading to floods or water scarcity during extended droughts. Climate change is multiplying these risks (Global Humanitarian Forum, 2009).

The United Nations Conference on the Human Environment, held in June 1972, was the event that turned the environment into a major issue at the international level. The conference drew together both developed and developing countries, but the former Soviet Union and most of its allies did not attend (UNEP, 2002,).The first 'Earth Summit' or the United Nations Conference on Environment and Development took place in 1992 in Rio de Janeiro. The Summit helped to set the agenda on environment and development issues for the rest of the decade. Along with the Rio Declaration and Agenda 21, the 'Earth Summit' led to agreement on two legally binding conventions: on Biological Diversity and the Framework Convention on Climate Change. The Summit also produced a Statement of Forest Principles and helped stimulate participatory Local Agenda 21 initiatives in cities and villages all over the world (Doran, 2002). The Earth Summit, aimed to rethink economic development, to find ways of halting the destruction of irreplaceable natural resources and constraining greenhouse gas emissions and other sources of pollution. The Rio Declaration on Environment and Development defined the Responsibilities of states to take full account of the environmental impact of their economic policies. Agreed policies included systematic scrutiny of production to control toxic outputs; seeking alternative sources of energy to replace fossil fuels; a new reliance on public Transportation; and ways of coping with the growing scarcity of water (United Nations 2007,), The principal message of the comprehensive programme of action, Agenda 21, was that a transformation of attitudes and behavior was required to bring about sustainable development.(United Nations 2007, p.4).This was followed by the world summit on sustainable development (WSSD) which was held in Johannesburg, South Africa in2002 where critical targets for sustainable development, including the Millennium Development Goals (MDG's), were defined (UNCED 1992 cited in Roba, 2012).

Again, the UN Conference on Sustainable Development (UNCSD or Rio+20") convened on June 20-22, 2012 in Rio de Janeiro. This conference marked the 20th anniversary of the UN Conference on Environment and Development (UNCED) in Rio in 1992.Governments participating in the 1992 meeting politically endorsed the objective of "sustainable development" as achieving economic, environmental, and social development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Leggett

& Carter 2012, p.35). Rio+20 began from the premise and findings that the objectives of the 1992 Rio conference have not been achieved. The UN's fifth Global Environmental Outlook, published in June 2012, found significant progress toward only four of 90 internationally-agreed goals associated with sustainable development. It found back-tracking on eight goals (Leggett& Carter 2012). The world economy globalizes as national economies integrate into the international economy through trade; foreign direct investment; short-term capital flows; international movement of workers and people in general; and flows of technology(Najam, Runnalls and Halle 2007).This has created new opportunities for many; but not for all. It has also placed pressures on the global environment and on natural resources, straining the capacity of the environment to sustain itself and exposing human dependence on our environment (ibid). As interactions between countries increase and the world faces globalization of the economy, there is widespread concern about the effects the ongoing process of trade liberalization will have on sustainable development and, in particular, on the environment. Economic globalization impacts the environment and sustainable development in a variety of ways and through a multitude of channels. Globalization contributes to economic Growth and thereby affects the environment in many of the same ways that economic growth Does: adversely in some stages of development, favorably at others (Borregard,N, et al 1999; Panayotou 2000).

After years of perceived contradictions between free trade and environmental protection, a common perspective was agreed upon at the 1992 United Nations Conference on Environment and Development (UNCED). There, Governments endorsed the call to address the issue and "make international trade and environmental policy mutually supportive". However, at the time, little was said on how to operationalize this goal. The task of making international trade work for environmental sustainability, instead of against it and of devising ways in which to achieve an effective integration of trade and environment policy is a challenge that is still before us (Borregard, N, et al. 1999,).Furthermore, current global trends such as economic globalization and liberalization of trade are having a strong impact on the environment at local, regional and global levels. Because of globalization, many productive activities traditionally associated with developed economies are gradually being transferred to developing countries (UNEP1998 as cited in Roba 2012). Most industries or activities that move to developing countries have some potential for environmental degradation. The result is negative, less care is exercised or responsibility taken, fewer resources are applied to environmental protection, soil is eroded,

forests are disappearing, and the atmosphere is polluted. Overall, the human ecological footprint has exceeded the caring capacity of the earth (ibid).

Climate science and mass media first came together in the coverage of climate change in the1930s. In the *New York Times* it was then written, "The earth must be inevitably changing its aspect and its climate. How the change is slowly taking place and what the result will be has been considered…" (Boykoff and Roberts2007, p.4). Media coverage of human contributions to climate change appeared more clearly in the 1950s. For instance, the *Saturday Evening Post* published a story by Abarbanel and McClusky, entitled 'Is the World Getting Warmer?', exploring links between atmospheric temperature change and agricultural shifts as well as sea level rise (Boykoff and Roberts 2007).Then in 1957 – the International Geophysical Year – science reporter Robert C. Cowen wrote an article that appeared in the *Christian Science Monitor* called 'Are Men Changing the Earth's Weather?' The article began:

> Industrial activity is flooding the air with carbon dioxide gas. This gas acts like the glass in a Green house. It is changing the earth's heat balance. It could bring anything form an ice age to a tropical epoch….Every time you start a car, light a fire, or turn on a furnace you're joining the greatest weather "experiment" men have ever launched. You are adding your bit to the tons of carbon dioxide sent constantly into the air as coal, oil and wood are burned at unprecedented rates (Boykoff and Roberts, 2007, p.4).

Many books, essays, media reports, and texts throughout the last century considered environmental issues, thus provoking attention and movements of environmental politics (Boykoff, 2009). Mass media have played a major role in shaping perceptions and awareness of environmental issues since the 1960s (Sachsman, 2000).Together with government officials, environmental activists, scientists, and industrialists, journalists and broadcasters have set the agenda for environmental discourse and decision-making for more than thirty years. Before that time, business and industry dominated discussions concerning the effects of economic development on the natural environment. But the publication of Rachel Carson's *Silent Spring* in1962 changed the frame of environmental discourse among scientists, activists, and government officials, and the rise of television as a national and international medium greatly increased the visibility of environmental issues (Sachsman, 2000).

Contemporary environmental challenges permeate the very material and discursive fabric of our lives, weaving through economics, politics, culture, and society (Boykoff, 2009). Through time,

mass media coverage has proven to be a key contributor on a number of factors that has stitched spaces of environmental science, governance, and daily life together. Mass media have given voice to the environment itself by articulating environmental change in particular ways, via claims makers or authorized definers. As such; mass media have thereby influenced a range of processes, from formal environmental policy to informal notions of public understanding. Media representations are convergences of competing bodies of knowledge, framing environmental issues for policy, politics, and the public and drawing attention to how to make sense of, as well as value, the changing world. Emanating out from these processes, public perceptions, attitudes, intentions, and behaviors, in turn, often link back through mass media into ongoing formulations of environmental governance (ibid).

In the last 40 years, the awareness of our impact on the earth has grown to the point where environmental issues are now at the centre of public discourse. Today, people exert themselves to care about environmental issues such as climate change, biodiversity and water scarcity, issues that were unheard of few decades ago(Simooya.2011). Mass media representational practices have broadly affected translations between science and policy and have shaped perceptions of various issues of environment, technology and risk (Weingart, et al. 2000 as cited in Boykoff and Roberts 2007). Climate change is a notoriously difficult subject for journalists to report on, for editors to maintain interest in, and for audiences to grasp. The science is complex and incremental, its worst effects are (probably) a long way off, and the topic is now fraught with controversy (Painter, 2010). Like many slow-burn but hugely urgent issues of the twenty-first century, part of the journalistic challenge remains that of conveying the importance of the science to audiences around the world – in short, "to make the significant interesting" (Painter, 2010,p.3). The fight against climate change could be won or lost on the pages of newspapers, in TV and radio broadcasts and on the internet and mobile phones. This is because people need good information to make effective decisions — at the household or global level — and most people get their information about climate change from the media. Journalists can warn of extreme climatic events, explain complex policies, highlight coping strategies that work on the ground, act as watchdogs that protect the public interest, and promote the necessary actions from consumers, businesses and governments to build green economies (Shanahan 2011).

News editors tend to be drawn to events, rather than to slow processes. This was exemplified by the UN's Copenhagen Summit on Climate Change in December 2009(Painter 2010).The Summit was marked by history, not because it ended in an ambitious and binding deal to curb greenhouse gas emissions but because of the huge number of journalists, delegates, NGOs and scientists present. It is very doubtful that any single event outside of the Olympics or the World Cup has ever attracted so many politicians, journalists, scientists and academics to attend it together (ibid).The good news is that across the global South, climate change journalists are growing in number and experience. They are creating networks to help each other as they report on climate change, and progressive media outlets are acting to improve their coverage. In 2009, for example, representatives of nearly 1,000 broadcasters endorsed the Paris Declaration on Broadcast Media and Climate Change, pledging to increase their coverage of climate change and give greater voice to marginalized populations (Shanahan 2011). The bad news is that media coverage of climate change still occupies only a small proportion of total media reporting relative to the scale of the problem, which threatens the lives and livelihoods of billions of people. Public awareness of climate change maybe rising worldwide but in many countries, public understanding of climate change, its causes and on sequences, remains low (Shanahan 2011).

Historically, the media in most developing countries have not given much priority to climate change although the amount of coverage has slowly increased in recent years. This is despite the fact that many of these countries are considered the most vulnerable to the impacts of global warming (Painter 2010). In many countries there are problems with not only the quantity but also the quality of climate change journalism. Climate change is often restricted to specialist environment pages or programs. It is often reported on inaccurately and presented as international news, without relevance to local people (Shanahan 2011). Lindolf 1995(cited in Roba 2012),notes that environmental reporting or voices have become increasingly marginalized in the news Banterer's (2002) study of the Globe concluded that lip-service was paid to environmental concerns and those environmental issues were never addressed in their full range and seriousness. The lip-service might have served to divert attention from the overall thrust of the reporting, which was one-sided and hardly environmental. Cleaver (1994) writes that western media were not reflecting the dangerous environmental change which is politically defined and ideologically constrained. Speth (2004) also observes how the public's understanding of global

environmental change and sustainability issues has been badly served by the media. As the science of environmental change and biodiversity has matured, media coverage of these issues became less (cited in Roba 2012).

Indeed, strategic actions that improve climate change journalism can themselves be forms of adaptation because accurate, timely and relevant information is a critical component of resilience. But many government initiatives fail precisely because they do not invest in effective communication as apriority, and many policymakers still see the media only as a 'public outreach' channel for promoting their own messages (Shanahan,2011).

2.6. Global Environmental Commitment

The human impact on the natural environment has increased rapidly over the past century in response to population growth, rapid technological development, industrialization and agricultural expansion. Unless we change our relationship with the environment, these increasing pressures will limit the planet's capacity to supply the world's economies with sufficient water, energy and other basic resources, and bring about substantial change that will create uncertainties and instabilities (European Communities, 2007).

Sustainable development is the guiding political theme of the 21st century. Achieving sustainable development requires action in all areas of life. Promoting sustainable development is the task of every government and of the global community at large. Therefore, sustainability is also a clear priority of the United Nations (UN) (UNESCO, n.d).With the effects of man on the environment becoming more and more evident concern for the environment has been on the rise among the different nations in the world. As highlighted elsewhere, environmental issues began to crop-up starting in the 1960's and 1970's; among the most notable being the United Nations Conference on the Human Environment (UNCHE) in 1972 in Stockholm, which brought the creation of the United Nations Environment Program (UNEP).The conference also designated June 5th as World Environment Day and encouraged governments to celebrate that day each year by organizing activities aimed at promoting environmental protection. The conference also called for the establishment of an international education program (Scheese, 2003 cited in Roba 2012). The 1972 the United Nations Conference on Human Environment signaled a new chapter in international development by acknowledging that protection of the environment is a major issue which affects the well-being of people and economic development throughout the world. In

1987, the Stockholm agenda was taken forward by the Brundtland Report, which defined the concept of sustainable development and its – economic, social and environmental dimensions (Stockholm Partnership Forum for Sustainable Development Report 2012).

In 1992, the first United Nations Conference on Sustainable Development, popularly known as the Rio Earth Summit, was convened in Rio de Janeiro, Brazil to address the state of the environment and sustainable development. The Earth Summit yielded several important agreements including "Agenda 21", a plan of action adopted by over178 governments to address human impacts on the environment at local, national and global levels, and key treaties on climate change, desertification and biodiversity (United Nations Environment Programme 2011). Following the conferences the international community, in their quest to protect and conserve the environment and its immense species, entered in to numerous multilateral environmental agreements. All countries, in their efforts to promote environmental quality, adopted many multilateral environmental agreements (UNCHE 1972 cited in Roba 2012). After the Stockholm conference, many countries were committed to creating an environmental policy and institutions like the environmental protection council and environment protection authorities (UNCED 1992 cited in Roba 2012). The OECD is a unique forum where the governments of 30 democracies work together to address the economic, social and environmental challenges of globalization. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population (OECD, 2006). Most OECD countries have developed and implemented national sustainable development strategies (NSDS) in accordance with the 1992mandate of *Agenda 21*. The sustainable development strategy process offers an opportunity to build on the complementarities of programmes in the economic, environmental and social spheres to improve the long term effectiveness of government policy agendas (OECD, 2006). Martin 2002 (cited in Roba 2012) notes that, subsequent to the Rio conference countries redefined their environmental policy to achieve sustainable development. The years after the Summit in Rio saw some improvements in the quality of life for people in many parts of the world. A key governance principle that came out of the Rio Earth Summit related to the need for integrated management of natural resources. The Plan of Implementation makes some specific commitments to support integrated management of natural resources. It states that "Managing the natural resources base in a sustainable and integrated manner is essential for sustainable

development" and includes commitments for integrated management of coastal zones, land, and water (Gardiner, 2002, p.4). There is also a strong commitment to biodiversity that calls for the adoption of the ecosystem approach, as well as for the integration of the Convention on Biological Diversity (CBD) principles into national economic policies and international financial institutions (ibid).

Ten years after Rio, the 2002 Earth Summit in Johannesburg, reviewed the progress made and agreed on new action items. The Earth Summit highlighted the great importance of education as a key to sustainable development. 2005–2014 was declared as the "UN Decade of Education for Sustainable Development". UNESCO is the lead agency for implementing the decade. Starting in 2015, a world action programme would follow (UNESCO, n.d). Despite the positive effects in the aftermath and the results of United Nations Conference on Environment and Development, governments have not been implementing the plans for action the UNCED and other conferences have produced. Thus, the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 convened in order to reinvigorate the global commitment to sustainable development and review the progress (Pisano,et.al., 2012). The Johannesburg Declaration reaffirmed the commitments from Stockholm 1972 and Rio 1992 as well as some of the Millennium Development Goals. Another important deliverable – the Johannesburg Plan of Implementation (JPOI) – can be regarded as a programme of action to guide government activities, negotiated and agreed between governments covering key commitments and targets in the areas of sustainable consumption and production, water and sanitation, and energy. In addition, the Johannesburg Summit in 2002 produced the so-called *Type II Partnerships* (i.e. voluntary transnational multi-stakeholder agreements between government and non-state actors) allowing civil society to contribute to the implementation of sustainable development (Pisano, et al., 2012).

The United Nations Conference on Sustainable Development—the 'Rio+20' Summit—took place in Rio de Janeiro in June 2012. It marked the 20th anniversary of the original Earth Summit, and was intended to secure renewed political commitment for sustainable context of "sustainable development and poverty eradication", and "the institutional framework for sustainable development". At the Summit, the UN published a conclusions document, *The Future We Want*, which was agreed by the states represented (Authority of the House of

Commons London, 2013: 5). According to Banki-Moon, secretary General of the United Nations, "Rio+20 will be one of the most important global meetings on sustainable development in our time. At Rio, our vision must be clear: a sustainable green economy that protects the health of the environment while supporting achievement of the Millennium through growth in income, decent work and poverty eradication" (UN, 2012, p.123).

The green economy discussions laid the foundations for an effective transition to a low carbon economy, efficient in the use of resources, with the primary objectives of creating jobs, increasing social inclusion and, ultimately, eradicating poverty. The document calls on governments, civil society and the private sector to join, and comply with, a series of commitments that aim to adapt our economies to the limits of the planet (UNEP, 2013). Among these commitments, the two include recognizing the need for broader measures of progress to complement Gross Domestic Product with environmental and social considerations, and increasing the role of the private sector in promoting sustainable development policies(UNEP 2013).To enhance the effectiveness of Rio+20, the Department of Economic and Social Affairs (DESA) and the United Nations Development Programme (UNDP) provided assistance to 72 countries for national and regional preparations, which included national analytical and consultative processes to identify achievements and challenges and to support a renewal of political commitment for sustainable development(UNDP 2012).

Another valuable success was establishing a High Level Political Forum that will help enhance the integration of the three dimensions of sustainable development -environmental, economic and social- in a cross-sectoral manner at all levels. There were agreements to promote more coherent and effective implementation of the environmental dimension of sustainable development within the UN system (UNEP 2013). For many participants, another expected outcome at Rio was the launch of a process to elaborate Sustainable Development Goals (SDGs), which could build upon the Millennium Development Goals and feed into the post-2015UN development agenda. Such goals should protect the health of the environment, while ensuring that the needs of the most vulnerable are addressed. They would be designed to help governments and other stakeholders focus their energies and monitor progress. Critical areas for action, which may provide focus for SDGs, include water, energy, food, jobs, cities, oceans, disaster preparedness and poverty eradication, among others (UNEP, 2002)

Rio+20 set in motion key processes on important issues, including identifying the format and organizational aspects of the Universal Intergovernmental High-Level Forum meant to replace the CSD; development of global Sustainable Development Goals (SDGs); and an intergovernmental process to prepare a report proposing options on an effective sustainable development financing strategy (Implementation of the Rio+20 Outcomes in Africa, 2013). Finally, Rio+20 reaffirmed many commitments previously made in specific thematic areas, closely related to UNEP's objective, such as the adoption of the 10-Year Framework of Programmes on Sustainable Consumption and Production, the development of an international instrument for the protection of marine biodiversity beyond national jurisdiction, and the universal recognition of the human right to water and sanitation (UNEP 2013). It is very important to underline that these commitments - and others adopted on climate change, ecosystem degradation and biodiversity loss, desertification and drought- are unavoidable if sustainable development and poverty eradication are to be achieved (ibid).

2.7. Overview of Environmental Issues in Ethiopia

While Ethiopia is a country of great geographical diversity endowed with rich natural and human resources, these conditions also create huge environmental problems. Due to these environmental problems, Ethiopia is one of the most vulnerable countries in terms of the environment in Africa as well as in the world (Environmental Protection Authority (EPA 1998 cited in Roba 2012).This vulnerability of the county is derived from multiple stresses coupled with low adaptive capacity. Ethiopia's economy and ecological system are fragile and vulnerable to climate change. Environmental challenges in Ethiopia include climate change, soil degradation, deforestation, loss of biodiversity and ecosystem services, and pollution of land, air and water. Ethiopia's economy is also highly dependent on natural resources. Exploitation of these natural resources may generate large economic benefits in the short term. In the long term, unsustainable use of these natural resources increases not only environmental degradation, but it also decreases economic growth and livelihood opportunities (César & Ekbom 2013).

According to environmental policy of Ethiopia formulated in1997, natural resources are the foundation of the economy. Smallholder peasant agriculture, in some areas including forestry, is the dominant sector accounting for about 45 per cent of the GDP, 85 per cent of exports and 80 per cent of total employment. Agriculture has also been the main source of the stagnation and

variability in GDP growth caused in the main by policy failures and exacerbated by recurrent drought, natural resource degradation, and poor infrastructure. Yonas 2002 (as cited in Roba 2012), notes that one of the most ominous of all problems facing Ethiopia is environmental crisis, which threatens to precipitate and deepen the country's precarious economic and social conditions. There is a vicious cycle of natural resource degradation and food insecurity driven by absolute poverty and population growth in Ethiopia. The country is caught up in a' poverty – environmental degradation and food insecurity circle which is a complex and multi-dimensional problem with no single cause. For example, population growth is only one factor, which can be regarded as both the cause and the result of the problem. On the other hand, the problem is quite surmountable since it has been overcome by many societies in the developing world under appropriate policies (Shibru and Kifle, 1998 cited in Sisay and Tesfaye 2003).

During the last few decades, Ethiopia has experienced massive environmental degradation due to natural factors, unwise use of its natural resources, unsound ecological practices and population pressure (Bielli, et al., 2001). Environmental degradation is most severe in the highlands, especially in the northern half of the country due, in part, to different reasons. Aynalem (2014), identifies the following major reasons.

- History: long history of settlement
- Primitive land-use practices which included clearing of vegetation cover for farming and fuel, and lack of innovation in farming practices
- Vague legal environments of land ownership and uncertainty of tenure with the resultant fragmentation of land-holdings
- Government policies, including a move toward collectivization in the1980's and 1990's which deprived rural citizens a sense of ownership and entitlement to the land they farmed
- Exponential growth in population numbers
- Climate change, drought, and the resulting population dislocation
- Cultural animal husbandry involving the overstocking of grazing land as well as use of dung and crop residues for fuel
- Several decades of war and conflict (northern Ethiopia)
- Lack of capital resources for investment in environmental rehabilitation

Among the harmful consequences of environmental degradation, land degradation is the most serious environmental problem in Ethiopia. Land degradation is one of the greatest threats which strike at the basic resource of the population, particularly in countries like Ethiopia, where large proportions of the population depend on agriculture for their livelihood. Land degradation is one of the subjugating main causes for increasing numbers of people to remain in poverty, suffer from shortage of food and deteriorating living conditions (Bielli, et al., 2001).The UN Population Division (2006) predicts the population will reach 100 million by 2015, and double by 2040. This burgeoning population places an enormous strain on Ethiopia's natural resources; the fact that such a large percentage of the population is young means the pressure on the environment will only increase over the next several decades (Mogues, 2007).As population grows arable land per capita declines and the fragmentation and degradation of land through overuse increases. To accommodate the landless young generation, frequent redistribution of land occurs resulting in the possession of holdings which are too small for sufficient production and has an impact on food shortages and family income (Belli, et al. 2001).

The pressure of the population on both renewable and non-renewable resources has brought irreversible damage to the environment (Molla 1994 cited in Roba 2012). Ethiopia's potent combination of high population growth, unsustainable land use and ambiguous land ownership policy has led to the rapid loss of the biomass cover, increased soil erosion, and creeping desertification over the past several decades (ibid). In response to the increased population density and shortage of arable land, fallowing practices which were traditionally used by farmers to maintain land fertility have also been either abandoned or the periods have been shortened. The disappearance or decline of fallow periods leads to the reduction in soil fertility and land productivity. In many weredas in the northern highlands of Ethiopia, more than 90 percent of the land is used for agricultural purposes on a permanent basis and fallowing as a system of farming has completely disappeared indicating that there is serious land shortage (Markos, 1997 as cited in Bielli, et al. 2001).

A number of studies indicate that up to 400 tons of fertile soil per hectare is lost annually due to various factors from land devoid of vegetative cover as well as land where no soil conservation works have been constructed. The soil thus lost annually is from the farm lands, which make up

13 % of the total area. This kind of erosion is common at altitudes between1, 700 to 2, 600 meters above sea level and where land cultivation is extensively practiced. It is estimated that the country loses 1.5-1.9 billion tons of soil annually due to wind and water erosion (EPA, 2003).The rural farming experience indicates that subsistence agriculture is relatively inefficient, and, therefore, large areas of land are needed to meet each household needs. As the number of large extended families and new households rise, and decreasing soil fertility reduces the amount of arable land available for farming, households are often forced to share a single piece of land which increased the pressure on the land and other natural resources. The increase in family size and the lack of arable land are affecting family relationship in rural areas. Without land of their own, it is difficult for young men to marry, or they must share their relatives' existing land in order to start their own families (Central Statistics Authority (CSA 2007 as cited in Roba 2012).

Forests cover 12.3% of Ethiopia alone and deforestation is a widespread practice. The average annual deforestation rate is 1% which is high compared to other Sub-Saharan African countries (0.6%).The growing population requires more fuel wood and more agricultural production which increase needs for new farmland, which accelerates deforestation and forest degradation. It is estimated that unless action is taken to change the traditional development path, an area of 9 million ha might be deforested between 2010 and 2030. Over the same period, annual fuel wood consumption will rise by 65% with large effects on forest degradation (César & Ekbom 2013). At the local level, deforestation may not be seen as an environmental problem, but rather as a necessary part of the development process to convert lands to more intensive and profitable use. On the local level, the problem of deforestation is over stated in many cases (CSA 2007 cited in Roba 2012).

The Ethiopian population is experiencing climate change and its impacts on the environment and natural resources. Continued climate change is expected to bring greater variability, and extreme weather events (e.g. droughts) which will further drive degradation of the country's ecosystems. The impact of climate change in Ethiopia is already apparent in the increasing temperature and declining rainfall, particularly in northern parts which are exceptionally vulnerable to drought (César & Ekbom, 2013).Climate change is already taking place now, thus past and present changes help to indicate possible future changes. Over the last decades, the temperature in Ethiopia increased at about 0.2° C per decade. The increase in minimum temperatures is more

pronounced with roughly 0.4° C per decade. Precipitation, on the other hand, remained fairly stable over the last 50 years when averaged over the country. How-ever, the spatial and temporal variability of precipitation is high, thus large-scale trends do not necessarily reflect local conditions. The projected increases in the inter-annual variability of precipitation in combination with the warming will likely lead to increases in the occurrence of droughts. Furthermore, heavy rains and floods are projected to increase as well (Keller, 2009,).

Ethiopia is highly vulnerable to drought. Drought is the single most important climate related natural hazard impacting the country from time to time. Drought occurs anywhere in the world but its damage is not as severe as in Africa in general and Ethiopia in particular. Recurrent drought events in the past have resulted in huge loss of life and property as well as migration of people. The other climate related hazard that has increasingly affected Ethiopia is flooding. Major floods which caused loss of life and property occurred in different parts of the country in 1988, 1993, 1994, 1995, 1996 and 2006(Abebe, 2007).According to EPA(2011), over 7 million people still face food insecurity, making food security a critical objective for the government. Most people rely on agriculture for their livelihoods, and increasing droughts and flooding are causing major rural crises. In particular, droughts in 2003, 2009, and 2011 showed once again how vulnerable the population is: Ethiopia's agricultural system is primarily rain fed, but parts of the country are prone to droughts and flooding. While changes in the severity and frequency of drought and flood events are difficult to project, uncertainty about the exact nature of future climate change and its effects must not be interpreted as uncertainty about the need to act now to minimize future environmental damage that could derail economic progress.

Various impacts of the ongoing and projected climate change and variability are widespread in both socio-economic and natural systems and Keller (2009) has identified the following major impacts:

-Agriculture, Food Security: The increasing year-to-year variability and in-creases in both droughts and heavy precipitation events lowers agricultural production with corresponding negative effects on food security.

- Water: The availability of clean drinking water is likely to decrease due to the increasing evaporation and the increasing variability of rainfall events.

- Health: Incidences of malaria in areas of the highlands where malaria was previously not endemic. The warming is further expected to cause an in-crease in cardio-respiratory and infectious diseases.

- Ecosystems, Biodiversity: Climate change but also human drivers such as forest fires threaten forest ecosystems. Furthermore, a large number of plant and animal species is threatened by extinction, as climate conditions are changing too quickly for them to adapt.

- Infrastructure: Heavy rainfall events and floods cause damages to roads and buildings.

Thus, it is necessary to stress the relationship between the destruction of the environment on the one hand and social and health problems on the other. It is the poor and the illiterate who are most exposed to such environmental problems. This realization can propel environmentalism to the top of the national agenda. In Ethiopia, the understanding of the link between climate change and its environmental repercussions, its impact on the economy and particularly on the livelihoods of the majority of the people, is still low. The political strategies required to adapt to the impact of environmental problems are not publicly discussed. The vast majority of the people are not even aware that fundamental changes to their lives are imminent. In order to be able to adapt and cope, they have to be informed (EPA 2007 cited in Roba 2012).

2.7.1. National Commitment to Environmental Issues

Apocalyptic warnings about Ethiopia's natural environment began in the 1950s, shown in part by expatriates who were not always familiar with the country's landscape. Ethiopian environmentalists and policymakers internalized this legacy of environmentalism rooted in ecological calamity, and formulated policies bent on avoiding catastrophe, with long-term implications (Patterson 2007).For example, when the Ethiopian Wildlife Conservation Organization (EWCO) was created in1965, it adopted an exclusionary protected areas policy that prohibited human access and required forced resettlement. The policy does not acknowledge traditional land uses (for example, pasture usage in times of drought), and has limited the country's conservation success (Patterson 2007).

Public programs to rehabilitate land through reforestation, terracing, and other methods, such as those instituted by the country's socialist government in the 1980s (with funding from the World Food Program) were coercive and top-down, and not popular among rural populations. The lack

of ownership of the environmental assets created by the programs undermined the sustainability of coercive reforestation on communal land, and when socialism collapsed, destruction of infrastructure and extensive deforestation ensued (Patterson 2007).

Concern for environmental degradation in Ethiopia has been growing in recent years. The downfall of the Derg regime in 1991 allowed a new system to take appropriate actions in order to turn back to learning and quickly accepting modern principle and rules of behavior governing international as well as bilateral environmental laws (EPA 2003b cited in Roba 2012).

The supreme law of the land, the Constitution of the Federal Democratic Republic of Ethiopia, (Proclamation No.1/1995) contains provisions, which recognize the importance of the protection of the environment and the need for its proper management. These provisions are a major springboard for subsequent legislations in the environmental management, as well as for mainstreaming environmental sustainability in the political, social and economic development sectors. Further steps such as good governance, devolution of power to district level, and issue of participation and sharing of revenues among the different levels of government have been adequately tackled in legislations. There is now a favorable atmosphere for assisting and empowering grass-root communities to initiate local environmental management including combating desertification and mitigating the effects of drought (EPA 2004).

Ethiopia has actively participated in the 1972 United Nations Conference on the Human Environment (UNCHE) (often referred to as the Stockholm Conference), the Mar del Plata World Water Conference held in Argentina in 1977, the 1992 United Nations Conference on Environment and Development, the International Conference on Population and Development (ICPD) in 1994 held in Cairo, and the World Summit on Sustainable Development convened in Johannesburg, South Africa in 2002. These global initiatives have influenced national policies and increased public awareness with regards to sustainable development (EPA 2012).

The Proclamation No. 41/1993, enacted on January 20, 1993, recognizes the right of nations, nationalities and peoples to self-determination and to determine their own affairs by themselves as affirmed by the Transition Period Charter of Ethiopia and later by the Constitution. The Executive Organs of the regional governments constitute several line bureaus parallel to that of the Executive Organs of the Federal Government. This kind of regional political organizational

structure underpins major transformation in undertaking environmental and Development issues at district and grass root levels (ibid).

One of the main priorities of Ethiopia authorities was setting up the legal framework for the environment and establishment of the Environmental Protection Authority (EPA) under Proclamation No 9/1995. According to this proclamation, the Environmental Protection Authority (EPA) has the powers and duties to prepare environmental protection policy and laws, directives and systems necessary for executing and evaluating the impact of social and economic development projects on the environment and to follow up and supervise their implementation (EPA 1997 cited in Roba 2012). EPA has taken the necessary steps and embarked on the establishment of an environmental impact assessment system for the country including the preparation of procedural and sectoral guidelines as a prerequisite for the approval of new development activities and projects. The major endeavors undertaken by the authority is preparing the first comprehensive statement of environmental policy for Ethiopia which was approved by the Council of Ministers (ibid). The current government enacted a National Environmental Policy in 1997(Patterson 2007). The Environmental Policy of Ethiopia has embraced the concept of sustainable development. As its goal, the Environment Policy of Ethiopia states "to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs" (EPA, 2012,p. 17).According to, Patterson,*(* 2007),The National Environmental Policy's goals include preserving essential ecological processes, life support systems, and biological diversity; encouraging sustainable exploitation of non-renewable resources; improving the environment of human settlements; and promoting understanding of the essential linkages between environment and development. Ethiopia's environmental policy is largely grounded in international cooperation. It is based on internationally accepted legal norms and principles of environmental protection and built upon explicit policy planning, and envisages the ways and means of their achievement (EPA 1997 cited in Roba 2012). However, Patterson *(*2007) notes that, unfortunately, the policy has been difficult to translate into on-the-ground actions.

Ethiopia aims to achieve middle-income country status by 2025 while developing a green economy at the same time. This is the vision set in Ethiopia's Growth and Transformation Plan (GTP) 2010/11-2014/15 and the main agenda of the GTP is the eradication of poverty(FDRE, CRGE 2011 cited in EPA, 2012).The Government of Ethiopia (GoE) has a strong political commitment to respond to prevailing and emerging challenges of climate change and disasters. The Growth and Transformation Plan (GTP) explicitly addresses the sustainability of growth: "Environmental conservation plays a vital role in sustainable development. Building a 'Green Economy' and ongoing implementation of environmental laws are among the key strategic directions to be pursued during the plan period."(GTP 2011, p.119). To this end, Ethiopia has committed itself to building a Climate-Resilient Green Economy (CRGE) that aims to ensure economic development that pursues a low emissions path while building resilience to adapt to climate change (UNDP, 2011).

Ethiopia's Green Economy Strategy, approved in October 2011, builds on the green growth study conducted under the Prime Minister's Office in 2010. The Green Economy Strategy for Ethiopia covers seven sectors that have high carbon abatement potential – Power Supply; Buildings and Green Cities;REDD+; Agricultural/Soil based Emissions; Livestock; Transport; and Industry.(UNDP2011). In a nutshell, Ethiopia has the domestic potential to contribute to the global effort to mitigate climate change by reducing around 250 Mt CO2e emissions a year in 2030 as compared to conventional development practices, 60% less than estimated for a business-as-usual approach and near-zero net emissions. Given the projected population growth to nearly 130 million, emissions on a per capita basis would fall from 1.8 t CO2e in 2010 to 1.1 in 2030 – a decrease of nearly 40% – while GDP per capita would reach middle-income level before 2025(EPA 2011).

By making the right investments, Ethiopia will position itself to be competitive in a carbon-constrained global economy. Through initiatives like the Nationally Appropriate Mitigation Actions (NAMAs), some immediate priorities for international climate finance for low carbon development have been identified by EPA. The climate action plans will be an opportunity to build on emissions abatement initiatives and mainstream green growth into Ethiopia's regional and sectoral development (EPA 2011).The National Metrological Agency states that there are already a number of existing national policy initiatives, sectoral policies, programs and strategies

that may directly or indirectly address climate change adaptation. Accordingly, the most relevant policy and program documents that have relevance for climate change adaptation include Plan for Accelerated and Sustainable Development to end Poverty (PASDEP), Environmental policy of Ethiopia, Agriculture and Rural Development Policy and Strategy, Water resources Management Policy, Health Sector Development Policy and Program, National Policy on Disaster Prevention and Preparedness, National Policy on Biodiversity Conservation and Research, Science and Technology Policy, Population Policy and National Agricultural Research Policy and Strategy(Abebe,2007).In addition, Ethiopia has ratified many international environmental conventions and general principles of environmental regimes (EPA 1997). The Ethiopian and international environmental regimes indicate the relevance of accession to the main international environmental legal instruments from the point of view of Ethiopia's major environmental problems and priority. Despite provisions in the Ethiopian constitution, providing for environmental protection and many statutory provisions, the environment degradation continues (ibid).

The main cause for environment degradation is, however, lack of effective enforcement of various laws and orders passed by the courts. It is evident that the policies alone are not sufficient to ensure environmental quality (World Bank 1992 cited in Roba 2012). Policies which deal with these problems need serious enforcement to be adapted to local circumstances. At the local level, it is crucial to identify what local communities can do themselves, what they can do with external assistance, and what the government has to do. The country has a long way to go in identifying and implementing the appropriate policy measures (Daniel 1998 cited in Roba 2012).

2.7.2. Awareness about the Environment in Ethiopia

During the reign of Emperor Haileselassie (II), when mass media began to develop in the country, all print, radio and television outlets largely engaged in putting news and programs emanated from the center of political power. The lives and activities of the rulers of the time were prioritized and emphasized in news coverage. That implies that the participation of the larger audience was not given appropriate attention (Tadese, n.d).During the Derg regime, the content provided by both print and broadcast media were politically charged and propagandistic in nature. During both Haileselassie and Derg regimes, the media fell totally in the hands of the government with no private and public media outlets, and there was a rampant censorship

practice during both regimes (ibid). Apart from these important aspects, there was also lack of awareness and understanding about the liberalization of the media sector to be effectively used for different purposes (MOI 2006 cited in Roba 2012).

The current ruling government, on the other hand, has been endeavoring to maintain a free and diversified media scene through press and broadcasting laws (MOI 2006 and EBA 2007 cited in Roba 2012).

More to the relevance of the topic of this research, information is very crucial for decision making on environmental issues and for dissemination of current environmental information to the public at large. In view of the pivotal role that information plays, the Environmental Policy has incorporated it as one of the cross-sectoral policy issues (EPA).The environmental policy of Ethiopia designed in 1997 emphasizes the need for environmental education and awareness to have a population with knowledge, skills, attitudes, motivation and commitment enabling to work individually and collectively towards solutions of current and future environmental problems (EPA 1997).

Environmental education envisions the increasing of awareness and understanding of the environment through formal and informal education. Practically, most of Ethiopian local population and government officials may be aware of the degradation problems but not the root cause of these problems (Bekalu 1995 cited in Roba 2012). Knowledge of the root causes of environmental degradation was not given much attention in the past since the emphasis was on raising public awareness about the environmental problems. Understanding the current status and root causes of land degradation are critically important and the government has to educate, spread awareness, involve and motivate everybody in the country to conserve the local flora and fauna, soil and water resource, and all other natural assets the country has been endowed with (Bekalu 1995 cited in Roba 2012).

2.8. The Role of Media on Environmental Awareness

Critical to the realization of any novel idea of relevance and practical translation is the matter of creating and raising its awareness. In the domain of environmental issues, environmental education plays a key role in sensitizing people on the need and significance of programs carried out to address environmental problems confronting them (ROBA 2012).According to UNEP

(2007), Action can be taken in a variety of areas to increase environmental awareness and education. Some of these categories are: environmental legal rights and responsibilities and associated consequences, use of the media, awareness raising campaigns, incorporation of environmental issues in mainstream education, increasing awareness and education in target groups and encouragement of public participation in environmental matters (UNEP 2007).

Environmental awareness involves communication campaigns for reaching various audiences, developing messages and selecting and/or producing the appropriate resources and media to reach these audiences. The aim of environmental awareness is to make people from all walks of life aware of specific issues related to their surroundings, including living and non-living elements, e.g. land, soil, plants, animals, air, water and other humans, as well as awareness of their built, social and economic surroundings, and the impacts of our actions on these (ERMD, 2011).Awareness is a necessary but not a sufficient element of social change. The aims of awareness-raising activities are more limited in scope than environmental education and the processes should not be confused. While they cannot, on their own, achieve the required educational outcomes outlined above, awareness-raising can be a component of broader and more in-depth education processes (ERMD, 2011).

There is a need for communities to intensity efforts to overcome environmental problems. This could be materialized through media messages creating effective influence on the community to bring about behavioral change. Mass media are important interpreters of environmental science and policy information: The public frequently learns about the environment from news and entertainment media (Boykoff, 2009).Burgess 1990 (as cited in Roba 2012), notes that the media's ability to change the course of the environmental crisis is immense. The media has a critical role to play in helping to halt and reverse the future expansion of environmental problems and to maintain existing efforts in the community. By contrast, particular political views that are regularly marginalized from the media (like environmental issues) weaken the credibility of the parts championing them like the greens (Hiebert 2006 as cited in Roba 2012). According to Ethiopian environmental journalists association, environmental and development reporting in Ethiopian media has only recently been recognized as a priority, and the quality and quantity of such reporting has been low (Smith, 2011). In addition, the challenges that the media faces,

political or other development agenda is usually a priority and environmental protection is rarely high in the news agenda (Deacon 1999 as cited in Roba 2012).

According to EPA (2006), the overall capacity for the promotion and awareness creation of environmental concerns is weak (has not been adequately developed). The essential capacity to raise and promote environmental awareness at all levels through the enhanced and effective use of mass media is still in its infancy. More specifically, the following are still lacking:

• Strategies to promote awareness and to integrate environmental concerns through a multi-disciplinary approach into the on-going curricula development of schools and colleges;

• Properly designed programs for implementing environmental education and awareness at various levels using different media;

• Development and conducting of coordinated environmental training programs; and

• Mechanisms to monitor the impacts of the above, as well as aspects of environmental governance and stewardship.

Environmental awareness, although essential to good citizenship, is not always a prominent feature of education programmes in institutions of primary or higher learning. Agenda 21 states that education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues, moreover, education is stated to be an indispensable means of achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and effective public participation in decision-making (UNEP ,2007).

Educational and awareness efforts can target practically any sector of society. They can seek to raise public awareness broadly on environmental issues (e.g., through the media) or they may be a targeted campaign or educational effort focused on a specific sector (or target audience) on a specific issue (UNEP 2007). Environmental education and awareness plays a significant role in encouraging and enhancing people's participation in activities aimed at conservation, protection and management of the environment (Kumar, 2013,).

Adalelo (2007) is also of the opinion that environmental education is necessary to increase public awareness about effects of human activities on the environment. It is necessary to increase the public's sensitivity to environmental and development problems. People profit through environment Education, by gaining an understanding of how their individual actions affect the environment, acquiring skills are useful to evaluate various sides of issues, and becoming better equipped to make informed decisions (Roba, 2012).

The print, broadcast, and Internet media can be a powerful ally in educating the public on environmental matters. In order to perform this role effectively, it is often necessary for the government to work with the media (and sometimes educate the media). This is often done informally, through regular briefings and information centers (UNEP 2007).

By providing accurate, high-quality environmental report and engaging the public in a policy dialogue, independent media can also help citizens protect their own environmental interests (Center for International Media Assistance, 2009(cited in Ogunjinmi, et. al., 2013).Media coverage of environmental issues can heighten or diminish the amount of attention the public pays to these issues and strongly influence the political discussions that take place about the environment. In the past, the role of media in human society was seen essentially as sources of information and to influence people. It is now being proposed that the media should be understood as a process of social interaction through a balanced exchange of information and experience. This implies that participants critically analyze the role played by the media in environmental protection and progressive management (Hansen 2007 cited in Roba 2012). In a way, mass media have become an indispensable partner in global biodiversity conservation and management through their various roles of not only increasing awareness on the problems and challenges towards environmental sustainability, but also in achieving the ultimate goals of changing human perception, attitudes and behavior towards environmental resources(Ogunjinmi, et. al., 2013).

The World Bank Group (WBG) 2005(as cited in Roba 2012), states that, radio television and newspaper are considered the major media outlets in developing countries. The study also added that as is the case in developed countries measuring audience size by considering the number of households with radio/ television sets and distribution size of newspapers would determine the number of audiences in poor countries. The study argues that communal viewing, listening and

reading habits are far more common in poor countries than wealthy ones. The actual proportion of the population that consumes radio, television and newspapers is likely to be considerably higher than the proportion that owns a set and the distribution quantity (WBG 2005 cited in Roba 2012).

Wezel and Haigis (2000), write that media coverage of the environment is poisoned by inconsistencies, distortion, and misrepresentations of the data. The problem in part has been insufficiency of environmental information in printed and electronic media and the lack of depth of writers on the subject Such contributions by the press according to Ongkili (2004) have been ad-hoc and the problem sounding rather than problem solving (Ongkili, 2004 cited in Ogunjinmi, et. al., 2013).Environmental news coverage is typically devoid of scientific explanations and pro environmental mobilizing information and has been crisis or event oriented. Furthermore, coverage of environmental issues had centered on dramatic, improbable environmental risks and has emphasized problems and conflicts instead of solutions (Buell, 2005 cited in Roba 2012).

The Ethiopian public media (print and broadcast) has a long history. However, there are currently less than a dozen radio stations and a small number of print media outlets, nearly all of them in and around Addis Ababa. These media's air time on environmental protection may be seen in the context of difficulty to initiate sponsorship and fund-raising for media programs on environmental issues as opposed to doing such promotions for sports, music and other entertainment packages (EPA1997 cited in Roba 2012).

2.8.1. The Role of the Media in Creating Environmental Awareness in Ethiopia

Environmental communication through the printed media, radio, television and lately the Internet is increasing steadily in Ethiopia. In particular, the electronic media have become an important platform to inform the public on environmental issues. The most frequently used means of obtaining information about the environment are radio and television. In the major cities of the country, the print media, in particular newspapers are also regarded as an important source of information on the environment. However, the allocated for environmental problems on the newspapers and television programs is relatively small (Yoseph, 2010).

The environmental problems affecting this country as a whole are enormous. Mass media campaigns are proven to be effective tools of creating awareness, changing attitudes and

behavior of people. Such a campaign has the potential of reaching a large number of individuals and communities, and it is reasonable to assume of the mass media in general and broadcast media in particular can play an instrumental role in making such campaigns successful in Ethiopia (Center for Human Environment, 2004).

In the long history of modern media in Ethiopia, only a few radio programs related to the environment.. One of the earliest programs was an agricultural program that focused on environment related issue. The program operated under different names during different periods, including *Arsoader* (farmer), *Gibrina* (agriculture) and currently *Awedegeter* (rural forum) and *Akababi-ena-lmat* (environment and development). In short, the Amharic Service of Radio Ethiopia currently transmits two environmental programs (*Awedegeter and Akababi-enalemat)* per week (MOI 2006 in Roba 2012).

The Ethiopian Television (ETV) claims to reach 47% of the country's geography. However, the station does not have regular environmental programs, save some imported environmental documentaries aired occasionally. Even though environmental stories are starting to appear in the front pages of some newspapers, there are only few regular columns in the print media that have a little impact on the public given the high level of illiteracy in Ethiopia..On the other hand, the CSA census in 2008 has shown that both radio and television are perceived as authoritative and friendly media by most of the population in the country (CSA 2008 cited in Roba 2012). There are about 7 million television sets in Ethiopia which provide access to nearly11.9 million people, and television is one of the most powerful effective means of propaganda and persuasion. Television has become a new status symbol even in remote villages. In rural areas prosperous people have at least some access to television. The rapid growth rates of television sets will probably increase the importance of television in the future (EBA 2006 and CSA 2008 cited in Roba2012).

A further advantage of television is that it is an educational media that is helpful in teaching practical work. A televised presentation can be almost as clear as a face-to-face demonstration. The radio and television broadcasting generally makes sense of the complexities of this rapidly evolving landscape and are helping listeners to understand their place in it. The national channels are regulated by the Ethiopian Broadcasting Authority (EBA) and it is required by law for these outlets to offer environmental programs.

The national radio is the most important channel of dissemination that reaches almost all over the country. It has two regular programs on the environment. Each of the weekly broadcast programs (*Awedegeter* and *Akababi-ena-lemat*) focuses on special environmental problems (EBA2006 cited in Roba 2012).Most television and print media coverage of environmental issues are event based.

2.9. Theoretical Framework

This section discusses the theoretical framework of the study. Mainly development journalism is employed as model while social responsibility theory and framing are the constituent parts of the theoretical underpinnings within which this research is framed.

2.9.1. The Development Journalism Model

There is a close link between environment and sustainable development which is used in the broad perspective and the overall development of human beings without any distinction (Awan, 2013). This interaction can be characterized as one of interdependence. Just as development is impossible without a good condition of the living environment, so quality environment cannot be maintained in inhabited or intensively exploited areas without their sustainable development (Stojanov,R 2007).Thus, development journalism is one important model for this study.

According to Merican (n.d), journalism has become one of the manifestations of development, and an indicator of modernization in non-western societies. In response to the perceived needs and demands of development, i.e. in catching up with the west, those societies have come to develop what is called development journalism over the last few decades. The idea of "development journalism" was conceived in the 1960s at the Press Foundation of Asia. This approach to journalism emerged out of dissatisfaction with the dominance of Western news and communication ideals in developing countries, these being inaccurately covering socio-economic development. There was a real need of reflection on new type of journalism specifically designed to function in the cultural and political structures (Journalism and Development 2010).

Development journalism was first introduced in a global context much less complicated than it is today. The clear political and economic divisions gave people much simpler attitudes and ways of life compared to what we have in the 21st century. The media, like most public institutions, functioned within a much different atmosphere. Nevertheless, development journalism, when first introduced, triggered a heated debate on how journalism should be practiced (Fiji Institute

of Applied Studies, 2008). Development journalism follows the former discussions about development politics and fundamentally presumes the following: (1) Development is a central social objective; (2) the mass media play a decisive role in this process (Domatob and Hall 1983; Kunczik1995 in Wimmer & Wolf 2005).

Development journalism had different definitions in different contexts. In some places it meant the communication process being used as a tool to serve the development goals of state journalism, which was practiced by all forms of media and played the same role in promoting the total development plans of a government (Fiji Institute of Applied Studies, 2008). Development journalism comprises the reporting on ideas, programmes, activities and events, which are related to an improvement of the living standard, mainly in the rural regions. Basically, it is assumed that journalism is able to influence the development process by reporting on development programmes and activities. Accordingly, it is the journalists' duty to "critically examine and evaluate the relevance of a development project to national and local needs, the difference between a planned scheme and its actual implementation, and the difference between its impact on people as claimed by government officials and as it actually is" (Aggarwala 1979 in Wimmer& Wolf, 2005,p. 2). A more professional definition of development journalism existed in other places. There, development journalism was treated as being similar to investigative journalism. Journalists who wished to make a legitimate report on development issues needed to engage in critical examination of events, situations and processes they were reporting about. In this case, journalists had a task to observe critically and report on the whole government development process, which included planning, implementation, impact and shortcomings as they were. The role of journalists was not to support the state's development goals without questioning. Instead, it was to make sure that the development process was accountable and transparent (Fiji Institute of Applied Studies, 2008). The reporting on national and international events is only desirable if they constructively contribute to the development and improvement of the living standard (Kunczik 1995 cited in Wimmer & Wolf 2005).

2.9.2 Social Responsibility Theory

It is well -known that social responsibility theory is one of the four theories of the press that mainly focuses on the media's discharging of duty stems from their existence within the society. Serving the public interest through promotion of development activities, advocating

environmental protection- since environment is a major part of development- , etc. are among the main responsibilities of media which this theory underpins.

With regard to social responsibility theory, Mc Quail (1983) stated that its main impetus was a growing awareness that in some important respects, the free market had failed to fulfill the promise of press freedom and to deliver expected benefits to society.

According to Baran and Davis (2012), social responsibility theory appealed to the idealism of individual media practitioners and tried to unite them in the service of cultural pluralism even when this might reduce their profits or antagonize existing social elites. Social responsibility theory challenged media professionals' ingenuity to develop new ways of serving their communities.

Nerone (1995), also said that it seems an open question whether social responsibility theory makes demands on the macro level. Certainly the theory expects, some kind of stewardship of media resources on behalf of the public, certainly it expects the media to be educators. But at the sometime it avoids detailing structural changes that would allow performance of these functions.

Mc Quail, in his (1983) book, Mass Communication Theory, explained that social responsibility theory has a wide range of application, since it covers several kinds of private print media and public institutions of broad casting, which are answerable through various kinds of democratic procedure to the society. The theory has thus, to reconcile independence with obligation to society. Its main foundations are: an assumption that the media do serve essential functions in society.

2.9.3. Framing Theory

An understanding of the framing role of local and national media calls for some form of theoretical framework in order to explain why and how the media play a role in creating awareness about the environment. The framing theory has been developed by communication scholars in their examination of media contents.McQuail 1994(cited in Roba, 2012), states that the ideas of salience and framing provide frameworks through which the degree of issues can be examined and explained. In this regard, the concept of framing can be said to be a component of environmental communication theory, particularly in the study of the coverage of environmental issues in the mass media.

The framing theory has been defined and explained by various scholars. Each researcher attributes functions and specific characteristics to frames according to the specific "level of the communication" where he thinks they are placed. The first "level" is the making and treatment of news -the production of the information by journalists and the media. The second level is the message in itself -that is to say the concrete contents of news-, and the third level is the reception of the message by the audience -the effect frames have on those who receive them(Amadeo,2007).

The news media serve as valuable sources of information and powerful modes of communication. This power controls much of what people understand of events that occur around the world on a daily basis. The way information is transferred to its recipients comes through various forms of communication all of which is framed to meet the goals of the providing source. In social theory, a 'frame' consists of a schema of interpretation, collection of anecdotes, and stereotypes that individuals rely on to understand and respond to events. In communication, framing defines how news media coverage can shape mass opinion by using these specific frameworks to help guide their audience to understanding (Cissel 2012). Framing theory provides an explanation about the critical role the media can play in influencing human perception of issues and events. It highlights how the media urges users to think in a certain way about the content they disseminate (McQuail, 1994 cited in Roba 2012).The major premise of framing theory is that an issue can be viewed from variety of perspectives and be construed as having implications for multiple values or considerations. It refers to the process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue as a result of the influence that media messages create on them (Chong and Druckman, 2007).

In a nutshell, framing is a comprehensive theory that includes the news making process, the formal characteristics of the pieces of news as well as their reception by the audience. It focuses on underlying social values shared by journalists and their community, values that are either explicitly mentioned or suggested in the news. It explains the transfer, strengthening and modification process of the social set of values, symbols and norms from the mass media to society and vice versa(Amadeo, 2007).

CHAPTER THREE

METHODOLOGY OF THE STUDY

As it is discussed under the earlier chapters, the main objective of the study is to examine how Ethiopian Broadcasting Corporation (EBC) practices environmental coverage and explore corroborated challenges. To meet these objectives, the study employed both qualitative and quantitative research methodologies.

3.1 Qualitative Research Methodology

Qualitative research methodology involves collecting data in the form of words or pictures *(*Kohlbacher, 2006), and it is concerned with developing explanations of social phenomena (Hancock 2002). That is to say, it aims to help us to understand the world in which we live and why things are the way they are. It is concerned with the social aspects of our world and seeks to answer questions about:

- Why people behave the way they do;
- How opinions and attitudes are formed;
- How people are affected by the events that go on around them;
- How and why cultures have developed in the way they have; and
- What differences exist between social groups?

In a way, qualitative research is concerned with finding the answers to questions which begin with why, how and in what way (Hancock 2002,).

One advantage of qualitative methods in exploratory research is that use of open-ended questions and probing gives participants the opportunity to respond in their own words, rather than forcing them to choose from fixed responses as quantitative methods do. Open-ended questions have the ability to evoke responses that are meaningful and culturally salient to the participant, unanticipated by the researcher, and that are rich and explanatory in nature (Mack,N,et. al., 2005).

Another advantage of qualitative methods is that they allow the researcher the flexibility to probe initial participant responses – that is, to ask why or how. The researcher must listen carefully to what participants say, engage with them according to their individual personalities and styles, and use "probes" to encourage them to elaborate on their answers (ibid).

Denscombe (2007) identified some features of qualitative research. Accordingly, qualitative research relies on transforming information from observations, reports and recordings into data in the form of the written word, not numbers. Qualitative data are better suited to descriptions. Whether dealing with meanings or with patterns of behaviour, qualitative researchers can use detailed and intricate descriptions of events or people. Such thick description is necessary in order to convey the complexity of the situation

This research, as it seeks to examine the practice and challenge of environmental coverage in Ethiopia, in the case of Ethiopian Broadcasting Corporation (EBC) has primarily employed qualitative research tools. However, the use of quantitative method particularly for the content analysis part of the study has served the purpose of triangulation of data. In-depth interviews have been used under this research as a primary tool, and content analysis has also been employed to supplement the primary tool.

3.1.1 In-depth interviews

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. For example, we might ask participants, staff, and others associated with a program about their experiences and expectations related to the program, the thoughts they have concerning program operations, processes, and outcomes, and about any changes they perceive in themselves as a result of their involvement in the program (Boyce & Neale 2006).

In-depth, qualitative interviews are excellent tools to use in planning and evaluating Extension programs because they use an open-ended, discovery-oriented method, which allows the interviewer to deeply explore the respondent's feelings and perspectives on a subject. This results in rich background information that can shape further questions relevant to the topic.

In sum, in-depth interviews involve not only asking questions, but systematically recording and documenting the responses to probe for deeper meaning and understanding (Guion; Diehl; McDonald, 2011).

The advantage of in-depth interviews is that they provide much more detailed information than what is available through other data collection methods, such as surveys (Boyce and Neale 2006). In-depth interview may also provide a more relaxed atmosphere in which to collect information— people may feel more comfortable having a conversation with interviewer about their program as opposed to filling out a survey(Ibid).

In-depth interviews in this study have helped to probe into the responses and reflections of journalists, editors and media managers who were selected to be the respondents for the study. In particular, these interviews have made the researcher able to explore views and perspectives of the interviewees regarding the practice, framing mechanisms and challenges during practicing environmental coverage in the Ethiopian Broadcasting Corporation.

More importantly informants will be selected purposely. The need to conduct the in-depth interview as explained above is to get intensive individual interviews with a small number of respondents to explore their first hand views and opinions.

3.2 Quantitative Research

A quantitative research method involves the generation of data in quantitative form which can be subjected to rigorous analysis in a formal and rigid fashion. More specifically, quantitative methods allow researchers to assign meaningful numerical values to variables and then to analyze those values using descriptive and inferential statistics to describe the data, infer population characteristics from sample attributes, and discover significant differences between groups/conditions and relationships between variables (Kothari 2004), 5).Among the various quantitative research techniques, this research has utilized quantitative content analysis to examine contents of environmental programmes and news in EBC..

3.2.1 Content analysis

In order to examine the practices and challenges of environmental coverage in Ethiopia in the case of Ethiopian Broadcasting Corporation, the inclusion of content analysis to the methods was imperative and supportive. Contents on written news, audio-visual news and documents have

been used as an object of analysis for the study. The texts are selected randomly to do the quantitative analysis.

Quantitative content analysis is an empirical method used in the social sciences primarily for analyzing recorded human communication in a quantitative, systematic, and inter -subjective way. Material for such analyses can include newspaper articles, films, advertisements, interview transcripts, or observational protocols, among others. Thus, a quantitative content analysis can be applied both to verbal and visual material.

A quantitative content analysis utilizes a variety of tools and methods to study media content. The broad nature of the field has led to various definitions over the years. According to Berelson (1952) content analysis is "a research technique for the objective, systematic, and quantitative description of the manifest content of communication". Holsti (1968,p. 55) states that content analysis is "any technique for making inferences by systematically and objectively identifying specified characteristics of messages" while Kerlinger (1986,p. 133) defined content analysis as "a method of studying and analyzing communication in a systematic, objective, and quantitative manner for the purpose of measuring variables." More recent definitions have specifically included references to social media, sentiment analysis, and big data approaches. Overall, quantitative content analysis transforms observations of found categories into quantitative statistical data.

When measuring the news documents that will be used in this research, the authenticity and credibility would not be questioned since almost all news documents are to be collected from their original possessors.

3.3 Sampling

EBC has two prime time news transmissions every day at 1 pm and 8 pm. Unless there comes some breaking news or some special events, the remaining eight transmission periods every day from Monday to Friday, and the five transmission periods every Saturday and Sunday are utilized for a re-run of the day's news. It is also noteworthy that EBC runs pretty much the same news items in both its radio and TV channels. However, the researcher has taken only TV news packages for its audio-visual advantage. The researcher, therefore, has found it justifiable to take 60 packages of prime time TV news for each month that run at 1 pm and 8 pm for the days

selected within the specified time frame. In total, 300 TV news packages have been taken for the five month period that spans from March to July 2014. This time period has been selected to balance the seasonal proportion of environmental coverage and Five month has been found to be representative for this study.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

It is important to note at the outset that this research has considered practices and challenges of the Ethiopian Radio and Television Agency before it was renamed and reformed into the Ethiopian Broadcasting Corporation (EBC) under Proclamation No.858/2006. The data of this study was collected before its renaming and reformation, resulting in the application of the name EBC instead of ERTA in this study. Understandably, however, the researcher, as one working in EBC himself, understands that situations have not changed so much regarding the practice of environmental coverage in EBC and findings in the research will still be relevant to the existing conditions.

This chapter combines the presentation and analysis of the data obtained both qualitatively and quantitatively through in-depth interviews and content analysis respectively. This emanates from the objectives and questions of the research raised in earlier chapters. To make the results of the research more comprehensive and clear, tabulated presentations are used when necessary.

4.2 Topical Data Presentation and Analysis

4.2.1 Demographic Details of Interviewees

Table 2.Demographic details of respondents

	No. of interviewees	**Work Experience at EBC**	**Work Experience as Environmental Journalist or editor**
Reporters with EBC	3	2-19 years	2-7 years
Editors with EBC	2	6 years and 7years	2 years and 4 years
Program Producers	2	18 years and 3years	3 years
News and Program Media Managers with EBC	2	6 years and 7years	
Sum total	9		

EBC employees from both news and program sections have been selected for the in-depth interview in this research. . As indicated in the above table, three news reporters, one news editor, one program editor, two program producers, one program manager, and one news media manager participated in the interviews. Totally nine interviewees took part in the in-depth interview.

For quantitative content analysis both TV news and programs have been selected for the period between March and July, 2014. The practice with EBC is that unless there is special and organizationally planned project news, both TV and radio news are almost the same. Therefore, it made sense for the researcher to use only TV news items for their audio-visual advantage. In terms of programs, EBC produces two environmental programs a week namely, *Sinehizibna Akababi* (population and environment) for radio and *Akababiachin* (our environment) for TV. The programs are different from each other and they are run two times a week one of which is a rerun for each. Therefore, for the five month period between March and July 2014, 20 radio (*Sinehizbina Akababiachin)* programs have been taken as a sample for the research. Similarly, 20 TV (*Akababiachin*) programs have been taken for the study. Therefore, the researcher has based his content analysis on a combined sum of 40 radio and TV programs on the environment.

4.2.2 Coverage of Environmental Issues in EBC News Packages

As will be indicated in the table below, EBC has 10 periods for news casting every weekday and 7 news transmission periods for Saturday and Sunday each. For each day, there are two prime time news hours a day, 1 pm and 8 pm, and the rest of the news casting largely involves a re-run of the prime time news.

Table 3. Time Table for EBC's Daily TV news casting

	Monday-Friday	Saturda6y and Sunday
Television	-morning 6 am -morning 7 am -morning 8 am -morning 9 am -morning 10 am -after noon 1 pm (Prime time) -evening 8 pm (Prime time) -evening 9 pm -evening 10 pm -evening 1 am	-morning 6 am -morning 7 am -morning 8 am -morning 9 am -After noon 1 pm (Prime time) -evening 8 pm (Prime time) -evening 9 pm

This study mainly looked into the extent of coverage of environmental issues in the news packages and selected environmental programs. It does not include details of the meanings or semantics of the content in the environmental news and programming exercised by EBC. As a result, coding procedures and meanings audiences make out of these contents are not made part

of this research undertaking. Instead, it approaches the subject of analysis from the perspective of reporters and program producers to relate the content analysis to their practical experiences of producing these contents. Accordingly, the following table indicates how much coverage environmental issues received in the news packages broadcast for a period of five months between March and July, 2014. With EBC, the radio and TV news is almost the same in content and angles taken. Therefore, the researcher has chosen TV news items for their audio-visual advantage.

Table 4. Number of news packages and environmental news for the period study

Month	**News packages**	**Total Environmental News**
March	60	16
April	60	11
May	60	6
June	60	12
July	60	20
Total	300	65

The above table indicates that out of the 60 news packages randomly taken for the period of March 2014, the researcher located 16 news items related to the environment. Out of the 16 environmental news items, 4 were broadcast at 8 pm in evening and the rest 12 environmental news stories were aired at 1 pm in the afternoon. In this regard, it may be said environmental news gained prime time significance. However, this is common to all types of news as they are often run as prime news and rerun every news hour of the day.

Eleven of the environmental news for March 2014, are event oriented which covered meetings, campaigns, workshops, etc while 5 of them were a result of planned organizational project news by the corporation. It goes without saying, therefore, that the events and particularly the

campaign news are easier to fit in to the developmental journalism that EBC is committed to practicing.

Then, out of the randomly taken 60 news packages for the period between April 1, 2014 - April 30, 2014, the number of environmental news stories that were broadcast on TV amounted to only 11. Of these 11environmental news, 9 were aired at 1pm in the afternoon, 2 were broadcast at 8 pm. Again10 of these environmental news stories are event oriented that covered meetings, campaigns, workshops etc while only1 environmental news is done as project planned and designed by EBC. In terms of both the inadequacy of environmental news coverage and EBC's orientation to positive developmental news, the researcher's assertions are made to the month of March, 2014 apply here, too.

Of the same 60 packages that the researcher picked for the period between May 1 - May 30, 2014, only 6 news items are environmental related stories. Of these, 2 news stories were aired at 8 pm and the rest 4 environmental news were aired at 1 pm. Five of these news items are, once again, event oriented stories covering meetings, campaigns and workshops, among others. EBC did only one project based news for this period. Therefore, environmental coverage in this particular month is insignificant as compared to the other months.

For the period between June 1 - June 30, 2014, of the 60 news packages, 12 news stories randomly picked by the researcher were found to be environmental related news. Out of the 12 news items related to the environment, 7 of them were broadcast at 1pm and 5 at 8pm. Nine of these news stories are event oriented while 3 were made out of EBC's project designed for environmental issues. Clearly, the trend continues as findings keep indicating EBC's inadequate coverage of environmental issues and its preoccupation with events and campaigns which are convenient for crafting positive news on the country's development. Hence, some version of development journalism seems to be governing EBC's news selection and reporting practices.

Similarly, 60 news packages were taken for the period between July 1 - July 30, 2014, out of which 20 news stories were on the environment and related issues, this month is, therefore, when the largest number of environmental news ran on TV. This can perhaps be explained by the assertions made by the figure on the above table established that more environmental news coverage often awaits the rainy season (summer) when an increased number of events and

campaigns are staged. Out of the 20 environmental news items, 15 were run at 1 pm and the rest were aired at 8 pm. Not surprisingly, 16 of the environmental news aired in July are events while the other 4 were project initiated.

As illustrated in the table for the coverage of environmental content for the months selected, environmental issues were covered inadequately. The coverage is in fact much lesser than at least one environmental news item a day, which research respondents averaged out to be how frequently these issues are covered by EBC. Result from the interviews also agree with the quantitative findings in that most environmental news on EBC are indeed event oriented which covered meetings, campaigns, workshops etc. And organizationally planned, project-based environmental news stories are very limited in number.

4.2.3 Coverage of Environmental Issues in EBC Environmental Programmes

As it is illustrated in the table below, EBC's main TV and Radio channels run one environmental programs each once a week, and both programmes are re-run once a week as well. Each program runs for a duration of 20 minutes. *Sinehizbina Akababi* (Population and the Environment), the radio program on the environment, is aired at 12:20 pm on Tuesdays and re-run at 7:20 am every Thursday while *Akababiachin* (Our Environment) plays in at 12:20 pm on Mondays and is re-run every Friday at 7:20 am in the morning.

Table 5. Schedules for TV and Radio Environmental Programmes in EBC

Program name	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Sinehizbinaakababi(population and environment) radio program		12:20 pm After noon		7:20 am Morning (repeated)			
Akababiachin (our environment) TV program	12:20 pm afternoon				7:20 am Morning(repeated)		

In this section, both TV and Radio environmental programmes of EBC will be looked into through the analysis of data obtained for the same period used for the news analysis.

Table 6.Data Gathered from EBC's Radio and TV Environmental Programmes

Month	SINEHIZB ENA AKABABI (population and environment) **(radio)**	AKEBABIACHIN (our environment). **(TV)**	**Total environmental programs**
March	4	4	8
April	4	4	8
May	4	4	8
June	4	4	8
July	4	4	8
Total	20	**20**	**40**

i. ***Sinehizbina Akababi*** **(population and environment)**

This is a weekly radio environmental program aired, as mentioned in this study, every Tuesday at 12:20 pm (and rerun every Thursday morning at 7: 20 am for 20 minutes). As it combines environment and population, attempt has been made to identify largely or purely environmental issues from population related ones. The following table is an attempt made to work out this separation of themes.

Table 7.The coverage of environmental issues in the Sinehizbina Akababi programme

Month	***Sinehizbina Akababi*** **(population and the environment)program(radio)**	**Number of Programmes specifically on environmental issues**	**Population related programs**
March	4	1	3
April	4	0	4
May	4	1	3
June	4	0	4
July	4	2	2
Total	**20**	**4**	**16**

Needless to say, the number of programmes for five months cannot exceed 20 because there are only twenty weeks in five months. So this does not help to determine adequacy of coverage.

However, it is evident enough that, although environment appears an equally important component of the *Sinehizbina Akababi* programme just at face value, the programme actually covers environmental issues rather scantly. In March, 2014, for instance, only one out of four programmes was focused on the environment, while there was no environment specific program in April at all. Similarly, on May only one of the *Sinehizbina Akababi* program is closely related to the environment while the rest three were oriented towards themes on population. Like it was the case in Aril, 2014, no environmental program was produced in June, 2014 with all the programmes focused primarily on population related issues. Interstingly, similar to findings for the news analysis in this study, July was the month during which a relatively larger number of programmes were made on environmental issues. Two of the programmes aired for that month focused on environmental issues. One of them concerned itself with awareness creation on deforestation while the other covered soil and water conservation activities in the country.

ii. *Akababiachin* (Our Environment)

It is already highlighted that *Akababiachin*is EBC's only weekly TV program on the environmental program that runs for 20 minutes once a week on Mondays at 12:20 pm and re-runs once more every Friday morning.

Table 8.The coverage of various environmental issues in Akababiachin programme

Month	***Akababiachin*(our environment) program TV**	**Environmental issues**			
		soil conservation	**Water conservation**	**Afforesting and reforestation**	**others**
March	4	2	0	1	1
April	4	1	2	0	1
May	4	1	3	0	0
June	4	1	1	2	0
July	4	1	0	2	1
Total	**20**	**6**	**6**	**5**	**3**

In the five month period taken for the purpose of this study, 20 programes were aired of which 6 were on soil conservation activities, 6 others were produced in the area of water conservation and five on afforestation and reforestation endeavors in the country. Only three programs were devoted to other environmental issues.

Vividly enough, EBC's development journalism is well observed here as most programs are on environmental conservation activities which make positive news while environmental degradation and other adversaries of the environment are undermined in EBC's environmental programming.

4.2.4 Journalists` views on major environmental issues to which they give more Coverage

Through interviews held with journalists, it was attempted to explore what particular issues are often emphasized in EBC's news and program coverage. Accordingly, respondents identified a couple of environmental problems and mitigation efforts that they significantly cover in their news stories. Accordingly, a reporter recalled that he made "so much news on soil and water conservation". He added:

I make a lot of news out of achievements on afforestation, reforestation, soil and water conservations in Oromiya and Amahara Regional States and other parts of the country (Interviewee 3).

Another reporter highlighted that he gives more emphasis to "deforestation and soil degradation because these problems are the major causes of draught and production in Ethiopia" (Interviewee 1).

A program producer, on his part, notices a shift of focus in his productions from producing more programs on deforestation and air pollution to water and soil conservation. He has also said that "marine plants and animals are gradually being brought to focus in my programs" (Interviewee 4).

Another reporter, however, argued that environmental problems such as "soil erosion, land degradation and deforestation are all interrelated and I give equal emphasis to them in my reporting" (Interviewee 5).

A senior editor interviewed for this research explained that EBC's focus on environmental issues in Ethiopia needs to be understood more broadly. For him EBC gives due emphasis for such environmental concerns as land degradation, deforestation and global warming because these problems are adversely affecting the nation. He continued:

Land degradation is, for instance, severe in some zones of the Oromiya Regional State such as eastern Harerge and Borena as well southern Wollo and eastern Gojam zones of the Amhara region. Global warming is affecting places like Gode in Somali region and in Logya in Afar region. Deforestation has greatly affected locations such as the Abay Gorge, mount Entoto and others. Therefore all these problems are the major challenges that the country has faced and EBC gives attention to them equally.

Apparently, respondents priorities of issues they cover more tally with their identified environmental concerns in the Ethiopian context. An increasing focus on environmental conservation activities such as soil and water conservation, as noted by a respondent, may, however, be explained by the corporation's commitment to covering positive development stories. In other words, a version of developmental journalism seems to be in order here.

When asked about what environmental issues they regard as very important in the Ethiopian context, most respondents came up with similar lists of environmental concerns. These include soil erosion, deforestation, land degradation, climate change, chemical waste and air pollution. While these concerns are greatly relevant to Ethiopia's environmental situation as much as they are to the world at large, the respondents, however, have found it difficult to provide study-based assertions on the most prevalent environmental problems in Ethiopia.

It is commendable that environments journalists are well aware of pressing environmental issues in Ethiopia as it helps them direct their focus on the right issues. However, EBC may need to be even more vibrant in identifying these issues in their order of vitality as evidenced by research findings.

4.2.5 Frequency of EBC Reporting on the Environment

All respondents of this research agreed that, on average, EBC airs at least one piece of news on the environment daily. They also maintained that most of these news stories, however, are event or/and campaign oriented, and in the absence of such events or/and campaigns, the corporation

may likely run out of environmental news. Although not frequently, Environmental journalists in EBC are also said to have planned some projects for broader news and program productions on environmental themes. As a reporter put it, such practice is, however, "not very common for EBC" (Interviewee 1). Interviewee 2, on his part said:

Personally I do not cover typical environmental stories every day. However, I frequently cover stories on the country's agricultural development which I consider to be directly or indirectly related to environmental issues.

One of the editors interviewed for this research also established that it does not mean EBC airs just one environmental news item a day. He explains:

The amount of environmental news transmitted per day may increase in the summer time (rainy season). This is because, in the summer, there are more campaigns of reforestation, afforesting and other environmental conservation activities (Interviewee 5).

For environmental program producers, the practice, as explained by the two producers, is that there are seven program producers in their department and, on average, each produces one environmental program a month for *Sinehizbina Akababi* program (Radio) or *Akababiachin* program (TV) or for both (Interviewees 4 and 5).

Obviously, the size of coverage for environmental issues is much less significant than the Corporation's seeming engagement in helping the public to create more awareness on environmental concerns and the need for vibrant conservation mechanisms. And largely event-based coverage and preoccupation on mainly environmental conservation campaigns, etc. may give a wrong impression that environmental degradation and related phenomena are less important than they actually are. What the practice of environmental coverage may continually need to do, however, is that it pursues an approach whereby it brings to focus current and present dangers as well as potential threats of the environment without undermining opportunities that can be seized through activities that help revitalize it. By so doing, the corporation may intensify its engagement as a socially responsible media particularly when it claims to be fashioned as a public service broadcaster.

4.2.6 Views on the Adequacy/Inadequacy of Coverage of the Environment by EBC

None of the research respondents believes that EBC as an Corporation and the respondent as a journalist covers the environment adequately enough to claim any significant contribution to creating public awareness on issues around the environment. In this regard, the Corporation seems to fail to be understood as and perhaps to materialize a socially responsible platform at least for its coverage of the environment in its news and programming Let us enlist some responses concerning the inadequacy of EBC's coverage of environmental issues.

EBC is not covering environmental issues adequately….because enough time is not allocated to covering these issues and the reporting is not done in the required detail (Interviewee 1)

EBC is giving increasing attention to environmental issues; however, the coverage is not big enough. Given the magnitude of environmental problems, a lot remains for EBC to cover them adequately (Interviewee 2).

The environmental programs produced by EBC often lack depth and width due mainly due shortage of appropriate human and material resources (Interviewee 4).

EBC is not informing the public adequately. Despite their high level of seriousness, issues such as deforestation, soil erosion, and land degradation, and air pollutions are not covered sufficiently. Therefore, EBC has not become the dependable source of information for the public to raise awareness on the environment (Interviewee 5).

It can be concluded from the above assertions that reporters and program producers unanimously agree that environmental issues deserve wider and more in-depth coverage by EBC for the Agency to make a meaningful effect on its audiences regarding environmental issues and problems.

4.2.7 Sources of Information for EBC's Environmental News and Programs

Based on data obtained from in-depth interviews with journalists, editors and program producers, the sources of information for EBC's environmental news and programs can be categorized into two. The first and major sources are events including conferences, meetings, training arrangements, grassroots level environmental campaigns, etc. that are often organized by relevant organizations such as the Ministry of Agriculture, Environmental Protection Authority,

NGOs, Universities, research institutes and other development actors. The second sources are often identified by the reporters and producers themselves when they engage in program producing and news making exercises based on plans set for projects by them or the corporation at large. These include research works, books, regional agricultural bureaus, farmers, and of course the organizational sources in the first group of sources mentioned above.

4.2.8 Respondents' Views on Framing Environmental News and Programs in EBC

It is interesting to note that while the respondents enlisted a range of environmental issues as important, they, however, largely differ in their view of how environmental issues and stories are framed in EBC news and programming. A respondent, for instance has the following to say.

I believe all reporting on the environment has soil erosion and then reforestation as its main themes to get across to target audiences (interviewee 1).

Another respondent, however, has a different view.

Ethiopia has planned to achieve the green economy by 2020. Therefore, EBC is working towards creating public awareness on overall environmental protection to achieve the green economy development and food security (Interviewee 3).

EBC endeavors to shape audiences' behavior through influencing them to detest deforestation practices as well as understand the consequences of global warming, soil erosion, depletion of natural resources, etc. (Interviewee 6)

For another respondent, the framing of environmental issues in EBC "should be seen in line with the developmental journalism the corporation is practicing". He further argued that the environmental issues, like other topics, are framed in a manner that "they enable people to acquire developmental thinking" (Interviewee 4). The aims or/ and frames of news and programs on the environment for this respondent are multidirectional. Firstly, they strive to make developmental thinking prevail in the nation. Second, they encourage industrial owners to participate on reduction of environmental pollution activities. Thirdly, they aim to enable people to engage in environmental conservation activities. Even more, they familiarize people with environmental policies, strategies and laws of the country (Interviewee 4).

Noteworthy is that journalists' perception of framing in relation to practices of environmental coverage within EBC varied from considering soil conservation and reforestation as major frames to various identifying general topics designed to various segments of audience such as environmental policies and strategies, green economy objectives, and so on. However, they mostly agreed that Environmental news and programs in EBC are largely event and campaign oriented. In other words, workshops, conferences and summits, etc at global, regional, national and local levels and grass roots developmental campaigns such as afforestation, reforestation and other environment conservation activities initiated most environmental news and programs in EBC. This appears to go in line with the EBC's orientation toward development journalism that tends to favor the positive face of a story with achievements and endeavors to realize the country's development goals brought to light.

4.2.9 Challenges of Reporting on Environmental Issues in EBC

All respondents complain about the logistic challenges when they do environmental news and programing. In particular, they maintained that some remote rural areas have hardly functional roads and it is so troublesome for them to go to such locations to access environmental news and to produce programs. The corporation, some also said, does not have enough vehicles and allocating these scarce resources for reporters who want to cover important events and situations particularly in rural Ethiopia is not always an easy process.

The respondents also enlisted other problems that are equally, if not more, important challenges while reporting on environmental issues. These include lack of material sources such as research findings, books, etc., reluctance of some farmers to give information and views to journalists, unwillingness of some officials to provide sufficient information, thereby hindering critical reporting, and, of course, lack of training and professional knowledge on the part of environmental journalists themselves. An editor also pointed out that he believes "the EBC management sometimes ignores environmental news giving priority to politics and current affairs" (Interviewee 6). This view contradicts with the opinion of another editor said that EBC's management is "committed to substantially covering environmental issues" (Interviewee 7) although he still believes that more critical reporting on environmental issues that consider both strong and weak performance of the country in the field.

A media manager agrees that EBC at times positions environmental projects secondary to other subjects. He pointed out:

EBC is often busy doing routine and current affair programs and news. Therefore, project news and programs are often ignored and there prevails usual or redundant angle used in its news as well (Interviewee 8).

Another respondent also agrees that EBC largely dwells on positive environmental news and programs with less coverage for negative issues involved around the environment. He further argued that the corporation needs to engage in critical environmental reporting activities (Interviewee 9).

In general, environmental journalists do not seem to be practicing critical reporting and substantial programming perhaps because the notion of development journalism is closely related to covering positive development stories with weak developmental performance in the field of environmental protection gaining insignificant attention within EBC's journalistic exercises. When journalists are influenced to only cover positive environmental developments, it may at times be done at the cost of more pressing topics and concerns on environment. Inability to address issues of high social significance such environmental challenges entail failure on the part of EBC and its journalists to fulfill social responsibility.

It may, however, be important to quickly mention here that although most respondents seemed to be more interested in talking about the challenges of environmental reporting in EBC, some have seen opportunities for environmental journalism in Ethiopia in general and within EBC in particular. A media manager has the following to say:

There are a lot of opportunities. The environment is of high concern for the Ethiopian government. The government has planned to achieve the green economy strategy in the country. EBC, therefore, has an opportunity to work on environmental issues. It can be well informed with deliberations of many workshops, trainings, meetings, seminars all over the world. This is the best input and opportunity for EBC. Besides, substantial environmental information and facts are easily available through the internet and other media technologies. Journalists also tend to show increasing eagerness to know about and work on environmental issues Interviewee 8).

Somehow, the opportunities for EBC to make an impact through its environmental reporting and programming are real. However, these opportunities need to be cleverly captured through journalists' vibrant engagement in reading and reporting on and training in comprehensive environmental issues. Similarly, the Corporation needs to materialize its virtual commitment as a socially responsible broadcaster to making the environment a major development issue to be covered substantially in EBC's news and programs.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

The purpose of this research is to examine practices and challenges of environmental coverage in the Ethiopian Broadcasting Corporation (EBC). EBC has recently been renamed Ethiopian Broadcasting Corporation (EBC), but practices and challenges, the researcher understands as a journalist in EBC, have yet to change and findings will remain relevant to existing practices and challenges.

In specific terms, the study has sought to explore how adequately or otherwise environmental issues are given attention by EBC, what frames environmental news are often put into in the Corporation's practices of environmental coverage. Moreover, it is within the objectives of this research to identify major sources of information for EBC's environmental news and programmes as well as to identify challenges related to covering environmental issues at EBC. Number of environment coverage is also another aspect of the study.

The researcher found it relevant to frame the study within the theories of social responsibly, and framing, a theories which helped to view salient perspectives entertained by a given media house, in this case EBC. Development journalism has been also employed as a model.

Both qualitative and quantitative methods of research have been employed in this study. Qualitatively, practices and challenges of environmental coverage in EBC have been explored through in-depth interviews with environmental journalists in the corporation. The purpose of triangulation has then been served through content analysis of environmental news and programmes that EBC aired for five consecutive months in 2014.

Findings generally indicated that EBC has given inadequate coverage to environmental issues both in terms of the level of significance it attaches with environmental news and also in terms of treating a range of pressing environmental issues even within already existing environmental TV and radio programmes. Budding environmental journalists with EBC have also lacked professional training in environmental journalism although they have various levels of journalism training and this seems to add to limiting their potential for vibrant engagement in

environmental coverage and program production. Moreover, the practice of 'development journalism within EBC seems to have been perceived as covering positive development news stories and this appears to have undermined critical reporting on issues threatening the environment at various levels. It can fairly be argued that environmental issues are often framed within a positive lens through which environmental news and programmes are largely viewed as indicators of growth and development the country is witnessing. Critical engagement for environmental coverage also seems to be stifled by the limited sources of information from which they access news. In particular, the preoccupation with covering events, meetings, summits, etc. seems to have led EBC's practice of environmental journalism to depend primarily on official sources and this may have hindered the opportunity for critical journalism. Challenges with environmental reporting relate to lack of continual training for environmental reporters and program producers, shortage of material resources or/and failure on the part of journalists to consult a variety of materials available online and offline. Limited space for critical reporting on environmental issues is also an important challenge the study has identified for EBC to exhibit social responsibility through comprehensive coverage of the environment.

5.2 Recommendations

Based on the findings of this study, the following recommendations are in order.

- If EBC means to contribute to creating any meaningful public awareness on the environment, it will have to design broader and comprehensive projects so as to engage in more vigorous coverage of the environment.
- Even in existing platforms, environmental news in EBC needs to gain more frequency, and at least one important news story on the environment needs to be aired every day.
- Findings indicated that environmental news stories are often aired at 1pm. in the afternoon. EBC may find it more effective to air them at 8 pm in the evening so that they are attended to by a larger mass of audience.
- Most EBC's environmental news stories gathered for this study have been found to be event oriented and well researched and in-depth news are lacking in.. EBC may be more influential institution to effect change if it involves featuring deeper and pressing environmental stories.

- In programs, there are only two environmental programs in EBC, one in radio and one in TV. This is not adequate in terms of the magnitude of the issue in the country. Therefore EBC should give attention on the number.

- Not only that the 20 minutes allotted for environmental programmes are insufficient, thereby the need for more time allocation; but also these programmes should engage audiences better.
- Apart from using source from government officials, institutions and events, the programs should also entertain other sources like: non-government institutions and others.
- Journalists should get persistent trainings and workshops in order to have a wide understanding of environmental issues.

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APPENDIX

Interview Guides for In-depth Interviews with Reporters, Editors and Media Managers

Questions for reporters (journalists)

1. For how long have you worked in this department/organization?

2. What is your understanding of environmental reporting?

3. What is your understanding of environmental issues surrounding the country?

4. What do you consider to be the Country's major environmental problems?

5. Which environmental concerns you prioritize in your reporting?

6. It is obvious that one of the thing when we deal with development, that comes in for front is environmental issues, so how often that you as a reporter and your organization as a media institution gave priority and focus to this important issues of development?

7. How does your media organization frame and present environmental issues?

8. How frequently you report on environmental issues in Ethiopian radio and television agency?

9. In your own view, do you think that the country's environmental problems are being reported by your organization to the community adequately?

10. From where and how do you get the information for your environmental reporting?

11. What are the challenges that you have faced so far in reporting environmental issues?

12. As a reporter what are the challenges that you witnessed and experienced while reporting environmental journalism?

13. What are the best experiences and opportunities that you have enjoyed as a reporter while you are reporting on environmental issues?

FOR EDITORS

Questions for Editors

1. For how long have you worked in this position?

2. How many environmental journalists do you have in this organization?

3. Approximately, what percentage of daily news/programs covers environmental issues?

4. What is your understanding of environmental reporting?

5. What is your understanding of environmental issues surrounding the country?

6. What do you consider to be the Country's major environmental problems?

7. Which environmental concerns your organizations prioritize?

8. In your own view, do you think that the country's environmental problems are being reported by your organization to the community adequately?

9. Which organizations are your partners in public environmental awareness and education?

10. What roles do you play as a media organization in enhancing public environmental awareness and education?

11. What are the challenges of environmental journalism in your organization?

12. How does your media organization frame and present environmental issues?

13. How free are the reporters in the organization while practicing environmental journalism?

14. How free you are on exercising on environmental issues?

15. What are the best opportunities in your news room regarding to environmental news?

16. What role do you think the media could play in fostering public environmental awareness?

For media managers

1. What is the relationship between development journalism and environmental issues?

2. How do you express the degree of practicing environmental issues in EBC?

3. What are the challenges available in your organization related to environmental journalism?

4. What are the opportunities with environmental journalism in EBC?