



**Environmental Issues Coverage in the Ethiopian State Media: The Case of  
Ethiopian Radio and *Addis Zemen* Newspaper**

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**Addis Ababa, Ethiopia**

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This is to certify that the thesis prepared by Gezahegn Teklesilassie, entitled: Environmental Issues Coverage in the Ethiopian State Media: the Case of Ethiopian Radio and *Addis Zemen* Newspaper and submitted in partial fulfillment of the requirements for the Degree of Master of Arts in journalism and communication complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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## ABSTRACT

Environmental Issues Coverage in the Ethiopian State Media: The Case of Ethiopian Radio and *Addis Zemen* Newspaper.

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Addis Ababa University, 2015

The main aim of this study was to investigate the news coverage of environmental issues in the Ethiopian state media. Agenda setting and framing were employed as theoretical frameworks of the study. By taking a six month data, the study was conducted on two selected major state media outlets of the nation, namely the *Ethiopian Radio of EBC* and *Addis Zemen* Newspaper. Data used for the study was extracted from a total of 90 sample news editions (45 from each media outlet). The news editions were selected by using quota and drawing sampling techniques. Both content analysis and in-depth interview methods have also been employed in the study. Content analysis was made on sample news editions to gather quantitative data with reference to the amount and quality of environmental coverage by the media studied. In addition, in-depth interviews were made with editors and journalists who were frequently assigned to cover environmental issues so as to gather qualitative data used to back the results found via the quantitative content analysis method. The study revealed that environmental news stories were not given priority in the daily news agenda of both media outlets studied. Ethiopian Radio was found to give more coverage to foreign environmental stories than to those domestic ones. In this regard, almost all of environmental news stories of *Addis Zemen* Newspaper were found to be dealing with domestic ones. Government officials were the dominant source of the news stories of the media studied. Most of the environmental stories of the studied media were event oriented. The capacity and resources news frame was found to be dominant being applied in most of the environmental stories of the media studied. The Political frame was the second dominant news frame used. But, a difference was observed between the two media in making use of the economic frame. This frame was the second dominant frame used in many of environment stories of the Ethiopian Radio. Based on these findings, some pertinent recommendations have been made.

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## **List of Abbreviations and Acronyms**

AZ- *Addis Zemen* Newspaper  
EBC-Ethiopian Broadcasting Corporation  
EMA-Ethiopian Metrology Agency  
EPA-Ethiopian press Agency  
EPA-Environmental Protection Authority (Ethiopia)  
ER-Ethiopian Radio  
EBA-Ethiopian Broadcasting Authority  
FfF- Forum for Environment  
GTP-The Growth and Transformation Plan of Ethiopia  
IPCC-Inter-governments Panel of Climate Change  
MoFED-Ministry of Finance and Economic Development  
GCAO- Government Communication Affairs Office  
NAPA-National Adaptation Plan of Action  
UNEP-United Nations Environment Program

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1. Background of the Study**

Ethiopia is endowed with a wealth of environmental resources, which results from extreme altitudinal variation (4,620 meters above sea level at Mount Ras-Dashen to 116 meters below sea level at Dalol) and a tropical location. However, this wealth of environmental resources is depleting and the country is confronting with serious environmental degradation problems, among which land degradation is major one (Shibru & Kifle, 1998:8). The ecological crisis is deepening, too, as a result of misguided and unregulated modification of the environment, in particular the vegetation, soils and natural ecological processes due to the growing human and animal population (Ibid:8).

Agriculture is the dominant economic activity in Ethiopia. People are highly dependent on natural resources and this dependency often leads to the depletion and degradation of the environment (Tesema, 2012:167). Proper utilization and management of the environment should be given a prior concern since the nation's agrarian economy is fundamentally linked to the productivity of environmental resources.

These days, environmental problems, such as climate change, are attracting global attention due to recurrent natural disasters causing huge human and material damages in many parts of the world. Ethiopia is also confronting with serious environmental problems such as land degradation, deforestation, soil erosion, loss of biodiversity, desertification, recurrent drought, flood etc. And these environmental problems have resulted in reduced agricultural productivity and reduced biomass availability for energy and other uses, which in turn resulted in energy crisis and increased public health problems as well as frequent starvation (EMA, 2007:16).

Lack of awareness and information is considered as one of the major factors behind persistent environment problems in Ethiopia (EPA, 2007:119). In this regard, media plays paramount role as a tool for disseminating information and knowledge. And what is more, it influences

values, attitudes, thoughts and public actions (Panos, 2007:11). The media can also play a crucial role in stimulating discussions on the environment. Strong environmental conscience and sensitivity can be created if the media give environmental issues due consideration in their output (Tesema, 2012:174). In this regard, the Ethiopian Radio and *Addis Zemen* Newspaper (subjects of the study) have a national duty to give due concern and news coverage to environmental issues. Relatively, both media have also the potential for large audience reach and wide geographical coverage.

The Ethiopian Radio is the pioneer broadcasting medium in Ethiopia. The radio station was inaugurated and began its broadcasting service in 1935. It was closed during the invasion of Fascist Italy. After the victory of Ethiopia over the Fascist Italian troops, the radio station was restored and reinstated broadcasting in 1941. The radio station was formerly known as “Addis Ababa Radio Station”. It was named “Ethiopian Radio” in 1966. In 1968 the radio station was merged to the Ethiopian Television and was called Ethiopian Radio and Television Agency. Soon the Derg came to power in 1974; the name of the radio station was changed to “voice of Revolutionary Ethiopia”. Though the radio station was reestablished as Ethiopian Radio Agency in 1994, it was merged again with the Ethiopian Television after a year (PANOS, 2007).

The content of the programs transmitted through Ethiopian Radio during the emperor’s era were focused on center. In addition, the lives and activities of the ruling classes and key officials were prioritized and emphasized in news coverage. Then, the participation of the larger audience who composed predominantly rural-urban dwellers was disregarded. Similarly during the Derg regime the content was not only initiated from the center but also mainly politically oriented. During both periods, therefore, the media was controlled and the flow of information was also guided by the full command of governments in power (Ibid).

Currently, the radio station is operating under the auspices of the Ethiopian Broadcasting Corporation (EBC) which is the national broadcaster. The radio station gets its news and programs across the Ethiopian public through multiple medium wave and short wave transmitters installed in various parts of Ethiopia. The National radio of Ethiopia transmissions are reaching all over the world via international satellites and the internet (Tadese, 2015:8-9).

*Addis Zemen* is a state-owned Amharic daily newspaper published by the Ethiopian Press Agency (EPA). It was started in 1941 and it has gone through a number of changes in its content, size, appearance, circulation rates and price since then. It was in 2001 that the newspaper became daily. The newspaper is published with pages ranging from fourteen to sixteen daily. The newspaper has various daily and weekly columns covering range of issues; political, economic, social, entertainment, sport, adverts and so on. Currently, about 10, 000 copies of the newspaper are published and distributed every day via distributing agents located across the country. It can also be accessed via the internet. Hence, the newspaper has a potential to reach a large number of readers all over the country.

As one of the oldest and most known national newspaper of Ethiopia, *Addis Zemen* has been contributing for the overall development of the country for quite some time. Likewise, the newspaper could also play a pivotal role in supporting the nation's environmental awareness endeavors as it reaches many and diversified readers.

## **1.2. Statement of the Problem**

Since the 1960s, the mass media have not only played a major role in shaping public perceptions and awareness of environmental issues and journalists and broadcasters, together with other stake holders, but have also set the agenda for environmental discourse and decision-making over the last three decades (Sachsman,2000:1). In addition to their key function as tools for public information and awareness, media have a pivot role in influencing public opinion and policy about issues having a significant impact on people's life.

Despite the fact that media have a significant role in disseminating environmental information and creating public awareness, little is known about their contribution and impact in the case of Ethiopia. To the researcher's knowledge, it has been studied little so far. For instance, a study conducted on the effectiveness of environmental coverage of 'Awdegeter', a bi-weekly program of Radio Ethiopia, found the radio program rated poor by its farmer audiences, whom it is meant to target due to poor presentation and communication of environmental issues (Eyob, 2006:87-89). Similarly, an audience reception study conducted on the perspective of agricultural college students on '*Akababi-Ena-Lemat*, which is a weekly environmental program by same radio station revealed that though all respondents consider the radio program to be useful to agricultural college students and farmers, most of them

preferred to listen to the voice of grassroots rather than the case in the specified radio program, where experts, officials and journalists dominate. Respondents also expressed discomfort when listening to journalists and experts using newly coined Amharic terms and inserting English words (Solomon, 2008:66-68).

Another study conducted on the framing of environmental issues in the Ethiopian Television 'Akababiachin' program indicated that most environment stories covered were event-oriented and significantly focused on local environmental matters. Government officials were also found to be frequent sources. In most of environmental stories covered in the program, issues were framed using educative/advocacy frame. However, human interest frame, empathy frame, and morality frame were totally ignored. Yet, the program focused on suggesting remedies by giving less emphasis to defining and stating the environmental issue. The study found also journalists to have insufficient knowledge and skill in the field (Stalin, 2009:57-59).

In general, these studies attempted to shade light on some aspects of environmental reporting practices in the Ethiopian state media by entirely focusing on the electronics media (Television and Radio). While some of them focus on the effectiveness of environmental programs from audience perspective, some of them give emphasis to the way the media cover environmental issues. And all of them were also conducted based on the content of specific programs meant to deal with environmental issues. However, they have limitation in fully addressing the knowledge gap on the amount and quality of coverage researcher believes that there is a gap of knowledge concerning to. Therefore, this study attempts to examine the extent and quality of coverage given to environmental issues in the daily news of Ethiopian state media.

### **1.3. Objectives of the Study**

#### **1.3.1. General Objective**

The general objective of this study is to assess the amount and quality of news coverage given to environmental issues by the two prominent Ethiopian state media outlets: The Ethiopian Radio and *Addis Zemen* Newspaper.

### **1.3.2. Specific Objectives**

Specifically, the study:

- Examines the priority and coverage the media give to environmental stories in comparison with other issues of news coverage;
- Identifies environmental issues that are given more attention and news coverage by the media; and
- Identifies the dominant news sources and frames used by the media under study.

### **1.4. Basic Research Questions**

The research attempts to answer the following basic questions:

- How is the prevalence of environmental stories in comparison with other issues covered by the media under study?
- Which environmental issues or themes are given more attention and news coverage by the selected media?
- What are the dominant news sources and frames the media use while covering environmental issues?

### **1.5. Significance of the Study**

Public education and awareness about the environment is decisive for insuring sustainable socio-economic growth and development in Ethiopia. In this regard, media have a pivotal role in making environmental issues on the top of public agenda. They have also the potential to make a difference in creating a well informed and successful society developing an eco-friendly way of life. Hence, making a study that deals with the environmental coverage of the media will contribute a lot to the available stock of knowledge on media and the environment. The research is also believed to sensitize to focus on serious environmental issues pertinent to Ethiopia and report frequently by giving up-to-date and balanced information to the public. In this regard, not only media practitioners but other concerned government and non-government institutions can also benefit from the findings and recommendations of the study about challenges of journalists in particular and the media in general in communicating environmental issues.

As a result, they can make informed decisions on remedial actions such as designing training for media professionals as part of their endeavor to tackle environmental problems through effective use media for environmental education and advocacy.

#### **1.6. Scope of the Study**

The study focuses on the environmental issues coverage of Ethiopian state media with reference to Ethiopian Radio of the Ethiopian Broadcasting Corporation (EBC) and *Addis Zemen* Newspaper of the Ethiopian Press Agency (EPA). The research focuses on these two state owned national media outlets for a number of reasons. For one thing, the media have been selected for their perceived public recognition and national impact. But most of all, they are chosen for their potential to reach a larger audience residing in most parts of the nation.

It is also the researcher's assumption that a higher number of people that are potentially exposed to these media and their news contents. In addition, since the media are run by public funding, it is believed that they report on various social issues with a basic aim of meeting public needs, among which the environment is one.

Particularly, the research depended on data collected from sample news editions of the two media outlets. In addition, the study has been supplemented with qualitative data gathered via interviews held with journalists and editors who are working in the media under study. Therefore, the findings and conclusions of the study were made depending on data gathered from these sources.

#### **1.7. Limitations of the Study**

This study mainly focuses on examining the quantity and quality of news coverage to environmental issues given by the two media outlets. Quantitative content analysis was employed as a principal method to serve this purpose of the study. By its very nature, this method has shortcomings. One of the limitations is that it does not tell how the coverage influences the audience. Hence, the effectiveness of the messages in the sample issues conveyed was not addressed in this study, as it needs a deep and independent study by itself. And, it would be more preferable to strengthen representation of the study in terms of data, findings and conclusion to be made up on findings by including many other state media outlets in the study. But the researcher could not dare to do so due to given limitation of time,



financial and material resources. Therefore, the findings of the study might not be generalized.

News editions of a six-month period of time were incorporated in the sample frame of study. The result could be strengthening if a longer period of time is to be covered by the study. Lack of local research findings and well-documented materials in relation to the topic of the study was another source of limitation. Nevertheless, the findings of this study have significant implications for journalists, media professionals and institutions with regard to environmental issues coverage.

### **1.8. Organization of the Paper**

The paper has five chapters. Chapter one gives introductory information about background of the study, statement of the problem, objective of the research, basic research questions; and its significance, scope and limitation of the study. Chapter two discusses the review of literature together with theoretical framework used in the study. Chapter three explains the methodological approach the researcher followed in conducting the research. Chapter four presents the research data, interpretation and analysis about them. Chapter five discusses the findings and recommendations of the research.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1. Overview of the Environment**

##### **2.1.1. The Environment Defined**

The word 'environment' has derived from a French word «Environia»; meaning 'to surround'. The term «environment» can have various definitions up on its contextual applicability. However, it is most commonly used to refer to the natural environment comprising of both the abiotic (physical or non-living) and biotic (living) environment. Our life and existence totally depends on this natural environment since it generates everything we need to live; the air we breathe, the water we drink, the food we eat etc. In a broad sense, environment can be considered as the sum total of conditions in which an organism has to sustain or maintain its life process ([www.yourarticlelibrary.com/environment](http://www.yourarticlelibrary.com/environment)). The following definition by Yared (2009) is applied in referring to environmental issues to be discussed in this research work:

...the totality of all materials whether in their natural state or modified or changed by humans, their external spaces and the interactions which affect their quality or quantity and the welfare of human or other living beings, including but not restricted to, land, atmosphere, climate, water, living things, sound, odor, taste, social factors, and aesthetics (4).

##### **2.1.2. Constituting Elements of the Environment**

The environment is commonly conflated with nature which comprises the entire material world, or in earlier and recent languages, everything under God (Scheese, 2003; cited in Tesema, 2012:32-33). Accordingly, the term is usually used in a sense to refer to the elements that compose the physical or conceived aspects of nature, along with their groupings in landscapes and ecosystems, with special reference to that which is considered the non-human. However, the environment is comprised of the interacting systems of physical, biological and cultural elements which are interlinked both individually and collectively. And it mainly consists of the atmosphere, hydrosphere, lithosphere and biosphere. The environment can also be roughly divided into two types as Micro environment and Macro environment. When the micro environment refers to the immediate local surrounding of an organism, the macro

environment denotes all the physical and biotic conditions that surround the organism externally.

Environment can also be divided into two broad categories as the Physical and biotic environment. Here, the physical environment represents the abiotic (non-living) factors or conditions such as temperature, light, rainfall, soil, minerals etc. The physical environment encompasses the atmosphere, lithosphere and hydrosphere. But, the biotic environment refers to all biotic factors or living forms such as plants, animals, Micro-organisms ([www.yourarticlelibrary.com/environment](http://www.yourarticlelibrary.com/environment)).

Generally, the environment embraces three basic elements. It is constituted by the interacting systems of physical, biological and cultural elements inter-related in various ways, individually as well as collectively. These elements can be explained under:

- Physical elements - Physical elements are as space, landforms, water bodies, climate soils, rocks and minerals. They determine the variable character of the human habitat, its opportunities as well as limitations.
- Biological elements - Biological elements such as plants, animals, microorganisms and men constitute the biosphere.
- Cultural elements - Cultural elements such as economic, social and political are essentially man made features, which make cultural milieu ([www.newagepublishers.com/001281.PDF](http://www.newagepublishers.com/001281.PDF)). The Environment regulates the life of the organisms including human beings. Thus, the environment has a very decisive impact on the growth and development of living organisms.

Human beings interact with the environment more vigorously than other living beings. Specially, human economic activities are among the major factors that are immensely affecting the environment.

## **2.2. Major Global Environmental Concerns**

In prehistoric times, when human population was small and man was leading a simple life as a hunter gatherer, his impact on the natural environment was insignificant. However, the developments of agricultural activities followed by the industrial revolution, and the ever growing human population along with rise in quality and standards of living have caused a

drastic change in the natural environment; and have posed threat on environmental sustainability as well. Scientific evidences show that ecosystems are under unprecedented pressure; threatening prospects for sustainable development.

These days, the human civilization has reached its peak due to technological advancement and rapid economic growth. In this regard, industrialization could be considered as a hallmark of human civilization and development indeed. However, it is also a major source of pollutant gases that are being released into the atmosphere. Not only industries release pollutant gases, they do also discharge liquid wastes into water bodies. Some of the wastes penetrate down to underground water and pollute it to the extent that it cannot be used by human beings for drinking or cooking. Migratory birds are known to change their course due to pollution or change in weather. Respiratory diseases in human beings are another price that we are paying for polluting the environment. Pollution of water has led to the decrease in a number of large amounts of aquatic organisms. Besides adding to air and water pollution, the innumerable vehicles running on the roads add to noise pollution that has led to increase in stress, anxiety and problems related to hearing.

Development has changed the attitude of human beings towards nature, which in turn has further aggravated environmental problems. Consumerism has increased enormously with growing human population and growing demands in the modern era of development. The expanding trends in human population, industrialization and need of land for development and urbanization have led man to cut down forests thoughtlessly. Forests are home to a large number of animals and important component of the water cycle. The roots of plants hold the soil together and prevent soil erosion. They have also a very crucial role in preventing global warming by reducing the accumulation of carbon dioxide, which is one of the green house gases causing global warming. Our planet, earth is facing a multifaceted environmental degradation and insecurity due to the ever expanding trends in both human population and way of life.

Global warming, sometimes known as the “greenhouse effect” or as “global climate change”, is the major environmental problem that the planet is confronting with. It is also widely recognized as one of the most important issues on the current international environmental agenda. Global warming is termed as a rise in global temperature due to an increase in the concentration of greenhouse gases such as carbon dioxide, methane, nitrous oxide, water

vapor (Ecologic).The stocks of greenhouse gases in the atmosphere are raising as a result of human economic activity.

And, it is logical that global climate change is very likely to happen 10as the planet becomes warmer. The 2014 IPCC's report verifies that Changes in climate have caused impacts on natural and human systems on all continents and across the oceans in recent decades (p4).Climate change threatens the basic elements of life for people around the world; access to water, food production, health, and use of land and the environment. The damages from climate change will also accelerate as the world gets warmer.

The international science community suggests that there is still the possibility to avoid the worst impacts of climate change; but it requires a strong, urgent and collective action of the global community. It has become very important that co-operation between countries, through international frameworks that support the achievement of shared goals and partnership between the public and private sector, working with civil society and with individuals. In this regard, negligence and delay would be costly and dangerous.

### **2.3. Major Environmental Concerns in Ethiopia**

Ethiopia is situated in the horn of Africa, between 330 and 480 East Longitude, and 30 and 150 North Latitude. The country has a physical size of 1.13 million square kilometer. The altitude ranges from the highest peak of about 4,620 meters above sea level at Ras-Dashen in the north, and down to 110 meters below sea level at the Danakil depression in the North East. From the total land mass of Ethiopia, about 45% is highlands with an altitude of 1500 meters above sea level and the remaining 55 % is lowlands with an altitude of 1500 meters below sea level (EPA, 2008:2-3). Ethiopia is endowed with a huge wealth of environmental resources, which results from extreme altitudinal variation and a tropical location. However, 5,000 years of land cultivation and demographic expansion have degraded the natural environment (Shibru and Kifle, 1998:8).

The total population of Ethiopia is projected to reach 90.074 million by mid 2015 (ECSA, 2015). This figure makes Ethiopia the second most populous nation in Africa. Agriculture is the dominant source of Ethiopian economy. It is still considered to be main source of economic growth due to its huge economic potential for high value export agricultural products and raw material for food processing, beverages and textile and leather industries.

And, it accounts for 41.6 percent of the gross domestic product. According to Government's current economic development strategy, agricultural development has been given the leading position in the transformation of the nation's economy from agriculture based economy to industrial economy (MoFED, 2010). This is an orientation that agriculture will remain the engine of the economy for a foreseeable future.

Ethiopia's agriculture is dependant of environmental resources such as land, freshwater, climate and biodiversity and it employs more than 80 percent of the population. And environmental resources could be considered as the backbone of the national economy. Failure of agriculture is a major cause of frequent human suffering in Ethiopia Environmental degradation has a close association with recurrent drought, food insecurity, and declining farm productivity (EPA, 2008:26).

Environmental degradation is perceived prominent among environmental problems that Ethiopia is currently facing (EPA, 2008; FfE, 2010; Sisay & Tesfaye, 2003; Shibru & Kifle, 1998). It has the potential to threaten both physical and economic survival. It reduces the environment's ability to produce biomass for food, feed and household energy. Since the livelihood of rural Ethiopians is closely intertwined with land, water and biodiversity resources, the degradation of these resources directly affect their survival and the consequences of sever degradation of these resources are manifested through wide spread food insecurity and poor quality of life. It also undermines prospects for fighting poverty and achieving sustainable development (EPA, 2008:8).

A set of interacting factors contribute to the success of the sector including, the state of environmental resources (EPA, 2010:26). Sustainable land management (SLM) is the key one among these interacting factors. Land is critical to the economic and social development of the country. However, the country continues to face land resource degradation and needs to adopt both indigenous and modern technologies for improving land resource management in a sustainable way (FfE, 2010:211).

Limited information flow and networking is also considered to be one of the major setbacks for the realization of sustainable land management in Ethiopia. Therefore, appropriate information on the resource base, the extent of land degradation, the costs and benefits of applying sustainable land management as well as information on the nature of the different practices available is required to make decisions at different levels (FfE, 2010:207).

Awareness and education plays a vital role for the development and appropriate use of environmental resources and fighting environmental degradation as well. Strengthening environmental education and raising public awareness is a key strategic issue for the realization of sound and sustainable environment in Ethiopia (Tesema, 2012:56).

The Environment policy of Ethiopia which was endorsed in 1997, stresses on the role the media could play in raising environmental awareness (EPA, 1997).The policy states that due to the century-long poor environmental protection, the country has been greatly affected in many sectors including the economy. Therefore, public awareness creation through the media should to be considered as a key strategic issue in this regard.

#### **2.4. The Role of Media in Environmental Communication**

Communication holds the key to improvement in public understanding of environmental problems (Stamm et al, 2000:219). It has also many functions. For instance, it structures our perception of the world; it mediates beliefs, attitudes and behaviours related to environmental problems as well (Robert Cox, 2010: 23). Environmental communication can also be defined as educating, alerting, persuading and mobilizing; and as environmental issues affect a community or sometimes the whole society, environmental communication easily forms a public sphere such as room for public debate (Ibid:20). These functions of environmental communication can be considered as part and parcel of the environmental communication role of the media.

Having emerged in the 1960s, environmental Journalism is a relatively new journalistic field, when growing awareness of social and environmental issues stimulated the start of the environment movement (Bourassa et al, 2013:39). Since then, the mass media have played a major role in shaping perceptions and awareness of environmental issues; and they have also set the agenda for environmental discourse and decision making together with other stake holder (Sachsman, 2000). 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* in 1962 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 (Ibid).

In this turbulent era too, the media are playing a significant role in shaping popular views on the environment. If an environmental crisis occurs, it is obvious that the public will immediately look to the media for information.

In recent years the need to understand the relationship between the media and environment has become more pressing. Many commentators attribute enormous power to the news media, acknowledging that they have the ability to move and shape governments (Cohen 1994:9). Media have also the power to increase environmental awareness and activism of citizens by having more regular reports on relevant environmental issues; serving as a forum that connects environmental activists and the wider public; utilizing diverse expert opinions in coverage of environmental issues; and bringing public concerns about environmental issues to the attention of government and other stake holders. Mass-media campaigns are among most commonly used policy tools to influence public opinion of particular issues (Sampei and Aoyagi-Usui , 2009:203).

Agenda-setting studies show that media coverage is at least partly responsible for focusing people's attention on environmental problems. Together with other stakeholders, journalists and broadcasters have set the agenda for environmental discourse and decision-making since the 1960s (Sachsman, 2000:1). However, the perception of many communication scholars is that media systems in developing countries often deemphasize certain issues, with only some light of coverage, and others rarely mentioned them or totally neglected such issues (Peterson, 2003). People's opinion of reality is entirely dependent on the information available to them. It is therefore important to identify the agenda's used by media systems in order to understand what and how environmental issues are covered (Ibid: 249).

## **2.5. Challenges of the Media in Environment Beat Reporting**

Recent media research on environmental issues coverage indicated that the main stream media are not giving due concern and coverage to the beat ([environmentalcoverage.org/ranking](http://environmentalcoverage.org/ranking), accessed 23/04/2015).

Media coverage about environmental issue seems below satisfaction not only in quantity but also in quality. For instance, Content analysts typically find gaps in media coverage due to episodic coverage of dramatic events, and to focusing superficially on human interest and economic impacts, while overlooking systemic concerns. According to Stamm et al, such



findings give rise to the inference that public understanding mirrors the inadequacies of media coverage, an inference that has occasionally been supported by studies that have tried to document media effects more directly (2000:219).

Due to the way that media coverage has evolved in the world, environmental stories are often given the short end of the stick. While the level of coverage of environmental issues has clearly grown in the past 20 years, it still encounters many barriers to being as well established, and more importantly trusted, as it might be. This lack of stability has several underlying causes.

For instance, news reporting is heavily event driven since most news stories revolve around a breaking story of some kind. This sensationalism-driven news style is ill-equipped to report on longer term environmental stories. Robert Cox calls these types of issues “unobtrusive events,” because they only manifest themselves over long periods of time (2008:170). Slow-onset hazards such as climate change and ozone depletion are often reported using traditional reporting styles, surfacing as specific and discrete events, rather than gradual connected developments. This emphasis on the event and not the underlying issue undermines the importance of the issue, while simultaneously implying an infrequency that is simply untrue.

Today, journalists covering the environment find challenges in adapting traditional reporting methods to the beat, while dealing with space and deadline pressures as well as other demands (Bourassa E. et al, 2013:39). Adapting environment reporting to institutionalized journalistic practices, such as placing emphasis on breaking stories and exposing conflicting opinions as a form of balance is also another challenge (Berglez, 2011).

The environment beat has some unique characteristics that make it particularly susceptible to strong personal opinion and perhaps biases. However, journalists who cover the environment are often under fire from sides of both pro and anti-environment for being biased. There is even a debate about whether there is anything wrong about allowing environmental reporting to blend somewhat into the realm of advocacy. If the world is at stake, some argue that it is wrong not to use one’s influence as a reporter to advocate for the environment (Bob, 2008:233).

The environment is not seen as something a human being is morally compelled to care for, therefore, reporters are considered biased when they appear to care too much, or give too

much attention to the environmental side of the story. Others contend that a bias occurs because environmental reporters and science writers in general, by necessity must become experts in their field. In order to assess the validity of scientific sources and understand their relevance or importance to the story, environmental reporters must have a high level of technical knowledge. While this knowledge should give these writers an edge in understanding differing points of view, it also cultivates very strong opinions on some very controversial issues.

Whether or not environmental reporters should even be held to the same strict standards of traditional reporting is another point of contention. While critics say that the science surrounding many environmental issues is still far too fluid for an objective journalist to take a side, others point out that journalists are in the perfect place to affect significant positive change in the global environment, and because of their position of influence, they are morally obligated to do so (Bean,2010:6).

Proponents of advocacy journalism believe that it is their duty to teach about the environment. If bias is inescapable, then it would be better to make an informed choice about which side to advocate for than unconscious value judgments. Opinion over this is very much divided within the journalistic community (Ibid: 8).

Environmental journalism demands both outstanding scientific understanding of environmental issues and journalistic skill. It is necessary to have an understanding of scientific language and practice, knowledge of historical environmental events, the ability to keep abreast of environmental policy decisions and the work of environmental organizations, a general understanding of current environmental concerns, and the ability to communicate all of that information to the public in such a way that it can be easily understood, despite its complexity (UNEP, 2006:137). The media need to integrate the environmental angle into other stories and make that connection explicit, and should make environmental stories appealing to a larger cross section of society, focus more on solutions, and increase the visibility of environmental stories.

## **2.6. Theoretical Framework**

Understanding about the quantitative and qualitative nature of media news coverage on a certain issue as well as the cognitive and attitudinal effects it may have on audience calls for

some sort of theoretical framework. In this regard, agenda setting and framing have found to be appropriate theoretical models to decipher the research questions of this study.

Conceptually, both agenda-setting and framing are embedded in the larger context of media effects research. The emerging body of political communication research on agenda-setting and framing effects has signaled the latest paradigm shift in the history of communications research (D. A. Scheufele & D. Tewksbury, 2007:10). Markedly, the 1970s considered to be the birth of agenda-setting research due to the landmark study by McCombs and Shaw (1972), which detected a significant effect of agenda-setting in political communication as it drew considerable attention from researchers frustrated by the minimal-effects perspective, which was common at the time. And the 1980s and early 1990s also brought the most recent stage of political effects research approaches like framing, and the emergence of framing as a communication tool for modern campaigns has come a resurgence of academic research on other cognitive campaign effects, such as agenda-setting, which based on the theoretical assumption that mass media have potentially strong attitudinal effects (Ibid: 10-11). Agenda-setting and framing are also labeled as media effects models of communication as they operate on the premises of media effects theory.

According to Scheufele & Tewksbury, though both agenda-setting and framing (as media effects models) have a common theoretical ground, they differ in function and the media effect purpose they serve (2007:11). A brief conceptual and operational review of these two media effects models is presented under this section of the study.

### **2.6.1. Agenda-Setting**

According to McCombs & Shaw, agenda-setting refers to the idea that there is a strong correlation between the emphasis that mass media place on certain issues, in terms of relative placement or amount of coverage, and the importance attributed to these issues by mass audiences (1972 cited in D. A. Scheufele & D. Tewksbury, 2007:11). Such conceptualization of agenda-setting views it as a media effects model functioning on a memory-based models of information processing. Such models base on the assumption that media audiences form attitudes based on the considerations that are most salient (i.e., most accessible) when they make decisions (Hastie & Park, 1986). In other words, audience judgments and attitude formation are directly correlated with “the ease in which instances or associations could be

brought to mind” (Tversky & Kahneman, 1973). Agenda-setting effects assume that the locus of effect lies with the heightened accessibility an issue receives from its treatment in the news (Price & Tewksbury, 1997). Therefore, it is not information about the issue that has the effect; it is the fact that the issue has received a certain amount of processing time and attention that carries the effect (D. A. Scheufele & D. Tewksbury, 2007:14). Agenda-setting is also considered as “accessibility-based communication model” as it deals with the placement and availability of information in communication texts (Ibid: 11).

Agenda-Setting also refers to the role played by mass media in establishing prominent issues and images to which the public reacts. Considerable evidence has accumulated that editors and broadcasters play an important part in shaping our social reality as they go about their day-to-day task of choosing and displaying the news. And this impact of the mass media—the ability to affect cognitive change among individuals, to structure their thinking—has been labelled the agenda-setting function of mass communication. Here may lie the most important effect of mass communication, its ability to mentally order and organize the world for us. In short, the mass media may not be successful in telling us what to think, but they are stunningly successful in telling us what to think about (Shaw & McCombs, 1977).

And by making some issues more salient in people’s mind or agenda-setting, mass media can shape the considerations that people take into account when they make judgments about the issues. It is also a common practice for newspapers, for instance, to give more space and front page coverage for issues they think having more importance than other news issues they cover. Similarly, television and radio stations present news stories of issues with huge public importance as main stories of their news hours. The news coverage they give for such issues is also more intensive one. It is through this agenda-setting function of the media that some issues are made more accessible and salient in people’s mind. In doing so, the media can also shape the considerations that people take into account when making judgments about issues.

As agenda-setting theory explains, too, the menu of news and other information made available to the public by media decision-makers ultimately defines what is considered significant. Media plays an influential role in assigning importance to public issues. Due to the agenda-setting function of the news media, audiences not only learn facts about the “environment”, they learn too how much importance to attach to those facts on the basis of the emphasis placed on them by the media. The power and influence of the news media by

setting nations' agenda so as to focus public attention on specific public issues, is huge and a well-documented one influence ([www.infoamerica.org/documentos\\_pdf/mcombs01.pdf](http://www.infoamerica.org/documentos_pdf/mcombs01.pdf)).

Agenda setting is also a process by which issue proponents work to gain the attention of media professionals, the public and public policy makers. In this regard, communications research provides evidence that the news media are the primary agenda-setting agents. It is likely that issue with prevalent coverage by the news media set the agenda for how the public reacts as measured in public opinion polls and how policy makers will respond through legislation. Due to their agenda setting function, the media are also able to reflect and determine reality. They determine reality by how much attention they pay to any particular issue.

As Mc Quail explains, the media provide relevant attention to issues coverage by influencing the rank order of public awareness of issues and attribution of significance, which, in effect could influence public policy making (1994:426). Therefore, an examination of agenda-setting can offer an explanation of why information about certain issues are addressed frequently while other issues are event based to the public, as well as how public opinion is shaped. This research also attempts to answer questions related with the attention and prevalence of news coverage given to environmental stories in comparison with other issues of news coverage informed by the theoretical assumptions of agenda-setting.

### **2.6.2. Framing**

As the concept of framing offers a way to describe the power of a communicating text, frame analysis illuminates the precise way in which influence over a human consciousness is exerted by the transfer of information from one location, for instance from media news report, to that consciousness (Entman, 1993:51). As a media effects model of communication, framing bases on the assumption that how an issue is characterized in news reports can have an influence on how it is understood by audiences (D. A. Scheufele & D. Tewksbury, 2007:11). Framing explains about the role that media can play in influencing human understanding and perception of issues. It also highlights how the media urge audience to think in a certain way about the content they disseminate (Mc Quail, 1994:430).

Framing is widely acknowledged as a powerful tool of communication, especially in field of political communication. However, previous communication research on framing have been

characterized by lack of clear conceptual understanding and relying on context specific rather than generally applicable operational definition of the term framing (Shcufele, 1999:103) . Due to vague conceptualizations, the term framing has been made operational in research in combination with concepts like agenda-setting or priming (Iyengar& Kinder, 1987 as cited in Shcufele, 1999:103). Pertinent to this, MacCombs et al, suggest that not only are agenda-setting and framing effects related, framing is indeed an extension of agenda-setting (1997). Even, these scholars coined the term “second-level agenda-setting” to describe the impact of the salience of characteristics of media coverage on audiences’ interpretation of news stories (Ibid: 103). Similarly, McCombs, 2004, views framing as a more refined version of agenda setting. Accordingly, framing can be considered as making aspects of an issue more salient through different modes of presentation and as a result shifting people’s attitudes. McCombs labels this phenomenon of framing “second-level agenda setting” (cited in D. A. Scheufele & D. Tewksbury, 2007:15).

Anyhow, and Entman’s conceptualization of framing found to be appropriate to this study as it offers a more convincing insight about how media provide audience with schemas (frames) for interpreting events. Entman (1993) defined framing as follows:

To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (52)

This Entman’s frequently quoted definition of framing essentially involves the selection and salience of particular aspects of an issue rather than to the issue itself. Accordingly, Media framing refers to modes of presentation that journalists use to present information in a way that resonates with existing underlying schemas among their audience (Shoemaker & Reese, 1996 cited in Scheufele &Tewksbury, 2007:12). The basic framing approach in this regard assumes that the locus of the media effect lies within the description of an issue or the label used about the issue. And the underlying interpretive schemas that are applicable to the issue are considered to be the central effect of a frame. According to D. A. Scheufele & D. Tewksbury, the primary difference on the psychological level between agenda-setting and, on the one hand, and framing, on the other hand, is the difference between whether we think about an issue and how we think about it (2007:15) . In this sense, framing is not about facts but rather about the meaning it imposes on the reported facts. Framing, thus, can be taken as a

process by which communications source, for instance a media, defines and constructs an issue.

Media framing is the process by which an issue is portrayed in the news media. It is through framing that journalists arrange a set of information in certain way so as to impose a definite meaning on it. Framing is also considered as quality of communication that leads people to accept one meaning over another. (www.journalism.uoregon.edu, accessed on 23/04/2015)

Frames are abstract notions that serve to organize or structure social meanings. Frames are cognitive shortcuts that people use to help make sense of complex information. According to Entman, frames may have the following functions:

- They define problems-determine what a causal agent is doing with what costs and benefits usually measured in terms of common cultural values;
- They diagnose causes-identify the forces creating the problem;
- They make moral judgments-evaluate causal agents and their effects;
- They also Suggest remedies-offer and justify treatments for the problems and predict their likely effects. (1993:52)

Furthermore, frames influence the perception of the audience. Frames help us to interpret the world around us and represent that world to others. They also help us organize complex phenomena into coherent, understandable categories. Frames provide meaning through selective simplification, by filtering people's perceptions and providing them with a field of vision for a problem.

Therefore, identifying what sorts of frames are used in a given media content has a huge importance to make understanding of news coverage given to issues of public interest, such as the environment. But the process by which a communications scholar identifies the catalogue of frames in a media contents about a particular issue (i.e. frame discovery) is complex and labour-intensive; so is the secondary process of coding instances of framing in text (i.e. frame analysis) in order to reveal patterns in frame usage of the media.

The news media generally make use of two major types of frames known as episodic and thematic. According to Iyengar (1991), while episodic news frames focus on discrete events that involve individuals located at specific places and at specific times, thematic news frames

place public issues, such as the environment, in a broader context by focusing on general conditions or outcomes (cited in Boydston et. al. 2013:13).

Boydston et al, explain the benefit of Iyengar's frame schemas in media communication as follows:

Such general schemas facilitate invaluable insights into high-level patterns of communication and, most importantly, their influence on public attitudes. For example, people who consume stories about poverty that are framed episodically by focusing on unemployed individuals are more likely to blame poverty on individual failings. People who consume thematic poverty stories, focused on national unemployment rates, are more likely to blame poverty on the government or other forces beyond an individual's control." (Ibid: 13)

A codebook proposed by Boydston et al has been also found to be applicable for the purpose of this research. They developed the frame categories listed in the codebook through a mix of inductive and deductive methods so as to let researchers code frames either at issue-specific or across-issue level. Accordingly, it has been adapted in a way to be applicable to the coding of news frames used in the sample environmental news stories of the study. The codebook contains 14 categories of frame "dimensions" (plus and "other" category) that are intended to be applicable to any issue (environment, abortion, immigration, foreign aid, etc.) and in any communication context (news stories, Twitter, party manifestos, legislative debates, etc.) (Ibid, 2013:4).

The list of frames/dimensions and explanations are presented in chapter three of the paper in the subsection 3.5 discussing content coding categories.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Research Design**

As it has been stated in the introductory section, the main aim of this study is to investigate and make understanding on the quantitative and qualitative nature of news coverage given by the media studied. The empirical data needed to achieve this purpose of the study demands a scientific approach to data collection, organization and interpretation. Thus, the study was conducted following a research approach allowing the making use of both quantitative and qualitative methods in combination. The researcher has found this approach appropriate to collect and analyze major quantitative data of the study from sampled news contents and supplementary qualitative data from editors and reporter working for the studied media institutions.

Though these research methods were used in combination, quantitative content analysis applied as a major method, in-depth interview served as a supportive method to gather qualitative data used to supplement the discussion made on the findings qualitative data. As operational definition suggested by Kelinger (1986), content analysis is a method to be applied to study and analyze communication in a systematic, objective and quantifiable manner for the purpose of measuring variables (cited in Gunter, 2000:56). It is also ,since 1940's, a method evolved methodologically and was used by academic researchers to study a wide range of media issues and it also came to be used in partnership with other research methods including those qualitative ones ( Ibid,2000: 56).

Content analysis is applied only to study the 'what' of a media content leaving out the 'why'. In this regard, the counting and quantifying needs of data obtained via this method should be supplemented by interpretive procedures that can define the weight of a media message in terms of its potential impact upon the audience. Therefore, in-depth interview was employed as a supplementary method of the study. And the quantitatively gathered data went through a statistical computation and was analyzed and discussed along with the qualitative data following thematic approach.

The researcher has employed quantitative content analysis as a principal method to the descriptive approach of the study. And, he found it a convenient method in his attempt to examine the environmental coverage of the media through sample environment news stories. Anders et.al defines content analysis as a quantitative method used to identify and count the occurrence of specified characteristics or dimensions of texts, and through this method, one can be able to say something about the messages, images and representations of such texts and their wider social significance (1998:95).

Content analysis is also considered as one of the methods helping researchers examine various forms of contents. According to Lawrence, it is a technique for examining information or content, in written or symbolic material (1994). He also added that in content analysis, we should first identify the body of material and then create a system for recording specific aspects of it. The purpose of this method is to examine a selected (sample) body of texts and to classify its content according to a number of predetermined dimensions (Hansen et.al 1998). This method has its own principles, systems, rules and regulations which enable researchers to achieve intended goals in a logical manner. As Hansen et al, content analysis is also an approach which has the potential to record a high degree of validity and reliability with the relevant or proper sampling technique providing numerical evidence and allowing for replication and generalization (1998). However, since every method has its own strength and weakness, the possibility that content analysis might lack depth can occur in some cases. Besides, the researcher believes that content analysis could not be absolute to provide intended results in depth.

Thus, qualitative method is important to substantiate the study and to obtain details which the former method could not provide alone. In this regard, John (2009) states that using the quantitative approach may provide more breadth and generality of results, while using qualitative approach may provide more depth and is more capable of identifying unanticipated results. According to Berger, by using in-depth interview we often obtain unexpected information that other forms of research might not cover (1998:55).

This indicates that employing both approaches has its own advantages in conducting research. Thus, the researcher will employ qualitative interview with selected editors and reporters. In the interview, some questions which support content analyzes in order to obtain detail information will be raised to respondents.

In this regard, Keith (1998) also noted that the findings from one type of study can be checked against the findings deriving from the other type. For instance, the results of a quantitative investigation might be checked against the qualitative one. The aim is generally to enhance validity of the findings.

### **3.2. Subjects of the Study**

The main purpose of this study is to examine the quantity and quality of environmental issues coverage in Ethiopian state media. But it is not feasible to cover all Ethiopian state media in the study due to shortage of time and other resources. Therefore, two major state media outlets were selected as subjects of the study; the national service of Ethiopian Radio from EBC and Addis Zemen Newspaper of EPA. The earlier, established in 1935, as national radio broadcaster, whereas the latter, in 1941, as the nation's daily newspaper. The two media are to be selected because of their relatively large audience reach and wide geographical coverage. A total of six persons, two editors and four journalists; one editor and two journalists from each media outlet were also considered to be subjects of this study.

### **3.3. Sampling Techniques and Sample Size**

For practical reasons, content analysis must start with the selection and narrowing down of the types of coverage to be analyzed (Anders et al, 1998). Studying the whole bulk of media contents and making data analysis in a manageable manner is a very futile and time taking task. So, the researcher selected a specific span of time to make the sample size manageable.

In order to select the samples, the time span and the number of news editions of this study, purposive sampling techniques were employed. Accordingly, six months news editions spanning from January to June 2014 of the two media were chosen as samples of the study. The time span is purposively selected because the World Environment Day and most of Ethiopian annual environmental activities, such as soil and water conservation, watershed development as well as tree seedling and planting are carried out this period of the year. It common for the Ethiopian media, especially state owned ones, to give much coverage to such environmental activities. Therefore, media news contents to be selected within this time frame give a better chance to examine media coverage of environmental issues pertinent to Ethiopia. For the sake of technical simplicity and efficiency, only sampled Amharic news stories found

in the digital archive or database of the Ethiopian Radio and news stories published under the news column of Addis Zemen Newspaper were taken for content analysis.

It would be worth, here, to remind that it is too bulky and time taking to make analysis on each and every issue or content presented in the daily broadcasting schedule or newspaper edition of those sample days included in the study. According to a media policy document of the government of Ethiopia, news is considered not only as a major media product, but it is also recommended as a major tool to build and shape public understanding and way of thinking by the state media (OGCA,2004 E.C:30-31). It is also the principal reason behind researcher's decision to carry out the study entirely focusing on news contents of the media under study.

Moreover, news has multiple functions to different people on various issues. According to Hiebert et al (1988) media news is very important to the sustenance of society (cited in Tahir, 2012:28). And apparently people turn to the news every day due to the fact that information communicated through news contents has direct impact on their daily lives. Again, it is the news media that provide vital information on different topics that people want, and they represent the public and speak for the public interest (Schudson, 1995 cited in Ibid: 28).

In doing so, quantitative data collection and analysis was carried out on a total of 90 sample news editions. A total of 45 news editions were selected from each of the two media outlets. In this regard, a two-step quota sampling and drawing method that enabled the researcher to select equal number of news editions from each of the two media studied as well as from each month within the six months time span the study covered. First, the total number of the sampled news editions (which is 90) was divided by two, 45 for the Ethiopian Radio and the remaining 45 for *Addis Zaman* newspaper. Secondly, the 45 sample news editions allocated to each of the media outlets were divided by 6, which is the number of months (from the month of January to June) within the time span of the study.

Having distributed, the amount of samples allocated to each month found 6. But there were 3 samples remaining. Therefore, these samples were distributed to 3 of the months selected by using drawing sampling method. The amount of sampled news editions which were allocated to each month were also dispersed to the 30 days of each month. Drawing sampling method was applied this time again. By making use of the drawing sampling method, equal chance of

selection for each month to get one additional sample news edition; and also for each day within the study time span to be included in the sample quota of the month it belongs could be secured. Every environmental story found in sampled news editions was taken for content analysis. In addition, a total of six professionals, two editors and four journalists (one editor and two journalists from each Media outlet) were interviewed.

### **3.4. Method of Data Collection and Tools**

Archived radio news files and newspapers were used as main sources for quantitative data of the study. A coding book was prepared to collect relevant data used for the study. The data coding was carried out by the researcher and other two media monitoring professionals (one for radio news contents and the other one for print media news contents) from the Ethiopian Broadcasting Authority.

In addition, in-depth interviews were held with editors and reporters working in the news rooms of target media outlets to gather qualitative data used to back findings of the quantitative data.

### **3.5. Content coding Categories**

In content analysis, the themes, or subjects or issues to be studied can be categorized into different subcategories. This classification of issues covered within a general area of coverage chosen for analysis is a starting point in a study of media contents (Anders et al, 1998).

In this study the researcher has defined categories so as to analyze significant contents. It is because every unit should not be analyzed unless it has some sort of importance or relevance to the aim of the research. With regarding to content categorization, Anders et al underscore that we should include only those dimensions or characteristics of texts which can reasonably be expected to yield useful information pertinent to our research questions (1998:106).

Based on this technical assumption, the researcher has developed a coding sheet consisting of 7 major content categories which were applied for the coding of sample news edition in general and environmental stories in specific, too. These content coding categories listed and described as follows:

1. **News Stories Per Issues of Coverage-** This content coding category was meant to gather data needed to compare and evaluate the news coverage given to environmental stories in comparison with that of other stories dealing with other issues categorized as; Politics & Diplomacy; Law, crime & court issues; Business & Economy; Social Issues; Agriculture; Infrastructure Development; Science & Technology; Disasters/Accidents; Metrology/Weather; Sport & Entertainment; and other issues.

2. **Environmental Theme(S) the News Story Deals with-** This content coding category was meant to gather data used to know about the thematic focus of news coverage by the media studied with regard to various environmental issues categorized as:

- Environmental problems /Challenges- news stories talking about the cause or impact of environmental problems/challenges such as forest clearance, land degradation, pollution, global warming/climate change etc.
- Environmental Protection/ conservation - news stories about environmental protection activities such as tree seedling and planting, river basin development, soil and water conservation practices etc.
- Environmental events & campaigns- news stories about environmental campaigns or ceremonies, for instance, World Environment Day, World Biodiversity Day etc.
- Environmental Research Findings, Innovations & solutions- news stories about new scientific research findings, technologies and innovations pertinent to the environment. For instance, green energy development projects.
- Others- environmental news stories found not to be included in any of the aforementioned environmental issues categories.

3. **Prominence or Placement of environmental stories-** This coding category refers to the placement of the environmental issues in the news editions. It was meant to gather data about the attention, value or priority given by the media presenting environmental stories among their major news stories (for radio news) or front page news headlines (for news paper) presented in a given news edition. The categories are labeled in the coding book as; among major/ front page news stories; among insignificant (common) /inside page news stories.

4. **Origin of Environmental News Stories-** This content coding category was intended to collect data used the focus of the studied media's environmental coverage depending on the origin of news stories categorizing them either as Local /Domestic or Foreign.

5. **News sources-** This content coding category was developed to gather data about the most frequently used news sources for environmental stories by the media studied. And it refers to persons, institutions, events which the media get information from. It is important to know the dominant or common sources of their news. The sources can be government officials, community, NGOs, experts, documents, conducted researches, internet sources etc. This helps to know how the organization uses various sources to diversify their sources and to develop source credibility. The news sources are labeled as; Government officials; Experts/scholars; Community members; Environment Groups/NGO's; Privet Companies, Press Releases; and New Research Findings/Reports.

6. **Nature of environmental news stories-** This content coding category was applied to gather data about the nature or features of environmental news stories covered as they are found to be; either investigative, When the story is well researched and entertains deeply environmental issues with better quality or Event Oriented ,When the news story covers meetings and related reportage programs focusing on environmental issues ; either solution oriented or problem oriented; and either Advocating or Informative or both Advocating and Informative.

7. **News Frames Applied for Environmental Stories-**This content coding category deals with media frames used by the media studied in the presentation of their environmental news stories to audience. It was applied to collect data used to identify the most frequently applied news frames by the media. In doing so, a two step coding procedure was applied. First, coding judgment was made on sampled environmental news stories to decide whether they were framed using **Episodic or Thematic Frames**. Then, another coding decision follows if they are found to be framed using one of the following **Thematic Frames**:

1. **Economic frames:** The costs, benefits, or monetary/financial implications of the environmental issue covered in the story (to an individual, family, community or to the economy as a whole).

2. **Capacity and resources frames:** The lack of or availability of physical, geographical, spatial, human, and financial resources, or the capacity of existing systems and resources to implement or carry out environmental laws, policies, projects, goals etc.

3. **Morality frames:** Any environmental perspective/or policy objective or action (including proposed action) that is compelled by religious doctrine or interpretation, duty, honor, righteousness or any other sense of ethics or social responsibility.

**4. Fairness and equality frames:** Equality or inequality with which laws, punishment, rewards, and resources are applied or distributed among individuals or groups. Also the balance between the rights or interests of one individual or group compared to another individual or group, for instance, environmental justice.

**5. Constitutionality and jurisprudence frames:** The constraints imposed on or freedoms granted to individuals, government, and corporations via the Constitution or judicial interpretation. This deals specifically with the authority of government to regulate, and the authority of individuals/corporations to act independently of government.

**6. Policy prescription and evaluation:** Particular policies proposed for addressing an identified environmental problem, and figuring out if certain policies will work, or if the existing policies are effective.

**7. Law and order, crime and justice frames:** Specific environmental policies in practice and their enforcement, incentives, and implications. For instance, news stories about enforcement and interpretation of environmental laws on individuals for breaking laws, loopholes, fines, sentencing and punishment resulting in increases or reductions in environmental crimes.

**8. Security and defense frames:** Security, threats to security, and protection of one's person, family, in-group, nation, etc. Generally an action or a call to action that can be taken to protect the welfare of a person, group, nation sometimes from a not yet manifested threat.

**9. Health and safety frames:** News stories framed to depict the impact of environmental problems to human health and wellbeing.

**10. Quality of life frames:** The effects of an environment policy on individuals' wealth, mobility, access to resources, happiness, social structures, ease of day-to-day routines, quality of community life, etc.

**11. Cultural identity frames:** The social norms, trends, values and customs constituting culture(s), as they relate to environment.

**12. Public opinion frames:** References to general social attitudes, polling and demographic information, as well as implied or actual consequences of diverging from or getting ahead of public opinion or polls.

**13. Political frames:** Any political considerations surrounding an issue, such as the environment. Issue actions or efforts or stances that are political, such as lobbyist involvement, and bipartisan efforts, deal-making, appealing to one's base, mentions of



political maneuvering. Explicit statements reflecting that a policy dealing with the environment is good or bad for a particular community.

**14. External regulation and reputation frames:** Ethiopia's relations with another nation; or relations between groups. This includes agreements and outcomes, comparisons of policy outcomes or desired policy outcomes concerning with the environment.

**15. Other frames:** Any frame that does not fit into the above news frame categories.

**\*NB** - Adapted from a Policy Frames Codebook proposed by Boydston et al, (2013: 4-5) accessed on 23-04-2015 from; ([www.cs.cmu.edu/~nasmith/temp/frames-2013.pdf](http://www.cs.cmu.edu/~nasmith/temp/frames-2013.pdf))

### **3.6. Unit of Analysis**

In this study, sample radio and print news editions and environmental news stories collected from the media studied are considered as units of analysis. First, all news stories found in each sample news edition were categorized under various issues of news coverage such as sport and entertainment, crime and court issue, politics and foreign relation, economy and investment, environment etc. All Individual environmental news stories available in any of the sample news editions were also taken and analyzed on predefined quantity and quality standards of the study. Besides, data collected from editors and reporters was included the qualitative content analysis of the study.

### **3.7. Inter-Coder Reliability**

Due care and effort was made in the course of data coding process. In addition to the researcher, two media monitoring experts (one for radio and another one for print news samples) from Ethiopian Broadcasting Authority participated in the coding of sample news items. Adding to their professional experience working for the institution, the experts were given a detailed orientation prior to their engagement to the coding task. In this regard, the researcher assumes that the involvement of such media monitoring experts adds value on the quality and reliability of data gathered.

Furthermore, all data coded were made pass through a reliability check. Inter-coder reliability is considered as a decisive part of content analysis method. Data gathered and interpreted via content analysis method cannot be considered valid unless they pass through a well established inter-coder reliability testing method. The inter-coder reliability check was

carried out using Holsti's method, which is one of the highly recommended methods in mass communication research (Lombard et al, 2005).

The 90 news editions yielded a total of 40 environmental news stories. A total of 240 judgments were made. From the total, 5 disagreements were found and resolved by double coding. An overall inter-coder reliability coefficient .97 gained. This number is believed to be more than adequate because as a rule of thumb most published content analysis typically report a minimum reliability coefficient of above .75 by making use methods prior *alpha* or about 90% in percentage agreement.

### **3.8. Data Organization and Analysis**

The collected data in content analysis will be interpreted and analyzed by using tables with frequencies and percentages. The qualitative data obtained from interview will be interpreted qualitatively. Finally the results will be summarized and recommendations will be made based on findings and conclusions of the study.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND DISCUSSION**

#### **4.1. Introduction**

To make a description on the quantity and quality of environmental news coverage of the two selected state media outlets; The Ethiopian Radio and *Addis Zemen* newspaper, A total of 90 days news editions (45 from each media outlet) spanning from 9 January 2014 to 7 July 2014 were collected. And a total of 1,123 news stories dealing with various issues were found from the news editions. From the total number of news stories found, 616 of them were collected from the daily news broadcast of Ethiopian Radio, and the remaining 507 from the daily news columns of *Addis Zemen*. The task of content analysis was started first by segregating all the news stories found in to 12 news issues categories, of which the “environment” category is one (See 3.5 in chapter 3).

Having finished the segregation task of all the news stories in to the news issues categories, 40 news stories were found to be environmental (i.e. 25 from Ethiopian Radio and 15 from *Addis Zemen* Newspaper). These news stories were also analyzed to gather data used to answer the rest research questions pertinent to the quality or nature of the news coverage that the media studied gave to environmental issues.

The quantitative data (considered as main data of the study) are presented in tables displaying figures of frequency and percentage first. Then, their results are discussed supported by the qualitative data gathered from in-depth interviews made with news editors and reporters working for the media studied .

Results of quantitative and qualitative data gathered for the study are presented and discussed under this section. For ease of presentation and discussion, they are presented in a way that they correspond with the basic questions that the research was meant to answer.

#### **4.2. News coverage of environmental issues in comparison with other news issues**

In order to know about the amount of news coverage given to environmental issues by both media studied, every news story found in the sampled daily news editions had to be collected

and categorized in to the issues they dealt with. From the total 1,123 news stories collected, 616 were from the news editions of Ethiopian Radio (ER) and the remaining 507 from the news columns of *Addis Zemen* (AZ) newspaper. The result of data collected concerning news coverage given to environmental stories in comparison to other issues of news coverage is presented in table-1 as follows.

**Table 1- Environmental Issues news coverage in comparison with other news issues**

Name of Media Outlet	Frequency of coverage In:	Issues of News coverage												T O T A L
		Politics & Diplomacy	Law, crime & court issues	Business & Economy	Social Issues	Agriculture	Environment	Infrastructure Development	Science & Technology	Disaster/ Accidents	Metrology/ Weather	Sport & Entertainment	Others	
Ethiopian Radio	Number	157	21	109	100	22	25	21	18	9	14	108	12	<b>616</b>
	Percent	25.48%	3.4%	17.7%	16.2%	3.6%	4%	3.4%	3%	1.5%	2.3%	17.5%	2%	<b>100%</b>
Addis Zemen Newspaper	Number	135	30	72	77	27	15	22	5	9	1	114	0	<b>507</b>
	Percent	26.6%	6%	14%	15%	5.2%	2.9%	4.3%	1%	2%	0.2%	22.2%	0%	<b>100%</b>

According to data presented in table 1, news stories dealing with politics and diplomacy were given more priority and coverage than any other news issues by both media outlets. 25.48 % of the total number of news stories covered by Ethiopian Radio (ER) and 26.627 % by *Addis Zemen* (AZ) Newspaper dealt with such issues.

Next to news stories about politics and diplomatic issues, business and economy news stories by 17.7%; and stories dealing with sport and entertainment issues by 17.5%, got more news coverage in ER. But, news stories of sport and entertainment took the next position by a significant percentage difference, which is 22.2%, in gaining more news coverage in AZ. They are followed by those news stories dealing with social issues by 15% and business and economy stories by 14 % as well.

According to data gathered from the Ethiopian Radio, news stories dealing with issues such as the environment (4%); agriculture (3.6%); crime and law enforcement and infrastructure

development (3.4% each of them); and science and technology (3%) were given little coverage in comparison with those news stories with high percentage of frequency.

As data gathered from *Addis Zemen* Newspaper indicates, the proportion of news stories dealing with issues such as law and crime 6%; agriculture 5.25%; and infrastructure development 4.3% is better than the proportion of those news stories of ER that dealt with similar issues. But when we compare the proportion of news coverage given by AZ to environmental issue was insignificant, it was 3% only.

In fact, the prevalence of environmental stories seems to be better when we compare it with that of news stories dealt with issues such as disasters/accident (1.5% in ER and 2% in AZ); metrology/weather (2.3% in ER and 0.2% in AZ); and news stories in “Others” category (2% in ER and 0% AZ).

According to the quantitative data gathered the news, stories about politics and diplomatic issues found to be given more attention and news coverage than any other issue in both Ethiopian Radio and *Addis Zemen* Newspaper. Next to these, those stories dealing with business and economy; sport and entertainments; and social matters were also given better news coverage. But the prevalence of environmental news stories in comparison with that of stories dealing with the aforementioned issues was found to be insignificant.

The media are expected to have dedication to give due concern and coverage to environmental issues since these issues have a great deal of impact in every aspect of human life, be it political, economic, and social; and at national and global level.

Apparently, news editors are assigned to be the gatekeepers in the news room of Ethiopian state media. But, they have also a decisive role in the selection of issues to be included in the list of daily news. Technically speaking, they are the agenda setters of the news room. With this assumption in mind, qualitative data was gathered from the news editors of both media studied. The question raised to the editors was meant to gather data used to identify those major issues which they think have national impact and should be given priority and due news coverage.

Both the interviewed editors (Ed-1 and Ed-2) affirmed that they usually select news issues in line with current agenda of the government. They were also asked why they do so. Both of

them again responded that there is an institutional responsibility or mandate imposed on the media they work for to support and execute policies of the government. They further explained that, most of the time, their daily news agenda are the current agenda of the government.

The editors answered also to the question raised about the most frequently issues they cover. Ed-1 pointed out that issues concerning agriculture development, which is nation's major economic sector is given more attention and coverage in ER. He added also that they cover stories that promote rural small scale agro processing business and in support of endeavors of the government to transform nation's agricultural economy to industry and service based economy. But, with regard to this same question, Ed-2 responded that any issue of political, economic and social is likely to be given attention and news coverage if it is a current agenda of the government.

In addition to data gathered from the editors, 4 reporters (2 from each media) were interviewed. The answers given by R-1 and R-2 confirm that issues related with agricultural development are given more attention and news coverage than any other issue. Both of them mentioned a unique measure taken by administration of the media they work for to establish a team of journalists covering only stories dealing with the sector. This is also a fact justified by Ed-1 (from same media).

The researcher could also realize that most of environmental conservation news stories coded from ER were found to be covered by reporters assigned in this team. Though Ed-1 as well as R-1 and R-2 claim that agricultural issues (environmental issue as well since they are to be covered under the auspices of the so called "Agriculture news team") the most favored and covered issue, their claim was found to be unsupported by the result of quantitative data. Because, the total frequency percentage of both agricultural and environmental news stories ( $3.6\% + 4\% = 7.6\%$ ) was proved to be far less than that of news stories dealing with issues such as politics & diplomacy; Business & economy; Social issues; and Sport and entertainment.

But the other two reporters (R-3 and R-4) suggested that any issue of the government's prior concern is given news coverage on their newspaper. Their suggestion matches with that of the editor (Ed-2 /same media).

The researcher had also forwarded additional question with the aim of gathering additional data about the environmental concerns of the editors and reporters interviewed. All of them answered that issues of the environment need to be among major issues of prior concern of both the government and the media. And all of them reflect that the issues are not given due concern and news coverage as they should.

#### 4.3. News coverage given to various environmental themes/issues

All of the environmental news stories which were gathered from sampled news holes of the media studied put in to four thematic categories of the environment bit (See chapter 3 of 3.5). This was done with the intent to identify those specific environmental issues the media gave more attention and news coverage.

**Table 2- News coverage given to various environmental themes/issues**

Name of Media Outlet	News coverage In:	Environmental Issues of News Coverage				TOTAL
		Environmental problems /Challenges	Environmental Protection /conservation	Environmental Events & Campaigns	Environmental Research Findings, Innovations & solutions	
Ethiopian Radio	Number	10	3	0	12	25
	Percentage	40 %	12 %	0 %	48 %	100 %
Addis Zemen Newspaper	Number	3	8	0	4	15
	Percentage	20%	53.3%	0%	26.6%	100 %

According to data presented in table 2, from the total 25 environmental news stories of Ethiopian Radio, 48% of them were focusing on various environmental research findings, innovations and solutions. The remaining news stories dealt with environmental problems and challenges (40%) and environmental protection and conservation activities (12%).

From the 15 environmental stories found published on the news columns of the *Addis Zemen* newspaper, 53.3% were focusing on environmental protection and conservation activities. The rest news stories were about environmental research findings and innovations (26.6%); and various environmental problems and challenges (20%). There were no stories found promoting or celebrating any of environmental events or campaigns.

According to the result data gathered about the proportion of news stories among various themes or issues of environment, when near half of the total news stories by ER were found to

be dealing with environmental research findings, innovations and solutions, the other significant number was news stories about environmental problems and challenges such as global warming, ozone layer depletion, the melting of polar ice caps, increment of sea levels, urban sound pollution etc. The number of news stories about environmental conservation activities such as soil and water conservation, water shades development, tree seedling and planting, proper solid waste disposal and management was found to be fewer than both the aforementioned thematic categories.

In this regard, the case in AZ is different. Over half of the environmental news stories of the newspaper were found to deal with environmental conservation activities. The remaining number was divided between the thematic categories of environmental research findings and innovations; and various environmental problems and challenges. The result of qualitative data gathered from editors and reporter found to be coinciding with that of quantitative data.

#### **4.4. Prominence / Placement of Environmental News Stories**

Quantitative data were gathered with the aim of detecting the media's devotion to environmental stories by looking through the placement main or front page headlines of sampled news editions. The result of data gathered is presented as follows.

**Table 3- Prominence / Placement of Environmental Stories**

Name of Media Outlet	Frequency	Prominence or Placement		TOTAL
		main/ front page Stories	common/ Inside page Stories	
Ethiopian Radio	Number	11	14	<b>25</b>
	Percentage	44 %	56 %	<b>100 %</b>
Addis Zemen Newspaper	Number	6	9	<b>15</b>
	Percentage	40%	60%	<b>100%</b>

According to results of collected data, 56% of the environmental stories by the Ethiopian Radio and 60% of them by *Addis Zemen* newspaper were not found to be among the daily prime or front page news stories. Only 44% of them from Ethiopian Radio and 40% of them from *Addis Zemen* newspaper were given such a status. According to the result of quantitative data gathered, environmental news stories were not given priority in the daily news agenda of both media studied.



Question was forwarded to editors of both media with the intent to gather data about the treatment and representation of environmental issues in the editorial policies of the media. Ed-1 explains that environmental issues are listed among the top issues of given prior concern in the editorial policy of the Ethiopian Broadcasting Corporation (EBC). He adds in his explanation that the rationale to put environmental issues as prior editorial concerns with the organization's mandate to support the green development strategy of the nation. Ed-2 on his side explains also that environmental issues are among the prior editorial concerns of Ethiopian Press Agency (EBC). But he attributes the opportunity of news stories to be put on the front page depends on government's daily or current agenda. According to him, if they are found to be on the top of government agenda, it is likely for the stories to appear on the front page of the newspaper.

In this regard all the reporters (R-2, R-3 and R-4) except (R-1) reflected that issues of the environment are not given priority in regular bases. In fact, there are some seasons for such stories, especially stories dealing with soil and water conservation and tree planting activities, are become among the top news stories of the day when they are government's current concern. But, R-1 insisted that issues of the environment are top concerns of the daily editorial decision. His argument is supported by Ed-1 in this regard. According to Ed-1, whenever there is a request for news coverage from concerned institutions on issues related with environment, this stories are privileged than any other issue to be covered. But quantitative data results did not support this claim.

#### 4.5. Origin of environmental news stories

Data was also gathered in an attempt to know the proportion of domestic environmental stories in comparison with that of foreign ones.

**Table 4 - Origin of Environmental News Stories**

Name of Media Outlet	Frequency	Origin of Environmental News Stories		TOTAL
		Domestic	Foreign	
Ethiopian Radio	Number	11	14	<b>25</b>
	Percentage	44 %	56 %	<b>100 %</b>
Addis Zemen Newspaper	Number	14	1	<b>15</b>
	Percentage	93.3%	6.6%	<b>100%</b>

As we can observe from data presented in Table 4, over half of the environmental news stories (56%) by the Ethiopian Radio were foreign news stories. The share of domestic environmental stories of the medium was limited to 44%. But, the case of *Addis Zemen* newspaper in this regard is very different. Almost all of the environmental stories (93.3 %) published on the news columns of the newspaper were dealing with various domestic environmental issues. The share of foreign environmental stories was 1% only.

Therefore, we can deduce from quantitative data results that ER gave more coverage to foreign environmental stories than those local or domestic ones. In this regard, all most, all of AZ's environmental news stories found to be dealing with domestic ones. And most of these domestic stories found to be dealing with environmental conservation activities such as soil and water conservation, tree seedling and planting activities. As a matter of fact, those domestic environmental stories of ER were also found to be dealing with same environmental issues covered AZ.

Giving more attention and news coverage to domestic or local environmental issues is not bad by itself. Even it is supported by the principle of proximity (which is one of the major news selection principles). Most of the time news stories having both geographical and psychological relevance and proximity could appeal to audience. But, it should be also noted that the Ethiopian public is part of the global community. So that, it should be provided with news information about major environmental concerns that have a great deal of impact at global, continental and regional levels. In this regard, the quantitative news coverage which was given by ER for foreign environmental stories is recommendable. Most of the news stories were dealing with issues such as the release of green-house gases to the atmosphere, global warming/ climate change and its causative effects on planet Earth's echo-systems, the melting of polar ice burgs, the increase of sea levels etc.

#### **4.6. News sources of environmental stories**

Using a proper source of information is critical in news reporting. Specially, it becomes more critical in deciding the proper source of information in environmental reporting. Several researches examining environment journalism in various geographical contexts also reflect that powerful political and business interests exert influence on environment news coverage, particularly at the national level (Bourassa E. et al, 2013:13). One the basic research questions

of the study focuses on this issue. Both quantitative and qualitative data were collected in order to identify the major news sources the media use to their environmental stories. The result of data gathered about the making use of news source of the media studied is presented and discussed here under.

**Table 5- News Sources of Environmental Stories**

Name of Media Outlet	Frequency	News sources						
		Government officials	Experts/scholars	Community members	Environment Groups/NGO's	Private companies	Press releases	research findings/reports
Ethiopian Radio	Number	9	13	5	1	1	1	3
	Percentage	36 %	52 %	20 %	4 %	4 %	4 %	12 %
Addis Zemen Newspaper	Number	14	3	0	0	0	0	1
	Percentage	93.3%	20%	0%	0%	0%	0%	6.6%

According to the result of quantitative data presented in Table 5, in 52% of the environmental stories of the Ethiopian Radio environmental scholars and experts were referred as source of information. Government officials were also found to be news sources for 36 % of environmental stories of same media. And in 20% of the stories community members and in 12% of them environmental research findings and reports were also used as sources of information.

Government officials were found to be the news sources, almost, in all environmental stories (93.3%) of *Addis Zemen* newspaper. while environmental scholars and experts were found to be referred in 20% news stories of the newspaper, research findings and reports were used only in 6.6% news stories of the newspaper.

The result of quantitative data tells that environmental scholars or experts were found to be the dominant sources of information in the news stories of ER. Government officials were also found to be major sources of information in a significant number of stories by ER. What was found surprising to the researcher is the domination of government officials in almost all environmental news stories of AZ. But, the news stories in which environment scholars or experts were used were few (in 20% or 3 stories only). Except a research report used in one story, other news sources such as grass root communities, environment groups and NGO's and press releases from concerned bodies were found totally neglected news sources by AZ.

But, these sources were given a meager chance in few stories of ER (grass roots in 5 stories and research findings in 3 stories).

This data revealed government officials' domination of the news, confirms also the researcher's profound personal observation on the common tendency of Ethiopian state media in making use of government officials as their sole news sources. Unlike this common feature of news stories of the state media, the strange news dominance of environment scholars and experts revealed by the result of data gathered from sampled news stories of ER could inculcate the question 'Why this happened?' in the researcher's mind. Urged by this question, he had to revisit the result of data gathered on the proportion between domestic/local and foreign environmental stories of ER. Then, he could realize that from the total percentage of stories covered by ER, 56% of them were taken from foreign news sources.

Comparison made on the frequency percentage of these stories with that of news stories with scholars/experts information (which is 54%), led the researcher to make additional observation on coded foreign news stories sources. Then, he could realize that 54% of those stories were coded having scholar/expert news sources. From the correlation between the result of this indirectly checked quantitative data and the result of data gathered about the news sources of environmental stories of both ER and AZ, we can generalize that government officials were found to be the dominant source of environmental stories of the media studied.

The result of qualitative data gathered from editors and reporters agrees with the result of the quantitative data. From the in-depth interviews made with editors and reporters, it could be detected that in most of their environmental stories, especially those event oriented ones, are dominated by keynote messages of political figures. During interviews made, they were complaining about the challenge they face to find cooperative experts and up to date research information of the sector. They further mentioned that things get better when they work on project or planned environment related news stories.

According to R-1, R-2 and R-4, such news production projects allow them more time to collect news information from diversified sources and make well researched, substantive, depth full and appealing environmental news stories.

#### 4.7. Nature of the environmental news stories

It is obvious that informing the public is one of the principal roles of the news media. They discharge this key duty mainly through news stories they produce and disseminate to the public. On top of that, Ethiopian state media are expected to shape the public thinking and create national consensus by means of their news product (MGCA, 2004:30).

**Table 6 - Nature of the Environmental News Stories**

Name of Media Outlet	Frequency	Nature of environmental news stories					
		Investigative	Event Oriented	solution oriented	problem oriented	Advocating	Informative
Ethiopian Radio	Number	0	8	16	3	0	25
	Percentage	0%	32%	64%	12%	0%	100%
<i>Addis Zemen</i> Newspaper	Number	0	14	8	0	1	15
	Percentage	0%	93.3%	53.3%	0%	6.6%	100%

As the result of data gathered about some major news functional, all (100%) of the examined environmental news stories were found to be informative. And most of environmental news stories of the studied media (64% of ER and 53.3% of AZ), were found to be solution oriented. But when we come to the contexts in which the news stories were produced, there was a significant variation observed between the two media. Almost all of (93.3%), except one, environmental news stories of *Addis Zemen* newspaper were event oriented. Comparatively speaking, the prevalence of event oriented stories among environmental news stories by the Ethiopian Radio was found to be less. Only 32% of them were found to be event oriented. But, there was no any environmental story found having investigative nature.

Furthermore, 12% of environmental stories of the Ethiopian Radio were found to be problem oriented; one news story (6.6%) from those published in *Addis Zemen* newspaper found to be pro-environment (having advocating nature).

The results of quantitative data gathered about the nature of the news stories tell that most of them were event oriented. They were reported depending on news information gathered

attending environmental consultation meetings, workshops, events. Most of the information sources of these news stories found to be keynote speeches of invited political figures. The news stories lack depth, clarity and explanation on the environmental they dealt with. Since they were not properly sourced, they lack substance and credibility. If they were well researched and equipped with proper information from relevant sources, they could have the quality to be critical, trustworthy as well as appealing to audience.

#### 4.8. News Frames applied for environmental stories

How an issue is characterized in news reports can have an influence on how it is understood by audiences (Scheufele & Tewksbury, 2007:9). This is also one of the principal purposes attached to the making use of news frames. One of the basic research questions of this study focuses on the identification of the dominant news frames applied in the environmental stories of the media studied. In order to gather data, a media frame identification codebook proposed by Boydston et al (2013: 4-5) has been adapted and used for the purpose of this study. The result of data gathered concerning media frames used is presented and discussed hereunder.

**Table 7 -News frames applied for environmental stories**

Name of Media Outlet	Frequency	News Frames Applied															TOTAL	
		Episodic Frames	Thematic Frames															
			Economic	Capacity & Resources	Morality	Fairness & Equality	Constitutionality & Jurisprudence	Policy Prescription & Evaluation	Law, Order, Crime & Justice	Security & Defense	Health & Safety	Quality Of Life	Cultural Identity	Public Opinion	Political	External Regulation & Reputation		Others
Ethiopian Radio	Number	-	6	9	-	-	-	2	1	2	1	1	-	-	3	-	-	25
	Percentage	0%	24%	36%	0%	0%	0%	8%	4%	8%	4%	4%	0%	0%	12%	0%	0%	100%
Addis Zemen Newspaper	Number	0	1	9	0	0	0	0	0	1	0	1	0	0	2	1	0	15
	Percentage	0%	6.6%	60%	0%	0%	0%	0%	0%	6.6%	0%	6.6%	0%	0%	13.3%	6.6%	0%	100%

According to data presented in table 7, 36% environmental news stories by Ethiopian Radio and 60% news stories by *Addis Zemen* newspaper were framed using the capacity and resources frame. This news frame was found to be the most frequently used news frame in the environmental stories of both media. When we come to the prevalence of other news frames,

the economic frame was applied in 24% of environmental stories by the Ethiopian Radio. But it was applied in 6.6 % of the news stories by *Addis Zemen* Newspaper. While the political frame was found to be applied in 12% of environment stories by Ethiopian Radio, it was also used in 13.3% of the environmental stories of *Addis Zemen* newspaper. Each of the policy prescription and evaluation and the security and defense frames were applied in 8% news stories of ER. But in the case of AZ, when the security and defense frame was applied in 6.6% of news stories of the medium the policy the other one was not applied in any of stories same medium. Each of Frames such as Law, order, crime & justice; health & safety and quality of life were also applied in 4% of environmental stories by ER. But only the quality of life frame found applied in 6.6 % environmental stories of AZ. But the rest two were not.

From the result of quantitative data presented in Table 7, we can deduce that the capacity and resources frame was found to be the dominant news frame used in both ER and AZ. In comparison, the frequency of political frame was also found to be proportional in both media. Because, there is a slight deference between the frequency percentages of its application in both media (it was applied 12% of stories in ER and 13.3% of them in AZ). But, a big deference was observed between the two media with regard to the application of the economic frame. When this news frame was found applied in higher frequency rate in ER (which is in 24 % environmental stories of the radio station, and even it is the second dominant frame used next to the capacity & resources frame), the case is very deferent in AZ. This news frame was applied only in 6.6% (in one news story only) of environmental stories the media covered.

As quantitative data results on the media's use of news frames indicated that the capacity and resource the dominant news frame applied in most environmental stories of the media studied. Political frame was found to be the second dominant frame used. But, a difference was observed between the two media in the making use of the economic frame. This frame was the second dominant frame used in many of news stories of Ethiopian Radio.

The tendency of the media to these news frames unveils some truths about the environmental news coverage of the media studied. Most of the stories framed with the capacities and resources frame were narrating environmental successes or problems attributed to concerning or executive institutions human, material, financial, managerial capacities. For instance, most of the news stories dealing with the success of soil and water conservation activities were

meant to signify the effectiveness of development policies and the cooperation and commitment of government and local farmers to implement these policies and so on.

And , in most of those stories found framed with the economic frame relate the environment issue dealt with either from economic benefit or cost it incurs on the communities directly or indirectly affected by it. Those stories framed with the political news frame too, were meant to signify the dedication and role of the government for the environmental successes.

The making use of these frames is not bad by itself. The limitation of the media on this matter is the neglecting of other frames considered crucial for the environment well to be communicated. Along with the providing the public with more environmental information it is very important also to frame or present the information using diversified news frames.



## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Conclusions

In recent years, environmental issues are attracting concern of the global community and the media. Environmental problems, such as global warming/climate change, are attracting global attention due to recurrent natural disasters causing huge human and material damages in many parts of the world. Ethiopia is also confronting with serious environmental challenges such as land degradation, deforestation, soil erosion, loss of biodiversity, desertification, recurrent drought, flood; and water and air pollution etc. The media and journalists should use the power of the news media to aware the public about the serious state of the environment and bring about changes to improve the management and sustainable use of environmental resources. It is the supposition of this study that media have a great role and impact by providing the public with sufficient, accessible, well framed environmental news information.

This study was an attempt to examine the environmental issues coverage of the Ethiopian state media through the Ethiopian Radio of Ethiopia Broadcasting Corporation (EBC) and *Addis Zemen* Newspaper of Ethiopian Press Agency (EPA). Quantitative Content analysis on sampled news contents and qualitative In-depth interview with editors and reporter of the media were carried out to collect data needed for the study. The results of both qualitative and quantitative data of the study indicated that:

- Environmental issues are relatively given little news coverage in the studied state media outlets. More attention and news coverage was found to be given to issues such as politics and diplomacy; business and economy; sport and entertainments; and social matters.
- Most of environmental news stories covered by Ethiopian Radio were found to be dealing with environmental research findings, innovations and solutions, and as well as environmental problems and challenges such as global warming, ozone layer depilation, the melting of polar ice burgs, increment of sea levels, urban sound pollution etc. The number of news stories about environmental conservation activities such as soil and water conservation, water shades development, tree seedling and planting, proper solid waste disposal and

management was found to be fewer than both the aforementioned thematic categories. The case in Addis Zemen is different in this regard. Over half of the environmental news stories of the newspaper were dealing with environmental conservation activities. The remaining number was divided between the thematic categories of environmental research findings and innovations; and various environmental problems and challenges.

- Environmental news stories were not given priority in the daily news agenda of both media studied.
- Ethiopian Radio was found give more coverage to foreign environmental stories than those local or domestic ones. In this regard, all most, all of AZ's environmental news stories found to be dealing with domestic ones.
- Government officials were found to be the dominant source of environmental stories of the media studied.
- Most of environmental stories of studied media were event oriented. They were reported depending on news information gathered attending environmental consultation meetings, workshops, events. And most of the information sources of these news stories found to be keynote speeches of invited political figures.
- The capacity and resources was found to be the dominant news frame applied in most environmental stories of the media studied. Political frame was found to be the second dominant frame used. But, a difference was observed between the two media in the making use of the economic frame. This frame was the second dominant frame used in many of news stories of Ethiopian Radio.

## **5.2. Recommendations**

Based on the findings of the study, the following recommendations are made by the researcher to be taken as remedies to improve environmental coverage of the media:

- The environment needs to be among major national issues of prior concern of both the government and the media.
- The media are also expected to give due concern and news coverage to environmental issues since these issues have a great deal of impact in every aspect of human life, be it political, economic ,social everything, at global and national level.

- In addition to giving more attention and coverage, they should increase the amount and visibility of environmental stories and make their environmental stories, so the public get empowered.
- Along with providing the public with more environmental information, the media need frame and present the environmental information using diversified news sources and frames.
- They should also integrate the environmental angle into other stories and make that connection explicit, make environmental stories appealing and trustworthy to a larger cross section of society.

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## Appendix-A

**CRA-01**

### Data Coding Sheet

**1. General Information**

Name of media outlet Ethiopian Radio Date of publication/transmission Jan. 14/2014

Coder ID- PA

No	Coding Categories	Coding Description and frequency										
1	environmental theme(s) the news story deals with	Environmental problems /Challenges	Environmental Protection /conservation			Environmental Events & Campaigns		Environmental Research Findings, Innovations & solutions			Others	
								/				
2	Prominence or Placement of environmental stories	among major/ front page news stories				Among insignificant (common) /inside page news stories presented in a given news edition.						
						/						
3	Origen of Environmental News Stories	Local /Domestic				Foreign						
						/						
4	News sources	Government officials	Experts/ scholars	Community members		Environment groups/ NGO's		Private companies,	press releases		new research findings/reports	
			/									
5	Nature of environmental news stories	investigative	Event Oriented		solution oriented		problem oriented		Advocating		Informative	
					/				/			
6	News Frames Applied for the environmental stories	<b>7.1. EPISODIC</b>					<b>7.2. THEMATIC</b>					
							/					
		<b>7.2. THEMATIC FRAMES</b>										
		1.Economic	2. Capacity & resources	3.Morality	4. Fairness & equality		5.Constitutionality & jurisprudence		6.Policy prescription & evaluation		7.Law,orde,crime & justice	
			/									
	8.Security & defense	9.Health & safety	10.Quality of life	11.Cultural identity	12.Public opinion	13.Political		14.External regulation reputation		15.Other frames		

## **Appendix-B**

### **Questions for In-depth Interview Guide**

1. What are the major issues of national impact you usually give coverage?
2. How do you treat environment related stories in your news editions in comparison with other news stories dealing with issues other than environmental ones?
3. How do you explain the representation of environmental issues on the editorial policy of your media institution?
4. Which of environmental issues do you give more coverage? Why?
5. What are the sources you commonly use for environmental issues you cover? How do you explain the relationship with your sources, major stakeholders (government, environmental protection authorities, NGOs, industries), the public?
6. What is your reflection on your and fellow journalists' professional status with regard to environmental reporting? Have you taken any training dealing with environmental journalism and/or environmental reporting?
7. What are the professional and institutional challenges you face while reporting /covering environmental issues? And In your opinion, what should be done to improve media coverage of environment issues?



## Appendix-C

### List of Editors and Reporters Interviewed

<b>ID /Code No.</b>	<b>Name</b>	<b>Media</b>	<b>Position</b>	<b>Academic background</b>	<b>Service years in media institution</b>
<b>Ed-1</b>	<b>Aragaw Tadese</b>	<b>Ethiopian Radio (EBC)</b>	<b>Editor</b>	<b>MA Degree</b>	<b>7 years</b>
<b>Ed-2</b>	<b>Daniel Bekele</b>	<i>Addis Zemen (EPA)</i>	<b>Editor</b>	<b>BA Degree in Language and Literature</b>	<b>3 years</b>
<b>R-1</b>	<b>Birehanu Alemu</b>	<b>Ethiopian Radio (EBC)</b>	<b>Senior Reporter</b>	<b>BA Degree in Journalism and Mass Communication</b>	<b>4 years</b>
<b>R-2</b>	<b>Ahmed Ibrahim</b>	<b>Ethiopian Radio (EBC)</b>	<b>Reporter</b>	<b>BA Degree in Journalism and Mass Communication</b>	<b>3 years</b>
<b>R-3</b>	<b>Mihret Mogess</b>	<i>Addis Zemen (EPA)</i>	<b>Reporter</b>	<b>-BA Degree in theatrical art -Diploma in Language and Literature</b>	<b>5 years</b>
<b>R-4</b>	<b>Biruk Berhie</b>	<i>Addis Zemen (EPA)</i>	<b>Reporter</b>	<b>BA degree in English Literature</b>	<b>4 years</b>

## Appendix-D

### List of Broadcasting/Publication Dates on which Sample News Stories for Content Analysis Selected

<i>Month of Broadcasting/Publication</i>	<i>Number of Sample Dates allocated for the Month</i>	<i>Broadcasting Dates Selected</i>	<i>Remark</i>
January/2014	8	14,16,17,21,22,24,27,29	
February/2014	6	9,15,16,17,25,28,	<i>Dates were set and selected according to the Ethiopian Calendar. That is why the distribution of number of sampled dates among these 3 months varies</i>
March/2014	5	3,14,19,24,29	
April/2014	10	1,2,7,9,13,21,22,25,27,28	
May/2014	8	2,13,14,16,18,21,24,28	
June/2014	8	1,10,11,20,21,24,25,28	
Total	45		

**Note:-**The total number of News programs /Editions which were selected and Included in the sample frame was 90 (45 from the Ethiopian Radio and 45 from the *Addis Zemen* Newspaper).

## Appendix-E

### Inter-Coder Reliability

Coding categories Categories	No of Coding Decisions	Decisions on which the two coders agree	Decisions on which the two coders disagree	Reliability	
				Percentage of Agreement	
environmental theme(s) the news story dealt with	40	40	0	1	100
Prominence or Placement of environmental stories	40	40	0	1	100
Origin of Environmental News Stories	40	40	0	1	100
News sources	40	40	0	1	100
Nature of environmental news stories	40	40	0	1	100
News Frames Applied for the environmental stories	40	35	5	0.875	87.5
	240	235	5	0.9791	97.91

**Note:**

$$\text{Reliability} = \frac{2M}{N1 + N2}$$

Where M is the number of coding decisions on which two coders agree, and N1 and N2 refer to the total number of coding decisions by the first and second coder, respectively

## **Declaration**

I, the undersigned, declare that this thesis is my original work and all the sources of materials used for it have been properly acknowledged.

Name: Gezahegn Teklesilassie

Signature: \_\_\_\_\_

Date of Submission: June 2015

Place of Submission: Addis Ababa University