

*Addis Ababa
University*

(Since 1950)



ADDIS ABABA UNIVERSITY

COLLEGE OF DEVELOPMENT STUDIES

CENTER FOR ENVIRONMENT AND DEVELOPMENT

MEDIA: it's ROLE IN PROMOTION CLIMATE CHANGE

INFORMATION: A CASE STUDY ON GARMENT NIFAS SILK LAFTO

ADDIS ABABA AND FANA BROADCASTING COOPERATION

By

NATHAN METASEBIA

ADVISER: DR. ENGEDAWORK A. (PHD)

**A THESIS SUBMITTED TO CENTER FOR ENVIRONMENT AND
SUSTAINBLE DEVELOPMENT STUDIES IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN
ENVIRONMENT AND SUSTAINBLE DEVELOPMENT**

September 2021

Addis Ababa, Ethiopia

**Media: It's Role in Promotion Climate Change Information: A Case Study on
Garment Nifas Silk Lafto Addis Ababa and Fana Broadcasting Cooperation**

By

NATHAN METASEBIA

Advisor: DR. ENGEDAWORK A. (PHD)

**A THESIS SUBMITTED TO CENTER FOR ENVIRONMENT AND
SUSTAINBLE DEVELOPMENT STUDIES IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTER IN ENVIRONMENT
AND SUSTAINBLE DEVELOPMENT**

September 2021

ADDIS ABABA

Declaration

I declare that, this thesis (MEDIA: ITS ROLE IN PROMOTING CLMATE CHANGE INFORMATION: A CASE STUDY ON GARMENT NIFAS SILK LAFTO ADDIS ABABA AND FANA BROADCASTING COOPERATION) is my own work and I have duly acknowledged the sources of materials I have used.

Name: Nathan Metasebia Signature: _____ Date: September, 2021

ADDIS ABABA UNIVERSITY

COLLEGE OF DEVELOPMENT STUDIES

**MEDIA: it's ROLE IN PROMOTION CLIMATE CHANGE
INFORMATION: A CASE STUDY ON GARMENT NIFAS SILK LAFTO
ADDIS ABABA AND FANA BROADCASTING COOPERATION**

By

NATHAN METASEBIA

APPROVED BY THE BOARD OF EXAMINERS

_____	_____	_____
Advisor Name	Signature	Date
_____	_____	_____
External Examiner	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date

Acknowledgements

I would like to express my sincere gratitude to Dr. Engedawork Assefa for his relentless support and motivation he has provided to me from the very start. It was his guidance and insights that has made it possible for this paper to come to life.

I would also like to thank all the staffs of Fana Broadcasting Corporation and the residents of Garment Nifas Silk Addis Ababa area residents for their cooperation and support. I would also to thank all those who have contributed in the construction of this paper.

Table of Contents

Acknowledgements.....	iv
Abstract.....	viii
CHAPTER ONE.....	1
INTRODUCTION	1
1.1. Background of the Study.....	1
1.2. Statement of the Problem.....	4
1.3. Objective of the Study.....	6
1.3.1. General Objective.....	6
1.3.2. The Specific Objective.....	6
1.4. Research question.....	6
1.5. Significance of the Study	6
1.6. Limitation and Scope of the Study	7
CHAPTER TWO.....	8
LITERATURE REVIEW	8
2.1. Introduction.....	8
2.2. Concepts and Definitions of Terms.....	8
2.2.1. Climate change.....	8
2.3. Impacts of climate change on development process	9
2.4. Impacts of climate change on African development	10
2.5. Climate change impacts in Ethiopia.....	11
2.6. Environmental Problems across the world.....	13
2.7. Theoretical Framework	14
2.7.1. Theories on Environmental Protection.....	14
2.7.2. Original theory of Schwartz’s Norm Activation Model.....	15
2.7.3. New ecological paradigm and human exceptionalism paradigm	15
2.7.4. Materialist vs. Post-Materialist theory	15
2.9.1. The role Of TV programs in creating awareness	17
2.10. Conceptual Framework	18
CHAPTER THREE	19
Research Methodology and Description of the Study.....	19
3.1. Introduction	19
3.2. Study design	19

3.3.	Research Design.....	20
3.4.	Sampling procedure.....	20
3.5.	Methods of collection.....	21
3.5.1.	In- depth Interview.....	22
3.5.2.	Observation.....	22
3.5.3.	Content Analysis (audio analysis).....	22
3.7.1.	Document Review.....	23
3.8.	Validity and Reliability.....	24
3.8.1.	Validity.....	24
3.8.2.	Reliability.....	24
CHAPTER FOUR.....		25
4.	RESULTS AND DISCUSSIONS.....	25
4.1.	Demographic Background of the Respondents.....	25
4.2.	Types of Media Used by Respondents.....	26
4.3.	Awareness of Climate Change by the Community Members.....	27
4.4.	Level of awareness of Journalists, Editors and Producers of climate change.....	28
4.5.	Demographic variable and climate change awareness.....	28
4.6.	Climate Change information for the community.....	30
4.7.	Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern.....	31
4.8.	Analysis of media content regarding the climate change.....	33
4.9.	Major Climate Change and Environmental Issues Covered.....	34
4.10.	Source of Information of Contents for Fana.....	36
4.11.	Challenges of Reporting on Environmental Issues.....	37
4.12.	Summary of Major Findings.....	39
4.13.	Major Challenges in Covering Environmental issues.....	40
CHAPTER FIVE.....		42
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....		42
5.1.	SUMMARY.....	42
5.3.	Recommendation.....	43
Reference.....		44
Appendix A.....		49
Appendix C.....		51
Survey from Residents.....		51

Lists of Tables

Table 1 background information of the local respondents	26
Table 2 Source of information for the local respondents.....	27
Table 3 awareness about climate change by the local respondents.....	28
Table 4 association between demographic indicators and awareness about climate change by local respondents.....	30
Table 5 the main source of CG information for local respondents	31
Table 6 Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern	32
Table 7 media content regarding the climate change	33

Abstract

This paper focuses on the analyses and challenges of climate change issue scope within the public media that centers on Fana Broadcasting Corporation and assessing the local community awareness about climate change issues. Particularly, the ponder investigates the degree of coverage on climate change issue in Fana TV and Fana FM 89.1 programs & assessing around garment Nifas Silk Lafto Sub City. Plan setting and framing were utilized as hypothetical systems of the think about. The thesis has utilized a qualitative strategy for information collection and investigation and quantitative method for assessing community awareness about the climate change in case of garment Nifas Silk Lafto Sub City. The hones and challenges of climate change issue scope in private and open media has been inspected through center gather discussion and bunch talk, with program maker writers and in interviews with editors within the examined media. 195 household heads around garment Nifas Silk Lafto Sub City selected using convenient sampling technique. In expansion, perception and substance examinations of climate alter programs were carried out. In expansion, perception and substance investigations of climate alter programs were carried out. Most of climate change programs of Fana TV program were occasionally situated and gave scope for both residential and outside climate change issues. For open media, most of the stories were arranged and centered on domestic climate alter and natural issues. The discoveries for the most part demonstrate that both private and open media has given lacking scope to climate change issues. From both of the study groups, Fana Broadcasting Corporation and residents of Garment Nifas Silk Lafto Addis Ababa residents it is evident that that there is a huge gap of perception on the people. In expansion, need of consideration for specialization erroneous report which is discharged from government and non-governmental organizations and need of substantial source and calculated results were found to be the challenges to cover better climate change issues. The ponder concluded that the degree media gives for climate alter issue ought to be reinforced to upgrade open mindfulness around climate change and its impacts.

Key words: - climate change, media, awareness, public, private, coverage

Abbreviation

CSA	Central Statistics Agency
FGD	Focus Group Discussion
UNEP	United Nations Environmental Program
EPE	Environmental Policy of Ethiopia
EPA	Environmental Protection Authority
MNC	Multinational Corporation

CHAPTER ONE

INTRODUCTION

This part of the chapter focuses on the background of the study, statement of the problem, objectives of the study. It also contains the research questions, significance, limitations, scope and organization of the study.

1.1. Background of the Study

The environmental management programs, conventions, declarations, protocols, actions plans have become a necessary (but not sufficient) condition for controlling or preventing the causes of environmental degradation and for finding ways to mitigate both the global and local environmental impacts of human activities. The success of a given project or approach actually depends on the number of people supporting it (Lewin, 1990). It is arguably easier to achieve results, lower environmental impact, with the help of collective measures, i.e. that politicians receive a mandate from the people to take action against industrial polluters, environmental harmful substances and activities.

The United Nations Framework Convention on Climate Change, in its article one, characterizes climate change as a change of climate which is credited straightforwardly or by implication to human action that changes the composition of the worldwide environment and which is in expansion to characteristic climate variability watched over comparable time periods (UNFCCC, 1992, 4).

Awojobi (2017) included that climate change has influenced the environment, human wellbeing, infrastructure, nourishment and water. He also included that, climate change has uprooted a part of people from their homes and they are constrained to immigrate to other safe parts. The foremost common types of climate change in Africa are dry season, flooding, desertification and soil erosion. He also clarified that whereas international and national endeavors have been concentrated within the relief of the impacts of climate change in Africa, there are still a few obstructions and impediments to adaptation.

According to a survey in 1998, Lithuanians are aware of such environmental problems which they face every day and those, which are global ones, were placed at the bottom of the list (Juraite &

Thelander, 1999). That shows that people have less knowledge concerning global environmental problems and they see just local problems. On the other hand, if they would know, they may be interested in it. There is still lack of information regarding global consequences due to local environmental problems (Juraite & Thelander, 1999). Nevertheless, to get knowledge it does not mean to act in pro-environmental way, just we can say that it is greater probability what people will have what to think about.

The role climate change can play in day-to-day lives is immense. With a lot of economic activities taking place across the world, climate change problems have arisen and has become hard to consider them as a primary problem. The world has already warmed by 1°C since the middle of the 19th century, and could reach 1.5°C before the middle of this century at the current rate of warming and on the track for 3°C rising. Limiting the rise to 1.5°C will require immediate action, and still create climatic difficulties but will have markedly better results for the planet. The warming effect of increasing carbon dioxide takes decades to influence the planet's temperature. Even if we cut all emissions today, we are still set for a temperature rise, due to the cumulative effect of the climate (IPCC, 2018).

The idea of climate change has been a widely debated topic among different scholars and intellectuals. Understanding this concept is crucial in ways such as policy making, understanding its significance, its gaps, the role it plays and many more. A powerful tool that still connects mankind and is being used to send messages and influence people's perception till this date is the media. Media outlets such as the newspaper, television channels, Radio are all tools people are still so highly dependent on, and still influenced by. Such tool is capable of communicating all types of climate change problems personally to each individual's house.

Regardless of the power the media holds in creating awareness on climate change issues, it is evident that little has been done and the routes taken were not efficient enough. Till date the interventions used in dealing with Environmental problems has been very weak, mainly based on lack of awareness.

Climate change issues have global aspects which require action at global level. Serious climate change and environmental problems result from developments taking place in developed as well as developing countries. Most advanced countries attained their prosperity at the cost of the

environment. These countries concerted efforts of pursuing sustainable socio-economic development through the protection of the environment are integrated at local, regional and international levels. Discussion about global warming, deforestation, and pollution of the oceans is affecting attitudes related to economic growth and development at local, national, and international levels (Hewitt 1990:277), . Though taking effective political action to deal with these problems is as such not simple.

The media used for the investigation of environmental awareness are newspaper, radio and television programs which are widely and frequently used modern media. There are a set of ideas about media tasks in society, like providing information about events and conditions in society and the world, facilitating innovation, adaptation and progress. McQuail (1994: 79).

Media's endeavors to sensitize the open almost environment issues and its proceeding central part within the battle against the cause of natural issues are vital. Be that as it may, the level of involvement of the media within the nation to address natural challenges is as it were occasion based. Natural issues have not however come to organize where they are the media's prime plan. The media falls flat to require a inventive approach in creating stories around natural assurance and gives deficiently consideration to natural corruption and its consequences. The media does not appear to be in a position to make natural mindfulness to the open in a given geological range. The spatial designs of media scope in Ethiopia are uneven. One of the substances observed within the nation is an urgent public request for the correct to rise to get to data. There's a broadening data crevice within the locales in common and provincial zones in specific (Federal Democratic Republic of Ethiopia 1992: article 4, sub article 1).

In this way, raising the mindfulness of a society is one of the techniques required for the successful realization of natural targets and objectives. The need of natural mindfulness has been common indeed among approach creators, until as of late. The issue is that media experts relegated to do programs or reports on the environment have a few other obligations which request their consideration and time. It isn't common for writers to specialize in more than one range or theme. The capacities of writers are not solid sufficient to create and show programs utilizing inventive strategies (MOI 2006).

Concurring to the Ethiopian Broadcast Authority (EBA 2006) there's no differentiated community media at grass root level. Moreover, the media does not allow reasonable and ideal space and time to natural issues. No point by point thinks about to discover the part of the media in natural mindfulness issues have been done not at all like other improvement and political issues. Indeed in spite of the fact that a few exercises embraced so distant are positive, the work done to date within the think about range is exceptionally lacking compared to the results of natural challenges. Therefore, the purpose of this study is assessing the role media plays in creating climate change awareness.

1.2. Statement of the Problem

A common issue that's wild across the globe, is that of natural issues. It's known to have a wide scope and impact all divisions. The degree of which the Environment is influenced might shift from nation-to-nation but all have their claim share of issues when it comes to protecting the Environment. Climate change has the control to influence diverse parts of the climate, horticulture, wild life, woodlands and biological system. Since on the off chance that influences normal things it straightforwardly or by implication influences all living creatures. A lof of places are still getting hotter, this temperature alter will advantage a few districts whereas influencing others. When the winter gets hotter it'll move forward the wellbeing of individuals and agrarian activities in a few zones, but all-inclusive it'll have negative impacts such as rise in mortality rate, and imperiled nourishment supplies, typically due to the visit and extraordinary warm waves on the summer and other related impacts.

Media have the power to influence public opinion as well as social policy about significant social matters. In a social system, communication channels play a crucial role in creating awareness, learning, sharing and imparting new knowledge among people. In this regard, the Rogers' Diffusion of Innovations model explains how mass media and interpersonal sources constitute two important channels in communicating information in a society Kassa (2017).

Regardless with this a study conducted on environmental issues coverage in the Ethiopian state media: the case of Ethiopian radio and Addis Zemen newspaper indicated that Environmental issues are relatively given little news coverage rather more attention and news coverage was given to issues such as politics and diplomacy; business and economy; sport and entertainments; and

social matters (Gezahegn, 2015). This shows that even though the extent of climate change related problem like drought, flood and unseasonal rainfall increased in Ethiopia media gives inattention related to other issues.

The government's efforts are only one aspect of the process in working toward sustainable development. Meaningful change in sustaining development and protecting the environment, however, needs the entire community to be actively involved. This is where environmental journalists play an essential role, by providing timely information and well-researched perspectives on environmental issues, and creating a green consciousness throughout society (Tadesse, 2015).

Even though, the Ethiopian media are cover climate change issue incidents in giving less attention, it is important to examine climate change issue coverage trends of the country's media. In search of recent studies that particularly focused directly in climate change issue reporting in the Ethiopian media are very few. Only one piece of research was directly related to climate change issue coverage in Ethiopia. That is conducted by Degsew(2015) to examine climate change reporting in the Ethiopian radio and television agency. Degsew in his study attempted to examine the stories of climate change issue in the sampled year July 2009 and June 2010. He concludes that the studied media give less attention in covering climate change issue and stories are lack clarity, proximity and attractiveness.

It is hard to find the academic research papers that conducted on commercial media in reporting climate change issue in Ethiopia. So, there is a clear gap in the academic research and in the other literature that comprehensively analyses awareness of the community about climate change issue and its coverage of Ethiopia Broadcast media. Therefore, assessing these issues definitely aims to fill some of the gaps in the literature which focusing on the coverage of climate change issues especially in awareness of the society around garment Nifas Silk Lafto and public broad cast media specifically Fana broadcast corporation. With this point, studying the extent climate change issue reporting takes place in the selected broadcast media may have fundamental and significant contribution for the current discussion on the media.

1.3. Objective of the Study

1.3.1. General Objective

The general objective of this study is to assess the extent Fana Broadcast Corporation gives coverage to climate change issue and challenges they face focusing on Fana TV and radio.

1.3.2. The Specific Objective

- To explore the challenges that affect media coverage of Climate Change by Fana Broadcast Corporation.
- To assess the awareness of the community members of garment Nifas Silk Lafto about climate change
- To examine source and content of climate change information of the Fana Broadcast Corporation

1.4. Research question

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

- To what extent did Fana Broadcast Corporation did prioritize to climate change issues a story have covered in selected time?
- What is the awareness of the community members of garment Nifas Silk Lafto on climate change information
- What sources does Fana Broadcast Corporation use to obtain climate change issues?
- How does Fana Broadcast Corporation frame climate change issues?
- What are the challenges to cover climate change issues for Fana Broadcast Corporation?

1.5. Significance of the Study

Climate change is a common natural problem affecting people. Globalization is accelerating and causing climate change. Having a clear and thorough understanding can better the earth we live in. Media has the power to inform us on climate change issues and its impacts. Radio, television, newspapers, internet can create awareness on people about climate change. This study will help to check the credibility of media in coverage of climate change information. This study will help the

media to overcome their shortcomings and improvise the coverage of climate change issues. This study can help the readers to choose the media to get the more relevant and useful data from the specified sources.

The impact media outlets such as National geography channel make on influencing environment development across the world including Africa is something that cannot be denied and should be seen how that can be executed on a specific national level such as Ethiopia a country filled with a vast ecosystem. The result of this study is expected to show how environmental issues can and should be brought to the attention of many through an effective calculative manner that benefits all stakeholders. The results are also expected to show whether environmental problems have been tackled by the sole use of media outlets.

1.6. Limitation and Scope of the Study

This research aims to study the role of media on creating climate change information. Thematic area of the study focuses on local shows on Fana Broadcasting Corporation and residents of Garment, Nifas Silk Lafto Addis Ababa Ethiopia residents. The sample areas focus on a single media outlet that is Fana Broadcasting Corporation (FBC). In addition to these target areas, viewers and audiences of these channels, government entities, and intellectual communities are also sample groups.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter provides a review of the literature related to media and environmental and climate change information. The chapter includes a review of the global environmental situations, the state of the Ethiopia environment with the causes of environmental degradation in the country as well as a review of the literature on the role of the media in creating environmental awareness. A review of documents, different short discussion and proceedings are provided to highlight the level of knowledge. With this in mind, the literature review should be read as the beginning of a journey of research on the topic of the media and environmental awareness.

2.2. Concepts and Definitions of Terms

2.2.1. Climate change

Climate alter in IPCC utilization alludes to alter within the state of the climate that can be identified by changes within the mean and/or the changeability of its properties which holds on for an amplified period, regularly decades or longer. It alludes to any alter in climate over time, whether due to common changeability or as a result of human activity. (IPCC, 2011)

Development: alludes to: a comprehensive financial, social, social and Political process, which points at the steady enhancement of the prosperity of the complete populace and of all people on the premise of their dynamic, free, and important Support in improvement and within the reasonable dispersion of benefits coming about there from (Fors and Moreno, 2001).

Climate change in IPCC usage refers to a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity.(IPCC, 2011)

The distinction between individual weather events and climate change, the term climate change' refers to change in the longer term pattern of behavior of the atmosphere over millennia or, more recently, as a result of natural processes or human activity. Climate is distinguished from weather, which is the specific behavior of the climate at a particular time. Weather is made up of specific

events, for example, a particular storm, the rainfall over a particular period, the temperature at a particular time. Climate is about expectations; weather is about events and conditions (Cedep, 2013).

According to Kaspar et al. (2013) climate is changing across our planet, largely as a result of human activities. The most compelling evidence of climate change derives from observations of the atmosphere, land, oceans and cryosphere. Unequivocal evidence from in situ observations and ice core records shows that the atmospheric concentrations of important greenhouse gases such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) have increased over the last few centuries. In general term climate change refers to a static variation of temperature persisting for an extended period of decades or longer. Climate changes happen by fossil fuel in the composition of the atmosphere or in land use.

2.3. Impacts of climate change on development process

Climate change and variability affects in detrimental ways some of the most fundamental determinants for good health: clean air and water, sufficient food, adequate shelter and freedom from disease. A warmer and more variable climate increases the transmission of water, vector and food borne diseases, and also threatens to change the prevalence of those associated with air pollutants and aeroallergens. Climate change could alter or disrupt natural systems thereby bringing new challenges to the control of infectious diseases, as a changing climate makes it possible for diseases to spread or emerge in areas where they had been limited or had not even existed before (Nwamarah et al., 2012).

According to a study conducted by Morton (2007) smallholder and subsistence farmers will suffer impacts of climate change that will be locally specific and hard to predict. The variety of crop and livestock species produced by any one household and their interactions, and the importance of non-market relations in production and marketing, will increase the complexity both of the impacts and of subsequent adaptations, relative to commercial farms with more restricted ranges of crops. Small farm sizes, low technology, low capitalization, and diverse non climate stressors will tend to increase vulnerability, but the resilience factors—family labor, existing patterns of diversification away from agriculture, and possession of a store of indigenous knowledge should not be underestimated.

2.4. Impacts of climate change on African development

Climate alter is known to influence the whole globe, it influences world economy and solidness, but it is said to influence Africa more than other nations. Africa is known to be the foremost affected landmass, conjointly at chance of critical climate changes. Dry spells are seen in brief span contrasts ceaselessly. Numerous ranges in Africa are recognized as having climates that are among the foremost variable within the world on regular and decadal time scales.

The European Union (EU, 2007) stated that climate alter is likely to have a critical effect on the economies of creating nations. Without adjustment and moderation the misfortunes are estimated to be up to 20% of GDP. To play down the impacts of climate change, in creating nation is climate alter, adjustment in creating nations is critically required. Dependable gauges of adjustment costs are still inaccessible, but they are likely to run into the billions of dollar per year. A rate increment in temperature altogether diminishes financial execution in sub Saharan Africa by roughly 0.13 %, *ceteris paribus*., Whereas this can be in couple with comparable comes about on the relationship between climate alter and development in other districts, the relationship between genuine GDP per capita on one hand, and, its determinants on the other hand, and climate alter (temperature and precipitation) are naturally nonlinear. This recommends that underneath a certain limit level of yearly cruel temperature, increases in temperature boost development execution within the long-run, all things being break even with. After this limit, increments in cruel yearly temperature tend to have harming impact on long-run development exertion of Sub Saharan Africa nations (Alagidede et al., 2016).

African nations particularly East African nations are exceedingly dependant on precipitation and the effect of climate alter influence emphatically this locale. Seitz & Nyangena (2009) bolster this idea and contend that in East Africa, the link between climate and business is exceptionally solid. As East Africa depends intensely on rain-fed farming, country vocations are exceedingly helpless to climate inconstancy such as shifts in developing season conditions. Moreover, horticulture contributes 40% of the region's GDP and gives a living for 80% of East Africans. In 2003-2004, all East-African nations endured from weather-related nourishment crises and can in this manner be considered as powerless to the effect of climate alter on their agriculture.

On the other hand Literary works appear that the continent's biological system are undermined by climate alter, the World Wild Support (WWF, 2006) famous Africa contains around one-fifth of

all known species of plants, well evolved creatures, and feathered creatures, as well as one-sixth of creatures of land and water and reptiles. These species compose a few of the world's most assorted and organically imperative environments such as savannahs, tropical timberlands, coral reef marine and freshwater living spaces, wetlands and Montana environments. These all inclusive vital biological systems give the financial establishment that numerous Africa nations depend on by giving water, nourishment, and shield. In any case, since of climate alter, these environments and the employments that depend on them are threatened.

According to Zukang (2009) help Economical improvement scenarios in developing nations are impacted by the coordinate effect of climate alter, by the spill over influences of climate-related arrangements in industrialized nations, and by the repercussions of adjustment and relief exercises within the creating nations themselves. Maintainable improvement approaches in all nations must be defined with due thought of this three-dimensional risk and its suggestions for adjustment, moderation, and universal participation and arrangement coherence the key components of universal climate assentation.

Contrariwise Baarsch et al. (2017) contends that usually since of African countries' restricted versatility against the negative impacts of today's climate are as of now coming about in lower development and improvement, tall lighting the results of this need of versatility and versatile capacity. Indicative discoveries appear lower GDP per capita development extending, on normal, from 10 to 13 per cent (with a 50 per cent certainty interim), with the poorest nations in Africa showing the most elevated adjustment shortage. They too show African nations are anticipated to encounter clear hindering macroeconomic results from climate alter over the coming decades. Across Eastern and Western Africa, climate alter within the high-warming situation would decrease GDP per capita by around 15 per cent by the 2050(Ibid).In common financial improvement and, in specific, destitution mitigation may be a major issue for numerous African nations counting Ethiopia. But in later a long time it has gotten to be apparent that climate alter impacts in creating nations might prevent the accomplishment of development goals.

2.5. Climate change impacts in Ethiopia

Ethiopia isn't immune to climate alter impacts, and is one of the foremost influenced nation from drouvht and cline alter, which includes a negative effect on the biophysical and financial

variables. Dry spell and flood is influenced by climate alter which in turn influences the agribusiness. So also (Boka, 2017) Over the past decade, fiascos have kept on apply a overwhelming toll and, as a result, the prosperity and security of people, communities, and nations as a entire have been influenced. Over 700,000 individuals have misplaced their lives, more than 1.4 million have been harmed and roughly 23 million have been made destitute as a result of disasters.

Watkiss et al. (2009) said that Ceaseless steady and reasonable climate condition of the final 10,000 a long time of the world for the entire of human improvement techniques had been changed on a variety from 1degree Celsius to sudden changes of temperature between 2°C and 6°C during 1960 and 2006. It was changed by 1.3°C in Ethiopia, at a normal rate of 0.28°C per decade. This alter had been most fast from July to September .Climate alter worsens the issue for the larger part of the world's provincial destitute who are inclined to climate chance. These stuns are a major cause of temporal destitution and family units had been incapable to smooth consumption.

According to Ethiopian Service of Water Water system and Electricity (2016) appraisal climate alter is getting to be the foremost common word used these days on media and by arrangement creators than ever. Typically since of its dangerous effect on human economy, wellbeing and vocation is exceptionally clear and enormous. The coordinated impact of climate alter incorporates expanded surge, dry season, and expanded recurrence of seriously storms and warm push, posturing extraordinary danger to human wellbeing and lives.

Developing nation like Ethiopia's financial development is exceedingly impacted by climate alter. agreeing to (Sørhaug, 2011), the most effect of climate changes in Ethiopia is that edit surrender has for the most part diminished from year to year, additionally creature items and creature ripeness. Moreover, climate changes to a few degree quickens the method of soil degradation; and overwhelming rain, hailstorms, solid wind, and surge can in several ways lead to soil disintegration. Since of climate changes, agriculturists get less wage from the creatures and from the edit areas and they might in dry spell- or surge periods confront broad deficiency of nourishment, water, or other necessities. (Woldeamlak et al.,p 47, 2015) contends Ethiopia as of now endures from climate changeability and extraordinary occasions.

In arrange to recognize and actualize suitable adjustment procedures at nearby level, it is vital to get it the nature of climate alter impacts, key vulnerabilities and innate adjustment practices. Climate alter has a few impacts on the environment in expansion to the disturbance to water assets we have fair portrayed. Expanded overwhelming precipitation as a result of climate alter can cause soil disintegration, edit harm and water logging, which makes the arrive troublesome or inconceivable to develop for agribusiness. It is evaluated that Ethiopia loses more than 1.5 billion tons of prolific soil each year through overwhelming rain and flooding; this misplaced soil seem have expanded the country's trim generation by an assessed 1.5 million tons soil (Works, 2016).

Securing Ethiopia's financial and social well- being within the confront of climate alter requires that policymakers and partners work together to coordinated climate alter adjustment into the country's advancement handle. Drought conditions, flooding, and bug flare-ups are a few of the push variables due to climate alter that influence agribusiness and nourishment generation frameworks. As climate alter is the foremost loathsome drift in creating nations like Ethiopia which are profoundly subordinate on farming, approach and key measures ought to be taken as approaches to adjust climate change stretch variables within the horticulture and nourishment generation segment. (Watkiss et al., 2009)

2.6. Environmental Problems across the world

Exorbitant contamination from human and mechanical exercises (industrialism), militarization and wars which leads to arrive corruption, spiraling populace development which leads to expanding squander era, unequal riches dispersion (destitution), unsustainable rural and angling strategies, overconsumption are all causes of natural issues (Donohoe, 2003). Natural issues are worldwide in beginning and so require collective nearby activities to unravel them (Gut 2006).

Individuals have an effect on the soil that cannot be maintained. By a few gauges, mankind employments more than 67% of the planet for essential efficiency (Wellford 1998) and agreeing to Sammalisto (2007) individuals are utilizing the soil assets quicker than they can be reestablished. Worldwide natural issues like deforestation, worldwide warming and contamination of water bodies or mechanical contaminations are open fiendish, that's , a universally negative impact on the economy causing different costs (Burgess 1990). In expansion to these issues and their adverse impacts, there's the green house impact and worldwide warming and worldwide

climate alter which has captured the consideration of the full world at the minute (Sammalisto 2007).

2.7. Theoretical Framework

Media Surrounding in Natural Awareness To outline is “to select a few angles of a seen reality and make them more striking in a communicating content, in such a way as to advance a specific issue definition, causal elucidation, ethical assessment, and/or treatment recommendation” (Entman, 1993:52). Surrounding alludes to the method by which individuals create a specific conceptualization of an issue or reorient their considering around an issue (Chong et al, 2007). Mass media effectively set the outlines of reference that perusers or watchers utilize to translate and talk about open occasions (Tuchman, 1978). Concurring to Neuman et al (1992), “they donate the story a ‘spin’...taking into consideration their organizational and methodology imperatives, proficient judgments, and certain judgments around the audience” (p. 120). On the other hand, recipients’ data preparing and translation are affected by pre-existing meaning structures or schemas.

2.7.1. Theories on Environmental Protection

In understanding with African constitution on human and people’s right (Banjul), Ethiopia must regard the correct of all individuals to common palatable environment favorable to their development. This obligation occupant on the nation due to the reality that worldwide arrangements confirmed by Ethiopia are the law of the Ethiopia compatible to Craftsmanship 9 (4) of the FDRE structure. In addition, our nation has built up on natural assurance specialist (EPA) to devastate natural emergency. The said specialist has been set up compatible to proclamation no 9/1995 (Prc no 295/95 reestablished the EPA and supplant decree no 9/1995). At worldwide level, the Rio Statement in 1992 asserts the will of the worldwide community to execute and favor the assurance and strong improvement of a worldwide biological and tough economy.

Mc Gray-Hill Reference book of natural science clarifies the meaning of natural security as takes after; “Environmental assurance is the framework of methods which constrain the disability of the quality of human utilize, of the discuss they breathe & the arrive that maintained them.”

2.7.2. Original theory of Schwartz's Norm Activation Model

Schwartz's Standard Actuation Demonstrate investigations conduct as a result of convictions on the results of activities and standards approximately individual duty to attempt particular activity in reaction. This hypothesis is additionally called speculations of enactment of benevolent standards (Widegren, 1998). In this hypothesis, Schwartz theorizes that "individuals in some cases act in reaction to their claim self-expectations than their claim individual norms" (Widegren, 1998).

The Schwartz's Show has been connected to clarify the pro-environmental conduct (Strict, Dietz and Kalof, 1993). This show is set up particularly to demonstrate how teach can "alter or coordinate human behaviour". (Widegren, 1998).

2.7.3. New ecological paradigm and human exceptionalism paradigm

This hypothesis centered on worldview on environment and assessed its connections with socio-demographic variables. They claimed ordinary humanism is incapable to discover a arrangement for natural issues since it stems from specific worldview, "Human Exceptionalism Worldview (HEP),¹² which fall flat to recognize the biophysical bases of social structure and social life (Buttel, 1996, Taniguchi, 1998).

Dunlap considers ponders on natural concern are critical in arrange to know whether the "shift" had taken put within the society. In this supposition, the "shift", which infer increment of natural concern, not as it were gives authenticity to the pro-environmental social development, but moreover put weights on government in approach making and execute natural controls. In this setting, he considers the patterns of open conclusion on natural issue as a sign of environmentalism. (Dunlap, Riley, 1989).

2.7.4. Materialist vs. Post-Materialist theory

Theory Increase of natural concern is considered as one of the wonders caused by the "value shift" from 'materialist' to 'post-materialist' (Inglehart, 1990). This implies that there was a 'shift' absent from the long overwhelming distraction with fabric wellbeing and physical security toward more noteworthy concern for the quality of life, which incorporates natural quality.

2.8. Environmental policy of Ethiopia

The Natural Approach of Ethiopia (EPE) states that agribusiness is the most source of changeability and stagnation in financial development (1997). As one of the foremost subordinate nations on remote help, constrained monetary assets affect Ethiopia's capacity to address these issues (ICNL, 2011).

To neutralize the brief term comes about of economic and technical policies of the past and to meet wants of display and future eras "the to begin with comprehensive articulations of Natural Approach for the Government Majority rule Republic of Ethiopia were endorsed by the Committee of Priests in April 1997" (UNEP Preparing Asset Manual: 2006).

A part of the Natural Security Specialist (EPA) commented that Ethiopia's natural policies were ordered moderately as of late; as a result, Ethiopia is comparatively unused to the method of actualizing natural arrangement (EPA_1F, 2011).

Taking after a progression of worldwide conferences and programs related to natural and economical advancement procedures, an expanded number of speculation applications required an natural affect explanation (Girma, 2000). Solomon (2003) states that there's a political weight to form choices in an awfully brief time period. Moreover, he states that it is inescapable that financial, social or political variables exceed natural components in numerous instances.

2.9. Link between Media and Climate Change Issues

The development of natural issues as social issues; considers on news detailing and the impact of the media on open conclusion arrangement date back to the 1970s (Hansen & Cox, 2015). As natural legislative issues and climate arrangements have moved from being an issue for logical specialists and naturalists to influencing all circles of both legislative issues and standard of, living more seasoned ideas of science talking truth to control have been challenged by modern requests for reflection on communication hones, subsequently contributing significantly to the field of media and communication ponders over the past decades (Cox & Depoe, 2015).

Media scope of natural issues can increase or reduce the sum of consideration the open pays to these issues and emphatically impact the political discussions that take put around the environment. Within the past, the part of media in human society was seen basically as sources of

data and to impact individuals. It is presently being proposed that the media ought to be caught on as a prepare of social interaction through a adjusted trade of data and encounter.

At a crucial level, natural communication concerns itself with the affect and impact of media and communications on both open understanding and political decision-making (c.f. Hansen, 2011; Nisbet & Newman, 2015). Radio, tv and daily paper are considered the major media outlets in creating nations. (WBG 2005).

There is exceptionally restricted natural instruction in Ethiopia (Shibru and Kifle 1998). Uncovered that natural instruction has ended up non- existent within the educational programs of colleges and schools (Daniel, 1998). The initiation of natural instruction in Ethiopian schools and instructors preparing establishing is inseparable related to the endeavors made by the government and non- legislative organizations to control the rate of natural debasement. This circumstance in this way makes the media a noteworthy apparatus in raising the mindfulness of individuals on natural matters.(Dalelo 2007:84)

At a crucial level, natural communication concerns itself with the affect and impact of media and communications on both open understanding and political decision-making (c.f. Hansen, 2011; Nisbet & Newman, 2015). Radio, tv and daily paper are considered the major media outlets in creating nations. (WBG 2005).

2.9.1. The role Of TV programs in creating awareness

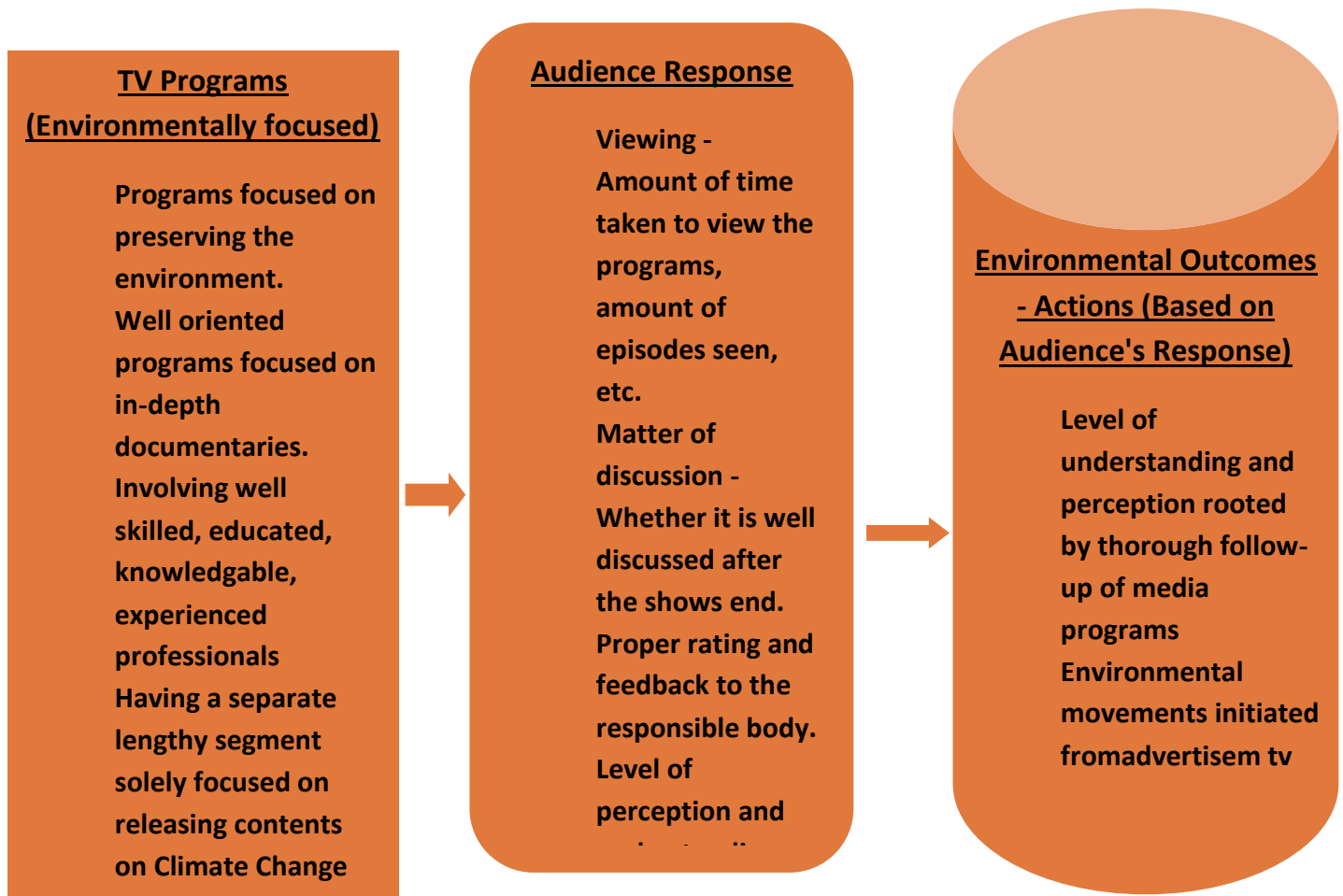
Television was considered to be the foremost imperative development of the twentieth century- hit its walk within the 1940s, followed by cable tv and adj. communications within the last mentioned half of the century (Lee, 2009). Television has been persistently made strides with expansion of modern highlights much obliged to innovative headways. An critical include of tv is “the sense of closeness and individual inclusion it appears able to develop between the onlooker and moderator of the performing artists and members on the screen” (McQuail 2004:13). McQuail (2004) advance states that tv is the foremost “massive” of the media in terms of reach and time went through globally. “Unlike all past communications innovations, radio and tv were frameworks basically outlined for transmission and gathering as unique forms, with small or no definition of going before content.” Williams (1975: 25). Radio and tv “both came to borrow from

existing media, and most of the prevalent substance shapes of both are subsidiary from film, music, stories, news and don (McQuail, 2004:12)

2.10. Conceptual Framework

It focuses on the relationship between TV programs and its audiences interaction with the climate initiated from the TV program.

Conceptual Framework



CHAPTER THREE

Research Methodology and Description of the Study

3.1. Introduction

The research methodology is based on the general objective of this study which is to assess the extent Fana Broadcast Corporation gives coverage to climate change issue and challenges they face focusing on Fana TV and radio. The research method used is a qualitative research method. Qualitative Research enables the researcher to collect and analyze data from key stakeholders such as journalists, residents, etc.

This Chapter focuses on the techniques used in the study. It consists of qualitative research methodology, qualitative content analysis (audio analysis), in depth interview, focus group discussion, and observation, secondary data source, sampling techniques and sampling size unit of analysis content coding categories Concrete information and data can come out through reliable collected information's by incorporating proper research design and approach. The research is aimed on understand the community awareness about climate change and media plays on the environment particularly TV and radio program's Fana Broadcast Corporation.

In order to come up with conclusions and recommendations, it is crucial to collect information from assumed audience/ community, documents and indigenous experiences. To reveal the actual and potential role of the media in environmental issues, a survey study method should be used and details should be provided within the framework of the available methods and theories. A detailed description is provided on the research strategy and design, how the data collection instruments were developed and presented along with study location, selection of sites and sample households, data collection and analysis. The specific research objectives and research questions are also discussed.

3.2. Study design

This study is a case study. John (2007), States that, the case study research involves the study of an issue explored through one or more cases with in abounded system. It is not methodology but a choice of what is to be studied. Others present case study as strategy of inquiry, a methodology

or a comprehensive research strategy. Kathori (2004) described that, the case study method is a very popular form of qualitative analysis and involves a careful and complete observation of a social unit, be that unit a person, a family, an institution, a cultural group or even the entire community. It is a method of study in depth rather than breadth.

The research took the Fana Broadcast Corporation as a case and of garment Nifas Silk Lafto's societies to assess the level of awareness about climate change. So, in this case study the selected two groups are broadcast media (Fana television and radio broadcasting, Addis Ababa) on climate change issue were investigated. In this regard the case study benefit the researcher by clearly identifying the data analyzed.

3.3. Research Design

This research is primarily an exploratory research because it aimed in assessing the community awareness. The finding of this research explore the level of awareness of the household head, challenges that hinder covering climate change information by Fana Broadcast Corporations. However, it has also some features of descriptive research in the sense that it views of the media experts at Fana Broadcast Corporations. A research can also be either of qualitative or quantitative in nature. Quantitative research designs are those which generate numerical data and use statistics to improve numerical data (Leedy and Ormord, 2005:147) while qualitative designs are those that involve human events such as human interactions, social organizations, and the like (Newman and Benz, 1998: 12). Quantitative design is helpful to assess the magnitude of something while qualitative design is suitable to describe, interpret, verify and evaluate a given phenomenon (Newman and Benz, 1998). In this research both of those approaches have employed to meet the objectives of the research.

3.4. Sampling procedure

As it has been stated in the introductory section, the main aim of this study is to examine to what extent climate change get coverage in Ethiopian public and commercial media. But it is not feasible to cover all Ethiopian public and commercial media in the study due to shortage of time and other resources. Therefore, researcher used purposive sampling in selecting the sampled media (Fana FM 98.1 and Fana TV).

Purposeful sampling is widely used in qualitative research for the identification and selection of information-rich cases related to the phenomenon of interest (Palinkas & Horwitz, 2013). Unlike

random studies, which deliberately include a diverse cross section of ages, backgrounds and cultures, the idea behind purposive sampling is to concentrate on people with particular characteristics who will better be able to assist with the relevant research (Etikan, 2016).

Accordingly, five years program coverage from January 2018 to December 2020 of Fana Fm 98.1 and Fana TV were chosen as samples of the study. The time span is purposively selected because sustainable development goal is lunch during this period of the year. Similarly plantation program become common in Ethiopia. Therefore, media program 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 program stories found in the digital archive or database of the Fana TV and Fana fm 98.1 was taken for content analysis.

Fana FM 98.1 was established in 1978, as the nation commercial radio and Fana TV is an Ethiopian satellite television owned by Fana Broadcast Corporation, which is state owned company. Fana TV was launched in 2017. The two media are selected purposively because of their relatively large audience reach and wide geographical coverage. A total of 16 persons included in this study, one editor, one chief editor and four journalists from Ethiopia national radio and one editor, one director and eight journalists from Fana FM 98.1.

195 respondents have selected purposively taking into account higher level of significance that is 7%. Based on CSA in 2017 estimated more than 27000 households around Garment Nifas Silk Lafto Subcity. The sample of this research is calculated by using Taro Yamane (Yamane, 1973) formula with 93% confidence level. The calculation formula of Taro Yamane is presented as follows.

$$n = \frac{N}{1 + Ne^2} = \frac{27000}{1 + 2700 * 0.07^2} = 195$$

Where;

n=Sample Size required

N=total number household

e=Margin of error or allowable error=7%

3.5. Methods of collection

The study employs qualitative approaches such as interview, and observation content analysis as a methods of data collection. Each of them is discussed in detail below.

3.5.1. In- depth Interview

The interview is one of the main methods through which used for collect data to qualitative research. Interviews can be used in various settings to collect information on a specific theme or topic (Kielmann et al., 2012). Therefore In-depth interviews in this study have helped to probe into the responses and reflections of editors and media managers who were selected to be the respondents for the study. In particular, these interviews have made the researcher able to explore views and perspectives of the interviewees regarding the practice, priority, framing mechanisms and challenges during practicing climate change coverage in mass media.

More importantly informants were selected purposely. Accordingly for the purpose of this study two key informant from Fana TV and Fana FM 98.1, total participant for in depth interview were four key informants. The need to conduct the in-depth interview as explained above to get intensive individual interviews with a small number of respondents to explore their first hand views and opinions.

3.5.2. Observation

Observation requires prior preparation and the availability of the researcher to visit the place where the event occurs. Moreover, the method is quite sensitive to the independence of the researcher's analysis, since the interpretation of the data is done exclusively by him/her (Queirós, *et al.*, 2017). For this study journalist interaction each other to produce program and working environment was directly observed.

3.5.3. Content Analysis (audio analysis)

Content analysis as define by Colorado University, (2004) it is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts, the writers, the audience, and even the culture and time of which these are a part.

This study mainly looked into the extent of coverage of climate change issue in the public, Fana TV and commercial Fana FM 98.1 radio program packages. It does not include details of the meanings or semantics of the content in the climate change programming exercised by Fana TV

and commercial Fana FM 98.1 radio. As a result, coding procedures and meanings audiences make out of these contents are not made part of this research undertaking.

Instead, it approaches the subject of analysis from the perspective of program producers to relate the content analysis to their practical experiences of producing these contents. Accordingly, the researcher has selected program produced during the sample period. By taking into consider their coverage, awareness creation and educational theme advantage radio program was chosen.

3.6. Methods of data presentation

The researcher use narration to present qualitative data. Through narration the researcher describe the responses of people concerning an issue. The findings expressed in organized forms to make readers understand the general picture of climate change issue coverage by Fana TV and Fana FM 98.1 and challenges they faced to cover the issue. According to Sarah and Ann(2008) Narrative analysis has its origins in literary theory and is closely associated with media and cultural studies, social scientists have become interested in using it as a means to gain greater understanding of the social world and the production of data. There for it was appropriate data presentation method for this study.

3.7. Descriptive analysis of the quantitative data

Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual or group. It provides a picture of what happened in the study (Kothari, 2004).in this part we will apply chi-square test of associations weather there exists significant relationship between demographic variables of respondents, and types of insurance policies, with overall customer satisfactions. Hence we have employed this method to assess the community awareness about climate change.

3.7.1. Document Review

A systematic collection, documentation, analysis and interpretation, and organization of data as a data collection method in research is crucial for this study. Various documents of Fana were assessed and analyzed. The document review resulted in information and insight into the research question and to the practice of teaching.

Document analysis is a form of qualitative research in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (Bowen, 2009). Analyzing

documents incorporates coding content into themes similar to how focus group or interview transcripts are analyzed (Bowen, 2009).

3.8. Validity and Reliability

The validity and reliability aspect to this study are mentioned and discussed in the sections to follow.

3.8.1. Validity

Agreeing to Roberta and Alison (2015) Legitimacy is the degree to which a concept is precisely measured in a quantitative ponder. For case, a study outlined to investigate discouragement but which really measures uneasiness would not be considered substantial. From this legitimacy can be seen as the center of any shape of appraisal that's dependable and precise. Accordingly the legitimacy of this consider precisely reflects or evaluates the particular concept that the analyst is attempting to measure. To set up substance legitimacy of radio program which the analyst has chosen amid the test period, in- profundity meet, center bunch dialog and bunch talk were conducted.

3.8.2. Reliability

Reliability relates to the consistency of a degree. A member completing an instrument implied to degree inspiration ought to have roughly the same reactions each time the test is completed. In spite of the fact that it isn't conceivable to deliver a correct calculation of unwavering quality, an appraise of unwavering quality can be accomplished through diverse measures (Roberta and Alison 2015). Unwavering quality is concerned with the precision of the genuine measuring instrument or procedure, as expressed within the information collection strategy portion this ponder utilized, in profundity meet, center gather discourse and gather talk and perception were conducted. Furthermore to that substance of five a long time programs from both sister companies is additionally analyzed.

CHAPTER FOUR

4. RESULTS AND DISCUSSIONS

In this chapter the results of its findings and discussions has displayed. The chapter focuses on and presents the local people' and journalists perception of climate change, media content sources and much more based on results obtained from household survey, historical rainfall and temperature records, and qualitative information generated from various groups of the community and concerned officials through FGDs and interviews. The analysis and discussion are given in accordance with the objectives of the study as well as reviews and theories that are set in the previous chapters.

4.1. Demographic Background of the Respondents

The survey result below in Table 4.1, indicates that out of the total household age is indicated by their first birthday, 28(14.4%) were 18 to 29 years, 54 (27.7 %), 30 to 39 years, 82 (42.1 %) 39 to 49 years and the remaining 31(15.9%) were > 50 years. The studies of (Santrock, 2011) the age has positive significant effect on the perception of farmers in the study area toward rainfall change, drought, and frequency of drought and crop failure due to shortage of rainfall. They also feel there is an increment of temperature in the past 30 years. Though it have no significant effect on the awareness about climate change, marital status of the household head (respondents) was that 7(3.6%) single, 172 (88%) married, 5 (3%) divorced and the rest 11(6%) were widowed.

The family size of the sampled household ranges between 1 to 10 and the average family size of the sample household is 4.8 which is slightly below the national average family size of five. The survey result in the Table 4.1 indicates that out of the total household size in the study area 93 (48%) of the respondents has > 4 family members and 102 (52%) has < 4 family members. This number of family size has their own positive effect on climate change and adaptation (Dereessa, 2007) the large family size is normally associated with a higher labor endowment, which would enable a household to accomplish various agricultural tasks.

On the other hand, (Tekeste, 2019) argue that as household size increases, obviously the number of mouths to feed from the available food increases. Hence, it is hypothesized that household size and food insecurity are positively related. This study support that the second argument which

indicates the negative relationship between family size and climate change household food security.

And their education level 46 (23.6%) were illiterate who are unable to read and write, 46(23.6%) can read and write, 43(22.1%) can complete 8th grade, 21(10.8%) can complete 10th grade, 20(10.3%) of the respondents were high school graduated and the remaining 19(9.7%) were graduate in higher education.

Variable		Frequency	Percent
Sex	Male	124	64
	Female	71	36
Age Category	18-29	28	14.4
	30-39	54	27.7
	39-49	82	42.1
	50 and above	31	15.9
Marital Status	Single	7	3.6
	Married	172	88
	Divorced	5	3
	Widowed	11	6
Family Size	Less than 4 family members	102	52
	More than 4 family members	93	48
	Average family size	4.8	
Educational Background	Illiterate	46	23.6
	Able to Read and Write	46	23.6
	8 th Grade Graduate	43	22.1
	10 th Grade Graduate	21	10.8
	High School Graduate	20	10.3
	University Graduate	19	9.7

Table 1 background information of the local respondents

4.2. Types of Media Used by Respondents

Based on the analyzed questionnaire, the following results on the main and most source of media at their home were found. From the selected 195 samples sample respondents, the following results on the use of media were found. The usage of the four sources of media has been used for comparison i.e. Television, Radio, newspaper and Internet (using mobile or other devices). Most of the respondents nearly 36% out of 195 use radio as their source of information. Next to this

around 32% of the respondents have used TV as their main source of information. On the next 19% and 13% of the local residents use published Journals, newspaper, magazines, books, etc. and Internet as their source of information.

<u>Medium</u>	<u>Respondents</u>	<u>Percentage</u>
Television	62	32%
Radio	70	36%
Journals, newspaper, magazines, books, etc.	38	19%
Internet	25	13%

Table 2 Source of information for the local respondents

4.3. Awareness of Climate Change by the Community Members

It is crucial to know and understand the perception of climate variation to understand how their knowledge is linked with the media. This information might justify their knowledge on climate change that might be linked with the media. Most adaptation options have a broad spectrum of values which can be considered an adjustment to climate change, market policy, demographic pressure, economic conditions, resource availability, and technology (Bewuket, 2010).

Understanding of local peoples' perception to climatic variation is crucial to designing appropriate adaptation and coping strategies to climate change and variability for many poor countries that are highly vulnerable to the impact of climate change and variability (Maddison, 2006 cited in Demeke, 2010). It is important to have an insight of local peoples' view on temperature and rainfall trends of change to dig out locally available climate change and variability adaptation options. In line with this, FGD participants, key informants and respondents were asked their understanding of climate change and source of information. Their response shows that most of the people and more than 66.15% and 60% of the respondents were informed and understand climate change respectively. The respondents reported that the major sources of climate change information were radio and TV (71.32%) and government agents (28%).

Questions		Frequency	Percent
Have you heard of the word "climate change" before?	Yes	129	66.15%
	No	66	33.85%
Do you understand what "climate change" mean?	Yes	117	60.00%
	No	78	40.00%
From which source you heard about climate change?	Radio, TV	92	71.32%
	Government	37	28.68%

Table 3 awareness about climate change by the local respondents

4.4. Level of awareness of Journalists, Editors and Producers of climate change

To be an environmental reporter, it is necessary to have an understanding of the scientific language and practice, knowledge of historical environmental events, the ability to keep abreast (side by side) 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).

Climate change becomes one of the top international agenda's and different organizations and authors give various definitions to climate change while most definitions seem similar to each other. Nearly all of them agree that climate change happened in long-term period by substantially raised emission of so called —greenhouse gases‖ predominantly in industrialized part of the world. For instance according to Kakade et al. (2013) climate change is a long-term change in the statistical distribution of weather patterns over periods ranging from decades to millions of years. It may be a change in average weather conditions or the distribution of events around that average (e.g., more or fewer extreme weather events). Even if all of the reactions from journalists and editors from the studied Medias give some highlights about the meaning of climate change, they get this information or knowledge from what they have read and what they hear from experts and professionals when they interview to their stories. However, as far as the researcher's observation is concerned, both journalists and editors have been striving by themselves to advance their skill on climate change using different sources like journals, books, foreign media and internet.

But as media professional and producing on educational program both sample commercial and public media journalist does not have concrete idea about the issue which they are working on to create awareness for the general public.

4.5. Demographic variable and climate change awareness

The table below show the relationship between climate change awareness and demographic indicators of the respondents. Moreover the researcher test the following claims

H1: gender of the respondents and awareness about climate change are dependent

H1: age and awareness about climate change are dependent.

H1: educational background and awareness about climate change are dependent

The educational level of farmers has a direct link with the perception to climate variability. Farmers with relatively higher education levels have opportunities to get information from schools, environmental clubs and other sources of information. Thus farmers with higher educational level have better perception than farmers with lower levels of education. This result was in lined with (Deressa et al., 2010)The levels of education, age, sex, h of farmers' were to be significant determinants of adaptation to climate change in the study area.

In our case as shown on the table below males are relatively aware as compare to females. Additionally the Chi-Square Tests of associations indicated that there is a significant dependency between awareness about climate change and gender of the household in our study area because the Chi-Square value was 42.9 and the p-value =0.00 which is less than 5% level of significance.

Secondly the 1st two age category are more aware as compare the last two age category. More than 71% of the respondent who are 18-29 years old have an awareness about climate change, more than 74% of the respondent who are 30-39 years old have an awareness about climate change, more than 46% of the respondent who are 30-39 years old have an awareness about climate change, and more than 45% of the respondent who are 30-39 years old have an awareness about climate change. And also the Chi-Square Tests of independency depicted the presence of dependency between age and awareness about climate change of the respondents because the p-value was 0.002 which is less than 5% level of significance.

Finally, as shown on the table below the higher educational background of the respondents have the higher percentage of awareness about climate change. The Chi-Square Tests of association/ dependency shows that there is a significant relationship between level of education and climate change awareness of the respondents. Because the Chi-Square value was 66.66 and which greater enough to reject the claim that they are independent and the p-value was 0.000 which is totally less than 5% level of significance.

Demographic variable * Awareness Cross-tabulation				
	Awareness about climate		Chi-Square Tests	
	Yes	No	Chi-Square	p-value

Gender	Male	Frequency	93	31	42.9	0.00
		Percent	75.0%	25.0%		
	Female	Frequency	19	52		
		Percent	26.8%	73.2%		
AGE	18-29	Frequency	20	8	15.9	0.002
		Percent	71.4%	28.6%		
	30-39	Frequency	40	14		
		Percent	74.1%	25.9%		
	39-49	Frequency	38	44		
		Percent	46.3%	53.7%		
	50 and above	Frequency	14	17		
		Percent	45.2%	54.8%		
EDU	Illiterate	Frequency	8	38	66.66	0.000
		Percent	17.4%	82.6%		
	Able to Read and Write	Frequency	18	28		
		Percent	39.1%	60.9%		
	8th Grade Graduate	Frequency	33	10		
		Percent	76.7%	23.3%		
	10th Grade Graduate	Frequency	19	2		
		Percent	90.5%	9.5%		
	High School Graduate	Frequency	18	2		
		Percent	90.0%	10.0%		
University Graduate	Frequency	16	3			
	Percent	84.2%	15.8%			

Table 4 association between demographic indicators and awareness about climate change by local respondents

4.6. Climate Change information for the community

The primary source of information from media outlets were from programs such as arengude ashara and Ethiopian Enalbsat. The programs mainly hosted in the rainy season from the whole parts of the country. Individual's urban residents, rural communities, civil society who care about climate change and governmental organizations, and ministry of minster of environmental protection are the main actors in this program. From mass media Fana FM 98.1 and Fana TV take the lion share in informing the society about this program.

The table below shows that 23.25% (30) and 27% (35) of the respondents come to hear about the climate change by watching television programs (talks, documentaries..etc) and news respectively, where as 11.6% (15) of the respondents come to known about climate change through radio news. This table even exhibits 11.6% (15) percent of the respondents come to hear about climate change through social media platforms and very few 3.88% (5) of the respondents come to hear about the

climate change by friends or other means. Here the table below results that more respondents gaze at news to know about climate change.

Means of information from media	Categories	Frequency	Percent
TV	Program	30	23.26%
	News	35	27.132%
	Advertisement	9	6.98%
Radio	Feature/Talk	7	5.43%
	News	15	11.63%
	Networks	4	3.10%
	Advertisement	10	7.75%
Social media	Article	3	2.33%
	News	5	3.88%
	Networks	3	2.33%
	Advertisements	4	3.10%
Other	Friends, gatherings, and Other	5	3.88%

Table 5 the main source of CG information for local respondents

4.7. Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern

The results on perception of climate change revealed that among the 195 participants only 152 respondents respond to this question because they do not even understood such of things or anything else, out of those 137 (91%) believed that there was an increment, 11 (7.3%) decrease, and 4 (2.7 %) of the participants perceived no change. In line with this they replied that there was an increase in annual temperature from time to time. Therefore, it concluded that most of the participants believed that there were annual and seasonal temperature trends. This result was consistent with the last three decades the largest and minimum annual temperature of the study area has increased by 0.58 0C and 0.39 0C. Therefore, it can conclude that the participants were well aware of the changes of temperature.

The results revealed that, regardless of the change in the amount of rainfall, 297 (83.89%) respondents were perceived on change in rainfall. Among them 23 (15%) perceived that there was an increment, 120 (80%) decrease, and 9 (6 %) of the participants perceived no change. On the other hand, the change in time of rainfall, 17(11.3) respondents believed that there was an increment, 128 (85 %) decreased, 5 (3.3 %) replied that it was the same. Therefore, we can see here that most of the respondents believed that the amount of rainfall had decreased over time.

The results revealed on the early onset of rainfall, that 134 (89.3 %) participants believed it had increased, whereas 12 (8 %) believed there was a decrease, while 6 (4 %) responded there was no change. Therefore, most of the respondents believed there was an early onset of rainfall.

On the other hand the perception of participants on late rainfall showed that 14(9.3%) believed there was an increment, 131 (87 %) decreased, 18 (5.08 %) replays the same. Therefore the farmers were perceived on the early on the set of rainfall. This result was also in lined with the KII. The results revealed on the early cessation of rainfall, the farmers were perceived 267 (75.42 %) were perceived to increase and 57 (16.10 %) responded there was no change in the early cessation of rainfall. This implies that the rainfall variability was happened in the study area at the past three decades. On the other hand, the farmer's perception of poor distribution of rainfall, the result reveal that 272 (76.83 %) was perceived there was an increment of poor rainfall distribution and 51 (14.4 %) perceives there was the same rainfall poor distribution. Poor distribution of rain fall affects the agricultural productivity and causes for drought.

Respondent's Perception		Increased	Decreased	The same
Annual temperature in the last two decades	Frequency	137	11	4
	Percent	91.3	7.3	2.7
Change in Amount of Rainfall	Frequency	23	120	9
	Percent	15.3	80	6
Change in Time of Rainfall	Frequency	17	128	5
	Percent	11.3	85.3	3.3
Early on the set of Rainfall	Frequency	134	12	6
Late rainfall of rain set	Percent	14	131	7
	Frequency	9.3	87.3	4.7
Early Cessation of Rainfall	Percent	122	1	29
	Frequency	81.3	0.7	19.3
Poor Distribution of Rainfall	Percent	125	0	27
	Frequency	83.3	0	18
Frequent High Volume Flood	Percent	128	3	21
	Frequency	85.3	2	14
Strong Wind	Percent	113	2	37
	Frequency	75.3	1.3	24.7

Table 6 Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern

The results revealed the frequency of high volume flood, the farmers were perceived 271 (73.72 %) were perceive there was increase high volume flood, 9 (2.54 %) decreased, 47 (13.27 %) of the responded there was no change in frequency of high volume flood. On the other hand, the

perception of farmers on the strong wind, the result reveal that 253 (71.46 %) was perceived there was an increment, 7 (1.97 %) decreased, and 83 (28.44 %) replays there was the same/ no change in strong wind. From all the climate change variables the farmers were perceived whether or not climate change in the study area. Annual and seasonal temperature, rainfall pattern, the onset of rainfall, early cessation of rainfall, poor distribution of rainfall, and volume of the flood and strong wing were checked. In this regard, most of the farmers were perched the climate change variables in the study area in the last decades.

4.8. Analysis of media content regarding the climate change

The table below shows that majority of the respondents consent that 61.3(92) percent say that the content regarding the climate change is relevant, 34(51) percent say it is most relevant and only 6(9) percent say the content is not at all relevant. It can be seen that, 38.7(58) percent of respondent say that media information of climate change is full reliable and only 4.7(7) respondents say that the media content about the climate change is not at all reliable. More than half of the respondents 56(84) percent of the respondents stated that the media content regarding climate change is easy to understand, 41.3(62) percent declare that it is very easy and only 4(6) respondents say that the media content about the climate change is not easy to understand. We can see from the table above that 50(76) percent of the respondents use media content regarding Climate Change in their lives for some extent, similarly 28(42) percent of the respondents use media content to full extent.

Relevance		Relevant	Most Relevant	Not Relevant
	Frequency	92	51	9
	Percent	61.3	34	6
Reliability		Full Reliable	Some Extent	Not at all
	Frequency	58	87	7
	Percent	38.7	58	4.7
Easiness to understand		easy to understand	very easy	not easy to understand
	Frequency	62	84	6
	Percent	41.3	56	4
Extent of Utilization		Fully	Some Extent	Not at all
	Frequency	42	76	34
	Percent	28	50.7	22.7

Table 7 media content regarding the climate change

The table shows that majority of the respondents consent that 61.3(92) percent say that the content regarding the climate change is relevant, 34(51) percent say it is most relevant and only 6(9) percent say the content is not at all relevant. It can be seen that, 38.7(58) percent of respondent say that media information of climate change is full reliable and only 4.7(7) respondents say that the media content about the climate change is not at all reliable. More than half of the respondents 56(84) percent of the respondents stated that the media content regarding climate change is easy to understand, 41.3(62) percent declare that it is very easy and only 4(6) respondents say that the media content about the climate change is not easy to understand. We can see from the table above that 50(76) percent of the respondents use media content regarding Climate Change in their lives for some extent, similarly 28(42) percent of the respondents use media content to full extent.

4.9. Major Climate Change and Environmental Issues Covered

There were a few minutes of segments released as part of other programs focused on climate change and global warming, within it had topics like drought, flood, and related contents. There isn't a specific program that would be aired officially, but instead the contents will be linked together with other programs. The programs would particularly focus on Agricultural matters, such as the quality and quantity of coffee. Also the contents included airing about areas that are affected by climate change and deforestation, such as the Sahara. Also the programs would release contents on the harmful environmental degradation caused by factories. It dealt on matters such as waste management, harmful chemicals, etc.

Mass media help in forming suitable habit for different programs and they utilize their leisure time in a productive way. It also influences the behavior of the people through different programs (Saikia, 2017). However focus group interview and focus group discussion participant in both private and public media assuring that program coverage for climate change issue is not taken seriously comparing with other national and international issues.

Even if Ethiopian constitution (1995) article 44 says all persons have the right to a clean and healthy environment, on their editorial policy of how to report business and economics, politics, social, good governance and others are represented but not climate change. On the environment issue also the media gives priority for agriculture productivity including environmental protection.

But it misses how to handle and react for climate change effects. It simply says State media shall give coverage to the national social development strategies and policies

The reasons why environmental and climate change issues were not aired was mainly the matter of finances. As it is well known programs are released with the support and connection of sponsors. There are very limited sponsors that would align with environment and climate change matters. Compared with other program in terms of depth, quality, and coverage there is remaining a lot to do.

There was a Climate Resource Green Economy prepared by Agricultural and Economy office, as part of the Growth Transformation Plan 1 and 2. After that there were not many television programs focused on matters like climate change. Recently there was the Green Legacy program in which a few minutes segments were shared.

The channel had an opportunity to expose factories that released waste materials to lakes. Especially around wing gate area, there were vegetables such as spinach, tomato, and other related vegetables the factories polluted.

The channel was able to work with environmental protection authority to give tag colors such as Red, Yellow, Green to show the factories environmental friendliness. They said that they had enough experts who were oriented on the contents.

It can be concluded from the over declarations that program makers collectively concur that climate alter issues isn't given need comparing with the other. For the truth that the impact of climate alter ended up expanding, it needs more extensive and in-depth scope Fana have changeless program with constrained time and unseemly transmission time, moreover the issue of climate alter does not have changeless program, its out sourcing issue, not at all like with political, economy, good administration, it'll get scope in case there's support. Tadese (2015).

Climate changes to some extent accelerates the process of soil degradation; and heavy rain, hailstorms, strong wind, and flood can in different ways lead to soil erosion. Because of climate changes, farmers get less income from the animals and from the crop fields and they might in drought- or flood periods face extensive shortage of food, water, or other necessities (Sørhaug, 2011). Even though the impact of climate change in Ethiopia increased time to time, most of the respondent from Fana Broadcasting Corporation did not include among the major environment

issue coverage. The audio analysis strong this idea, most of the program focuses on environmental protection and planting trees.

4.10. Source of Information of Contents for Fana

The first and major sources are events including conferences, meetings, training arrangements, grassroots level environmental campaigns, etc. that are often organized by relevant organizations such as the Ministry of Agriculture, Environmental Protection Authority, NGOs, Universities, research institutes and other development actors. The second sources are sponsored organizations.

Using proper and appropriate source of information is critical for program production; it's becoming more critical when the program is educational. Degsew (2010) argues that Journalists who work on climate change faces source problem to alleviate this problem; reporters should stretch their hands to different sources. Especially, reporters who work for broadcast media need variety of voices in order to appeal audiences and to forward the intended message easily. This notion is supported by Lyytimäki & Tapio (2009) indicating that various factors affect climate change issue coverage by media, including activity of news sources, journalistic practices and norms, media ownership and the phase of the discussion.

They said their source of information were specialized professionals, Non-Governmental Organizations, educational institutions such as Addis Ababa University. Another initiation taken was that some Organizations gave training of such contents to journalists.

Most of the group interview participant agrees when there is no sponsored program; stories are depending on news information gathered attending environmental consultation meetings, workshops, events. The news stories lack depth, clarity and explanation on the environmental issue 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. Generally, the responses from focus group discussions, in-depth interviews and qualitative content analysis showed that a large amount of Fana climate change programs use officials, farmers and experts as major sources since most stories are planned. Journalists use the voices of farmers and other community members when they go to rural areas.

Fana believes to have good relationship with their stakeholders, and partners. They work closely with policy makers, advocates. They also engage well with parliamentarians, executive bodsies, environmental protection authority, woredas and much more. They are connected with industries such as parks to influence good environmental conservation. They also work closely with the public to convey messages on trash disposition, and much more.

4.11. Challenges of Reporting on Environmental Issues

According to Tesema (2012) challenges to deliver information regarding with climate change are Scarcity of environmental information, lack of awareness about the environment, poor cooperation among the different bodies concerning environment, poor information delivery and communication system and lack of the necessary skill and training on the concepts of environment and journalism itself, are major challenges for covering and reporting on environmental issues

Similarly all respondents from both media complain about Lack of training, specialization, false reports, and lack of logistic, lack source and inattention for the issue are the main challenges to cover climate change issue.

Lack of Training

Both Medias which the study focuses, most journalists who report on climate change have different educational background which is not related with environment, development or climate change. Thus, to feel this knowledge gap, journalists must get continuous on job trainings.

However, the result of this study shows that most journalists who report on climate change never get trainings on climate change reporting and environment at large. None of the interviewees get formal trainings regarding with climate change reporting and editing. Lack of continuous on job trainings makes their work difficult in reporting climate change information.

In Fana TV and radio, participant confirmed that, the media did not facilitate trainings for environment and climate change program producer journalists.

Fana FM 98.1 radio on education, entertainment and sport programs, chief editor admitted that the organization is giving priority to basic journalism trainings. The organization does not have formal training system which leads to climate change specialization. The same is true on Fana TV, most

journalists who produce environmental and climate change program did not get the chance to receive trainings. Even though they have been working in Fana for more than three years.

Lack of facilities

The respondent from both TV and radio sample media in particular, maintained that some remote rural areas have hardly financial supports and sponsors. It is so troublesome for them to go to such locations to access environmental news and to produce programs. For reporters who want to cover important events and situations particularly in rural Ethiopia is not always an easy process.

Lack of source

Other important challenges while producing environmental and climate change issues include lack of sources such as research findings, books, etc. Similarly participants from FM 98.1 mentioned information or reports released by government officials are opposed each other, Source problem, lack of update training are other challenges listed by journalist. Some officials and experts are not willing to provide sufficient information. According to radio program chief editor of Fana FM 98.1 there is big challenge to cover investigative program related to environmental pollution, government official are not willing to give information.

Lack of specialization

Regarding to specialization both media did not give much attention like other subjects. Journalist who works on climate change issue educational background not related with climate change. Lack of specialization is one of the challenge rose by FANA FM 98.1 participant. Journalists does not have focused area, they assigned on various issues. This experience does not lead specialization. To create journalist who specialized on climate change issue, organizations that focus on climate change should work on these issues to empowering journalists who work on climate change and environment.

Despite the facts that the aforementioned challenges take their share in minimizing the quality of stories, environment programs current format has also its own impact. Respondents quoted specialization as a solution to have attractive climate change stories; the station (Fana TV) has not given attention to specialization. In addition, instead of giving priority to journalists who are interested in environment reporting and closer to the subject, the station assigned journalists

In general, environmental journalists in both Fana FM 98.1 and EBC national radio do not seem to be practicing critical and substantial programming because of lack of specialization. Inability to address issues of high social significance such environmental challenges entail does not give permanent coverage in the case of Fana FM 98.1 for this it lacks attention and its journalists to fulfill social responsibility.

On the other hand the program formats are the same which is boring and outdate, some programs are not relate with climate change. Most stories are focused on domestic issue like, current politics, economic issues regardless of the current disasters like flooding desert locus, high drought in different parts of the countries.

4.12. Summary of Major Findings

This study was an endeavor to look at part of media advancing climate change data on media outlets particularly Fana broadcasting corporation. The finding of the considered showed that:

- The result of subjective information appears that Fana gave less priority on covering climate change issue.
- Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern is very low.
- There are very few major Climate Change and Environmental Issues Covered in Fana broadcasting corporation.
- The level of awareness of Journalists, Editors and Producers of climate change is very limited.
- Education, age and gender of the respondents have a relation with their level of awareness about climate change,
- There are many major Challenges in Covering Environmental issues on media outlets.
- The Source of Information of Contents on climate change for Fana is very sparse.
- The media did not play its parts in advising the common open almost Climate alter issues.
- More consideration and scope was found to be given to issues such as legislative issues and strategy; commerce and economy; don and entertainments; and social things news.

- Government authorities, community members and policy makers were found to be the overwhelming source of climate change stories of the media studied.
- Most of climate change stories on Fana were seasonal oriented and arranged.
- Most of climate change programs on the media were not related with development.
- As distant as the reactions of the investigate members and researchers perception are concerned, open media, Ethiopia national radio as a rule gives need to current undertaking.
- The finding of the paper stated that the way climate alter stories are being presented missed allure and understandability.
- In Fana media writers and editors who delivered climate change stories did not get formal trainings around the subject.

4.13. Major Challenges in Covering Environmental issues

- No airtime given to environmental issues: One of the major challenges in covering climate change matters is the fact that it currently does not have any airtime given to it due to sponsorship issues. For a long time, there hasn't been any sponsor to partner with such programs to release the contents. Some Non Profit Non-Governmental Organizations rarely partner with media outlets such as Fana to air certain type of environmental programs.
- Lack of Sponsors and Partners There are very few organizations whose core primary mandate is to raise awareness on climate change and environmental issues. One of such organization is Red plus which once worked closely with with tv channels such as Fana to convey messages on environmental issues, but that program isn't active anymore. Once in a while United Nations Environmental Agencies, and a few other organizations are engaged in some environmental promotion work to promote the Climate Resilience Development initiative. Other important challenges while producing environmental and climate change issues include lack of sources such as research findings, books, etc. Similarly national radio mentioned information or reports released by government officials are opposed each other, Source problem, lack of update training are other challenges listed by journalist. Program production. Some officials and experts are not willing to provide

sufficient information, there is big challenge to cover investigative program related to environmental pollution, government official are not willing to give information.

- **Prioritization Issue** Another challenge is that environmental issues and climate change is not as prioritized as they should be, it's an internationally accepted trend. Usually on the media platform, what is prioritized the most are contents on politics, sport, health, war. They give priority to TV news coverage and current affairs for this lack of logistic is critical problem for environmental and climate change. It can be seen that it is a challenge for media outlets to prioritize climate change and related environmental issues. When convenient the environmental issues prioritized are contents on pollution, deforestation, wastage management. Other areas prioritized due to the initiative of Red plus is the green legacy and deforestation. Most of the reporters personal and professional belief was that climate change and environmental issues should be first priority, but they all second the fact that as a media outlet it is the least prioritized. They believe that there were should be a win win scenario
- **Manpower issue - Less Reporters oriented on environmental issues.** There are a few professionals who are well oriented on environmental issues, but there were times that some journalists could not understand some technical jargon words, through time and much training though those journalists are well equipped with plenty of knowledge now. Even though the journalists are more equipped now, they still use simple easy to understand language to share contents on climate change and environmental related matters, so its understandable for all audiences from different backgrounds. The journalists also refer to different contents such as Addis Ababa University science academic guideline, to upgrade their skills on a better reporting skill. Both Medias which the study focuses, most journalists who report on climate change have different educational background which is not related with environment, development or climate change. Thus, to feel this knowledge gap, journalists must get continuous on job trainings. The researcher also observed that many journalists are assigned regardless of their educational background on the subject in both public and commercial media. None of the focus group participants have environment related educational background. All of them have very different educational background from environment like mathematics, adult education and

language. In terms of number and gender also they are limited. The result of this study shows that most journalists who report on climate change never get trainings on climate change reporting and environment at large. Only one among the participants attended trainings related on environment and climate change reporting. None of the interviewees got formal trainings regarding with climate change reporting and editing. Lack of continuous on job trainings makes their work difficult.

- **Reporting Challenge** : The challenges the reporters face related to climate change content is that the reporters are not as equipped on reporting the matter at the level they want to and at the level they should, they also believe that they are not well oriented on investigative reporting related to climate change and environmental issues. Another challenges they faced was related to reporting on factories and industries that were harmfully affecting the environment. The way they would face challenges on such matters was that the owners of these industries, companies and factories would often try to bring physical harm upon them, threaten them and their loved ones, bribe those around them and many more. Also people who were responsible of reinforcing the law, would actually work together with these factories to cover up these messes. A few other challenges they faced was related to the many deadline work they have to work on, which makes environmental issues to become sidelined and they also might miss out on a few foundational content.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. SUMMARY

As the study entailed the role of media in promoting climate change issues, Fana TV and Fana FM 98.1 was used as the primary study area. Also the people were used as other source of in formations to record their knowledge and perception based on these media channels and programs. The two

major media theories that were primarily used was the agenda setting and framing theory which was then used as used as the theoretical frameworks. This framework helped answer the research questions, guide the methods, and helped to present the discussion and interpretation of the data clearly. The study was specifically focused on understanding people's perception of climate change sourced by media outlets and journalists knowledge on climate change issues. The major following research questions were also answered: What are Respondents Perception of Climate Change, Temperature Trends, and Rainfall pattern? And major Climate Change Issues Covered? Secondly what is the level of awareness of Journalists, Editors and Producers of climate change? Thirdly what are the Major Challenges in covering climate change issues? And what are the Source of Information of Contents for Fana?

The study utilized subjective investigate approaches. Subjective In-depth meet with editors and center bunch talk, gather discourse with program maker writer of the media were carried out to gather information required for the study. Substance examination (sound examination) was moreover utilized. Focused group discussions, content analysis, and interviews were all used and examined. By utilizing supporting writing, the generally coverage of climate change within the program was examined and interpreted.

5.2. Conclusion

It is possible to conclude that a lot has not been done to create awareness on climate change and environmental issues through media outlets. It is the overall reflection of Fana broadcasting media landscape (the sampled) in covering climate change issues, with comparison and relation to the people's perception on climate change issues. There is a need to a shift of trends by giving special attention in relation to climate change issues coverage. Different media outlets should play a strong role in promoting awareness as matters like climate change should be well communicated to the people and the people's perception should be influenced significantly. This paper tried to show that media have a great role and impact by providing the public with sufficient, accessible, well framed environmental information.

5.3. Recommendation

- A recommendation given by most of the reporters was that there are many papers/journals written on climate change and related climate change issues, but much is not done to get it into

motion or action. They agreed that it should be action/result oriented. They also believe that policy makers, media outlets, business all should prioritize climate change and environmental issues. They all conferred that they didn't want to see more done to the earth, they didn't want the world to go 50/60 years without the current problems being dealt with, they believed that the world should not see the problems worsening, to the extent that it couldn't be reversed. They believed that more researches are good, and that more initiations be brought to life, and more interventions be enacted.

- There should a clear, holistic, well designed project focused on covering climate change issues should as climate change contents, this will enhance people's awareness and participation.
- There should be at least a few minutes of news released on TV channels focused on climate change issues and the contents should be released quite often.
- People in the community should be more engaged in following up media outlets and giving feedbacks through awareness raising.
- Trainings for the journalists, editors and producers should be organized and given.
- Recruiting people with environmental science or related background to work on climate change issues.
-

Reference

Ahmed, A., Cheng, E. and Messinis, G. (2011), "The role of exports, FDI and imports in development: New evidence from Sub-Saharan African countries", *Applied Economics*, Vol. 43 No. 26, pp. 3719-3731.

Altman, M. Davies, R. Mather, A. Fleming, D. and Harris, H. (2008), *the Impact of Electricity Price Increases and Rationing on the South African Economy: Final Report to the National Electricity Response Team (NERT) Economic Impact Task Team*, Human Sciences Research Council, Pretoria.

- Bekele, Getachew, and Björn Palm. "Wind Energy Potential Assessment at Four Typical Locations in Ethiopia." *Applied Energy*, 86.3 (2009): 388-96. Print.
- Bromley, Helene et al. 2003. *Glossary of Qualitative Research Terms*. London: King's College, University of London.
- Burgess, J. 1990. *The production and consumption of environmental meanings in the mass media report*. Bath: Bath University press.
- Cable, V. (1999). *Globalization and global governance*. London: Royal institute of international affairs.
- Cartwright, J. (2014). African air pollution is spiraling. Retrieved from <http://www.environmentalresearchweb.org/cws/article/news/56625> (Access 21/09/2014).
- Cox, R., & Depoe, S. (2015). Emergence and growth of the 'field' of environmental communication. In A. Hansen, & R. Cox (Eds.) *The Routledge handbook of environment and communication* (pp. 13–25). London: Routledge.
- Dalelo, A. 2007. *Environment education*. Addis Ababa Ethiopia: (unpublished source).
- Daniel, K. 1998. *Media role and legislators*. News media, journalism quarterly. (Unpublished source).
- De Blij, H., Murphy, A. & Foubert, E. (2007). *Human geography: People, place and culture*. 8th Edition. New Jersey: John Wiley & Sons, Inc.
- Donohoe, M., 2003. Causes and health consequences of environmental degradation and social injustice. *Soc. Sci. Med.* 56, 573e587.
- Dunlap, Riley (1989), "Public opinion and environmental policy", *Environmental Politics and Policy*, James P. Lester (ed.), Durham, Duke University Press.

- Duru, P. & Chigbo, C. (2014). Conservation of biodiversity in rural environment: Study of some Fauna and flora species in selected rural parts of Imo state. *The Nigerian Journal of Energy & Environmental Economics*, Volume 6, No. 1, July, 2014. Awka: Association for Energy and Environmental Economics of Nigeria (AEEEN), pp. 29 & 31.
- Duțu, M. (2008). *Dreptul mediului* (2nd Ed.). Bucharest: C.H.Beck
- Gall, M.D., Gall, J.P., & Borg, W.R. (2007), *Educational research: An introduction* (8th ed.). Boston: Pearson.
- Girma, H 2000. *Environmental Law in Ethiopia*, *International En-cyclopaedia of Laws*. Leuven, Belgium: Kluwer Law International.
- Gore, A. 2006. *An inconvenient Truth: the planetary emergency of global warming and what can we do about it*. London: Bloomsbury
- Halicioglu, F. (2009), “An econometric study of Co2 emissions, energy consumption, income and foreign trade in Turkey”, *Energy Policy*, Vol. 37 No. 3, pp. 1156-1164.
- Hammouda, H.B. Geda, A. and Karingi, S.N. (2007), “Trade and growth in Africa: the theoretical framework of the TFED/ECA global macro econometric model”, Working Paper No. 56, Africa Trade Policy Centre, Addis Ababa.
- Hansen, A. 2007. *Introduction: The mass media and environmental issues*. London: Leicester University press.
- Hansen, A., & Cox, R. (Eds.). (2015). *The Routledge handbook of environment and communication*. New York, NY: Routledge.
- HoAREC_1E. (2011). pers. comm. Waterville, ME. November 16, 2011.
- IBC (2005). "National Biodiversity Strategy and Action Plan". Addis Ababa, Ethiopia.

- Inglehart, Ronald (1997), *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*, Princeton, New Jersey, and Princeton University Press.
- Johnson, D.L., S.H. Ambrose, T.J. Bassett, M.L. Bowen, D.E. Crummey, J.S. Isaacson, D.N. Johnson, P. Lamb, M. Saul, and A.E. Winter-Nelson. 1997. Meanings of environmental terms. *Journal of Environmental Quality* 26: 581–589.
- Kalemba, M. (2009), A glance on environmental protection in Africa: Theological perspective. *Ethiopian Journal of Environmental Studies and Management*, 2 (3), 19-26
- Knigge, M., Herweg, J., Huberman, D., 2005. *Geographical Aspects of International Environmental Governance: Illustrating Decentralisation*. Ecologic Institute for International and European Environmental Policy, Berlin.
- Lee, T. (2009) *Journalism and Mass Communication Vol.1- History and Development of Mass Communication in Encyclopedia of Life Support Systems* pp 15-26
- Lewis, Melinda. 2003. *Focus Group Interviews in Qualitative Research: A Review of Literature*. Sydney. <http://www.aral.com.au/arow/rlewis.html>
- Mckee, Jonathan. “Ethiopia: Country Environmental Profile.” (2007). Web. 18 Sept. 2011
- McQuail, D. (2004) *Audience Analysis*. California: Oxford Focal Press
- Ministry of Finance and Economic Development. (2006). *Plan for Accelerated and Sustainable Development to End Poverty (PASDEP), Volume I (Main text)*, Addis Ababa
- Ministry of Water Resources, National Metrological Agency (2007). *Climate Change National Adaptation Programme of Action (NAPA) of Ethiopia*. Addis Ababa, Ethiopia.
- Ogbaharya, Daniel, and Teclé, Aregai. “Community-based natural resources management in Eritrea and Ethiopia: toward a comparative institutional analysis”. *Journal of Eastern African Studies*, 4:3. (2010): 490-509.

- Osabuohien, E.S. (2007), "Trade openness and economic performance of ECOWAS members: reflections from Ghana and Nigeria", *African Journal of Business and Economic Research*, Vol. 2 Nos 2/3, pp. 57-73.
- Osabuohien, E.S. and Efobi, U.R. (2013), "Africa's money in Africa", *South African Journal of Economics*, Vol. 81 No. 2, pp. 292-306.
- Resnick, D. Tarp, F. and Thurlow, J. (2012), "The political economy of green growth: illustrations from Southern Africa", *UNU-WIDER Working Paper No. 2012/11*, United Nations University-World Institute for Development Economics Research, Helsinki.
- Sammalisto, K. 2007. *Environmental management system, a way towards sustainable development in universities*. Sweden: Lud University press.
- Shibru, D. and Kiflu, T. 1998. *Environmental management in Ethiopia*. Addis Ababa: Environmental Forum publications.
- Silverman, David. 2006. *Interpreting Qualitative Data (3rd Edition)*. London: SAGE Publications.
- Stern, Paul, Thomas Dietz, and Linda Kalof (1993), "Value orientations, gender, and environmental concern", *Environment and Behaviour*, vol. 25.
- The International Center for Not-for-Profit Law (ICNL). (2006). *Ethiopia: Civil Society Law and Community Based Organizations*. Web. 25 Nov. 2011. The International Center for Not-for-Profit Law (ICNL). (2011).
- TheWorldcounts, 2014. Is there really a hole in our Ozone Layer?
http://www.theworldcounts.com/stories/ozone_layer_depletion_facts
- Wellford, R. 1998. *Corporate environmental management: system and strategies*. London: Earth scans publications

Widegren, Orjan (1998), "The new environmental paradigm and personal norms" Environment and Behaviour, vol. 30, No. 1.

Williams, R. (1975) Television, Technology and Cultural Form. London: Fontana

Appendix A

Questions with media stakeholders (Journalists, Reporters, Producers).

- ✓ Your role in the media organization
- ✓ Your Position
- ✓ Educational Qualification
- ✓ Number of years of experience in the media field
- ✓ Number of years of experience in that specific media organization.
- ✓ Does your media organization climate change environmental programs, how often do you release media contents on the environment?
 - ◆ What are your primary sources for the environmental media contents you share?
 - ◆ Do you release environmental media contents focused on environmental preservation, specifically on matters of factories interaction with the environment, could you elaborate on that?

- ◆ Do you have a proper audience feedback mechanism? What comments are shared on the contents of the programs shared?

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	The TV channel or the radio station releases contents on environmental issues such as water pollution, air pollution, climate change and related environmental contents.					
2.	Proper research is done on the content about the environmental contents released.					
3.	Enough time is given on the channel to cover environmental issues.					
4.	There are well trained professionals who are able to research and report environmental issues in the channel.					
5.	There are proper feedback mechanisms on the contents released.					
6.	The contents released on the environment is great, and needs no change at all.					
7.	There are requests, interests and viewers on environmental issues TV contents.					
8.	The contents released on environmental matters, are released in a very interesting and appealing manner.					

Interview with Media staff members (Producers, Editors)

1. What do you think are the major environment issues of national or international nature that you focus on the coverage? What are your sources?
2. Do you assign special editions or permanent pages/sections to cover environment issues? Do you cover environment issues on a regular basis – daily, weekly, biweekly?
3. How do you explain the journalists and the knowledge and training on the concepts of environment issues? Have the journalists enough knowledge to both the profession and the complexities of environment issues?
4. What do you think about the major problems and challenges of covering and reporting environmental issues? How do you treat environment issues of chronic nature?

5. How do you explain the relationship with your sources, major stakeholders (government, environmental protection authorities, NGOs, industries), the public?

6. Where do you put environment issues and how do you cover most frequently?

Appendix C

Survey from Residents

Part 1. Personal Information

Gender: male female

Age: _____

Educational background: _____

Family size: _____

Part 2. Respondent’s connection with the Environment

- ◆ Have you ever heard the word climate change before? _____
- ◆ Do you know what climate change mean? _____
- ◆ What is your main source of media? _____

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	I am well aware of the environmental condition of the area around my work setting.					
2.	The air condition of the environment where I live around is well preserved.					
3.	The water condition of the environment where I live around is well preserved.					
4.	There is minimum noise pollution around where I live at.					

Part 2. Respondent’s connection with the media

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	I follow media programs focused on environmental issues.					
2.	The Environmental media program you follow have contents related to water pollution.					
3.	The Environmental media program you follow have contents related to water pollution.					
4.	The Environmental media program you follow have contents related to water pollution.					
5.	I watch a lot of the environmental media programs quite often.					
6.	The environmental media programs are very clear and understandable.					
7.	The media program has helped me preserve the environment around my work place.					

Appendix C

Interview with Professionals from Environmental Protection Authority.

1. What are the major environment issues and problems that the Federal Environment protection Authority focuses on?
2. As the Federal Environment protection Authority is one of the governments body mandated to handle environment issues how it transfers information to the public?
3. Which means of communication are mostly used to convey environment information to the public?
4. Do you think media are helpful to transfer environmental information? Do you think the media can cover the complexities of environment issues in full context?

5. Do you think Fana has given enough coverage to environment issues of any kind? What do you think are the reasons behind?

6. What are the major obstacles on the parts of the authority to convey the information to the public or the media? What do you think are the solutions to alleviate these problems and to get better coverage?