

**COVERAGE OF CLIMATE CHANGE BY THE BROADCAST MEDIA IN ZAMBIA:
A CASE OF THE ZAMBIA NATIONAL BROADCASTING
CORPORATION TV1**

BY

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**A Dissertation Submitted to the University of Zambia in Partial Fulfillment of the
Requirements of the Degree of Master of Mass Communication**

THE UNIVERSITY OF ZAMBIA

LUSAKA

2017

Declaration

I **Katendi N Wandu**, declare that this dissertation represents my own work and has never been submitted for a degree, diploma or any other qualification at this or any other University or institution.

Signed:.....

Date:.....

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Approval

This dissertation of Katendi N Wandu is approved as fulfilling the partial requirements for the award of the degree of Master of Mass Communication (MMC) by the University Of Zambia (UNZA).

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Abstract

This study examined the coverage of climate change issues in the broadcast media in Zambia using a case of the Zambia National Broadcasting Corporation (ZNBC) TV1. Particularly, it aimed to establish: the frequency of reporting climate change issues on ZNBC TV1; the dominant themes of climate change reported on ZNBC TV1; challenges those journalists at ZNBC face when covering climate change issues; and the influence of climate change stories on the lives of the audience.

To achieve the above, the study used both quantitative and qualitative research methods in the collection of data. Questionnaires were administered to the audience and also to journalists and editors at ZNBC. In depth interviews were conducted with experts and content analysis was done. The study used the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel to analyse the data.

Firstly, the findings of the study did confirm the perceptions that the coverage of climate change by ZNBC TV1 is minimal across the three units of analysis; news, documentaries and current affairs programmes. Secondly, the study found that ZNBC TV1 concentrated on specific dominant themes that were mainly aligned to agriculture. Thirdly, the study established that the coverage of climate change was characterised by several challenges, including limited available sources to interview, limitations in climate change related materials and lack of specialised training. Fourthly, the study found that the public lacked enough sensitisation of climate change and as such, had to a large extent not effected meaningful change on their lives as individuals or as a community.

From the findings, the study recommends that ZNBC TV1 and the media in general should: 1) Expand and diversify their information source base in order to cover the subject comprehensively. 2) Partner with climate change departments and organisations to cover more of other issues related to climate change and to have resources and knowledge on the subject. 3) Cover climate change more from a social perspective and include the political aspect for solutions in order to make it interesting and educative for the audience. 4) Set up deliberate learning programmes or training workshops with the help of climate change organisations in order for them to better understand climate change and to be motivated and interested in prioritising its coverage and 5) Colleges and universities should enhance the training on coverage of climate change, seeing it is a topical subject.

Dedication

To my parents Mr. and Mrs Wandi, thank you for setting the example of hard work and determination, my son Thabo, my brother Kafwana, my sisters Tapiwa and Kakula and indeed my entire family for their endless love, support and encouragement. I am truly thankful to God for having you all in my life.

Acknowledgments

I wish to sincerely thank all who in one way or the other contributed to the completion of this dissertation.

First and foremost I give thanks to God Almighty for his mercies and for granting me the opportunity and strength to complete my studies successfully.

I am thankful to my supervisor Mr. Kenny Makungu for his motivation, knowledge and guidance. I am also grateful to Mr. Fidelis Muzyamba and indeed all Lectures and Staff at the Department of Mass Communication for your assistance and support.

I would like to acknowledge all my respondents for their cooperation and interest in the study. I also wish to thank the Zambia National Broadcasting Cooperation (ZNBC) for their invaluable support. I extend the same gratitude to the Zambia Environmental Management Agency, Zambia National Climate Change Secretariat and the Zambia Meteorological Department.

I am thankful to the Director General at the Independent Broadcasting Authority (IBA) Ms. Josephine Mapoma for her support, without whom, this journey would not have been possible. I also wish to thank the Director –Standards Licensing and Compliance Mr. Eustace Nkandu, my colleague Mr. Thomas Sakala and the entire Management and Staff at the IBA for your support.

I owe a special thanks to my family for your unfailing support, love, encouragement and prayers throughout this journey. I especially want to thank my Son Thabo for the days and nights you had to endure when I devoted myself to my studies. You are my pride and joy son and I love you more than words can say.

I am thankful to all friends and fellow post graduate students for your support and cheerfulness.

I am also thankful to all Church leaders, brothers and sisters in Christ and to everyone in the family of our Lord Jesus for your spiritual guidance, encouragement and for standing in the gap in prayer for me. For this journey we prayed and the Lord answered, I am in awe of him.

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Abbreviations

IBA	Independent Broadcasting Authority
IPCC	Inter Government Panel on Climate Change
MMD	Movement for Multi-Party Democracy
NGO	Non-Governmental Organisation
SADC	Southern Africa Development Community
TBN	Trinity Broadcasting Network
USA	United States of America
UN	United Nations Organisation
UNFCCC	United Nations Framework Convention on Climate Change
UNZA	University of Zambia
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
ZBS	Zambia Broadcasting Services
ZNBC	Zambia National Broadcasting Corporation

CHAPTER ONE

INTRODUCTION OF STUDY

1.1 Introduction

This is a study on the Coverage of Climate Change by the Broadcast Media in Zambia: A case of the Zambia National Broadcasting Corporation (ZNBC) TV1. This chapter has brought out the background of the study, overview of the broadcast media in Zambia, background of ZNBC TV1, statement of the problem, significance of the study, objectives of the study, research questions, delimitation and conclusion.

1.2 Background of the Study

Climate change has become a global issue in recent years. It has been identified as a leading human and environmental problem that is posing a threat to the economies and people of both developed and developing countries.

Climate change is produced by several factors which are burning of fossil fuels, changes in land use through agriculture and deforestation, carbon dioxide, methane and greenhouse emissions (Besada and Sewankabo, 2009). The major man made cause of climate change that is especially common in Sub Saharan Africa, Zambia included, comes from deforestation, land degradation and heavy dependence on bio mass for energy.

The Inter Government Panel on Climate Change (IPCC) has reported that extreme events including flooding and droughts are becoming increasingly frequent and severe. Certain regions of Africa are more prone to such extreme events than others. It is possible that the increased frequency of recorded disasters is as a result of a combination of climate change and socio – economic and demographic changes, (IPCC, 2007a).

Most countries including Zambia are already experiencing the effects of climate change. According to the National Policy on Climate Change (2016), the country is already experiencing climate induced hazards which include drought and dry spells, seasonal and flash floods and extreme temperatures. Some of these, especially droughts and floods have increased in frequency and intensity over the last two decades and as such actions to minimise the potential future impacts of climate change are critical.

Agriculture which provides a livelihood for about three quarters of Africa's population, is mainly rain fed. Severe and prolonged droughts, flooding and loss of arable land due to desertification and soil erosion are reducing agriculture yields and causing crop failure and loss of livestock which endangers rural and pastoralist populations, (Besada and Sewankabo, 2009).

Water and energy security have also been threatened. Water is crucial to human society for drinking, washing irrigation and many other activities. It is also valuable for its role in supporting aquatic eco systems among others. However, climate change poses a threat to water security of countries in that it is expected that water will become increasingly scarce in the future and may lead to increased water supply costs not only because of increasing climate change, but also due to increasing demand,(IPCC, 2007).

Low water levels as a result of poor rainfall patterns are impacting hydroelectricity generation and resulting in inadequate power supply with long hours of load shedding being experienced in most countries including Zambia.

Climate Change may threaten political and economic stability of nations for example when nations that share water bodies fail to access scarce water resources, it can become a source of conflict.

Climate Change will have an impact on human health as a result of contamination of air, water, soil and food which will result in the spread of infectious and water borne communicable diseases such as diarrhoeal diseases, malaria and under nutrition,(WHO, 2014).

There is a growing realisation that the effects of climate change are global and world leaders under the United Nations have united to avert the catastrophic climate change, (UN, 2014).

In Africa, the African Union Heads of State and Government agreed that countries in Africa should mainstream climate change adaptation and mitigation into their developmental plans, (SADC, 2011).

The media play an important role in information dissemination and education. Therefore, communicating information concerning climate change, its impact, and the role humans play is cardinal in addressing the issue as members of the public will become more aware and appreciative of the environment and join efforts to contribute towards tackling climate change.

Both Governments and the people depend on the media not only for disseminating information but also in setting the agenda for Development and other allied activities. Media plays a vital role in educating and enlightening the people and the governments to protect and preserve natural resources in the interests of future generations. Media can focus on factors that cause climate change as well as the adverse impact on people. These factors threaten the present day existence as well as the future of humanity, (Yadav and Rani, 2011).

Following the above, it is clear that the media need to take a prominent role in public awareness of climate change and provide the public with timely, accurate and reliable coverage.

Thus, this study has sought to analyse the coverage of climate change issues by the broadcast media in Zambia using a case of Zambia National Broadcasting Corporation (ZNBC TV1).

The research understands that the phrase climate change is used to denote a wide range of issues in different parts of the world. However, in this research, climate change issues shall be looked at in terms of those effects that affect Zambia such as prolonged hot and dry seasons, significant decrease in rainfall, significant increase in rainfall, low agriculture yields loss of livestock and deforestation.

1.3 Television Broadcasting in Zambia

The London Rhodesia Company (Lonrho) established the first television station in Kitwe, Zambia in 1961. The television station was an extension of the Rhodesia Television based in Salisbury (Harare). Its purpose was mainly to serve the mining and commercial community who were mostly Europeans on the copper belt province. The programmes shown on the television station were also foreign, (Freedom Forum Report, 2001).

At Independence in 1964, Rhodesia Television in Kitwe became known as Zambia Television and by 1965; experimental broadcasts were launched at the Zambia Broadcasting Services premises in Lusaka. In June 1967, the television services became known as the Zambia Broadcasting Services (ZBS) and as a result led to television being an agency of government information, (Kapeya, 2011).

In 1987, an Act was passed that transformed the Zambia Broadcasting Services (ZBS) into a statutory body called the Zambia National Broadcasting Corporation (ZNBC).

With the coming into power of the Movement for Multi-Party Democracy (MMD) in Zambia in 1991, democratic reforms that included media reforms were embarked upon. These reforms saw the opening up of airwaves to other private broadcasters such as Muvi TV which has the highest audience reach after ZNBC, Mobi TV, Prime TV, Solwezi TV, Chipata TV, Trinity Broadcasting Services (TBN) and QTV. Under the Patriotic Front Government, the number of licensed private television stations currently stands at thirty three stations.

In 2002, the government enacted the Zambia National Broadcasting Corporation (ZNBC) Act and the Independent Broadcasting Authority Act. The ZNBC Amendment Act transformed ZNBC from state owned broadcaster to public owned broadcaster.

The IBA Act no. 7 of 2002 defines a public broadcaster as ‘*a broadcasting service which services the overall public interest and is accountable to the public as represented by an independent board and defined by the Zambia National Broadcasting Corporation Act*’.

As a public service broadcaster, ZNBC is an important source of information, education and entertainment for most people around the country. It has a wide coverage which also includes programming in local languages.

In January 2010 and in January 2016, ZNBC launched a second and third television channel known as ZNBC TV2 and ZNBC TV3 respectively. ZNBC TV2 It is a twenty four hour channel that is self-funded whose coverage is in Lusaka and surrounding areas. It can however be together with ZNBC TV1 accessed on the Multi choice DSTV decoder. ZNBC TV2 is more of a commercial channel whose programming is mostly more of an entertainment nature. ZNBC TV3 is a Christian channel offering entertainment and programming that uphold Christian values.

On the other hand, ZNBC TV1 mainly focuses on programming of a serious nature. It broadcasts mainly in English and its programming schedule includes news and current affairs, business programmes, discussion programmes, documentaries agricultural programmes, local dramas, religious programmes and soaps among others. ZNBC TV1 also broadcasts news and magazine programmes in the seven major local languages on weekdays and Monday to Sunday respectively.

1.4 Statement of the Problem

Climate Change has become a global issue in the recent years. Individual countries, Non-Governmental Organisations (NGOs), United Nations (UN) agencies such as the United Nations Environment Programme (UNEP) are trying to address the effects of climate change through different mitigation and adaptation strategies.

Despite efforts being made from all fronts to address its challenges, climate change remains poorly covered by local media and consequently the general public lacks understanding on both the science and the policy implications of climate change (Yadav and Rani, 2011).

There appears to be no deliberate or sustained commitment in covering climate change and as a result, this situation creates a problem in that the public remain poorly informed on issues regarding climate change.

Therefore, in view of the above, this study sought to highlight some of the information gaps that exist in the coverage of climate change by broadcast media in Zambia using a case of ZNBC TV1.

1.5 Significance of the study

The twenty- first century has seen climate change steadily rise on the policy agenda of nations, regions, states and cities. Public opinion has also vacillated on the reality of climate change and its human causation, (Moser and Dilling, 2011).

The media has a task of disseminating information on climate change, provide a platform for discourse on the topic, motivate audience for behaviour change and demand for policy interventions on climate change among others.

However, despite the importance attached to climate change, there has not been enough research on what the media, and in particular the broadcast media was reporting on climate change. There has been to the best of my knowledge so far no such study conducted. The closest is another on-going study on the coverage of Climate Change by the print media in Zambia.

Therefore, this study has contributed to the literature on the coverage of climate change by the broadcast media in Zambia using a case of ZNBC TV1.

1.6 Objectives of the Study

1.6.1 General Objective of the Study

In general, the research aimed to examine the coverage of climate change issues in the broadcast media in Zambia using a case of the Zambia National Broadcasting Corporation (ZNBC) TV1.

1.6.2 Specific Objective of the Study

The specific objectives of this study were to:

- 1.6.2.1 To examine the frequency of reporting climate change issues on ZNBC TV1.
- 1.6.2.2 To establish the dominant themes of climate change reported on ZNBC TV1.
- 1.6.2.3 To identify the challenges that journalists at ZNBC face when covering climate change issues.
- 1.6.2.4 To find out the influence of climate change stories on the lives of the audience.

1.7 Research Questions

The study sought to answer the following research questions:

- 1.7.1 What is the frequency of reporting climate change issues on ZNBC TV1?
- 1.7.2 What are the dominant themes reported of climate change on ZNBC TV1?
- 1.7.3 What challenges do ZNBC TV1 journalists face when covering climate change?
- 1.7.4 What influence has the coverage of climate change on ZNBC TV1 made on the lives of the audience?

1.8 Delimitation

The study was carried out in Munali constituency of Lusaka city. Three townships in Munali constituency namely Avondale, Chelstone and Mtendere provided the sample for viewership based on their category as low, medium and high density areas respectively.

Lusaka was chosen because of its large mixed population, proximity and reasonable costs involved in undertaking the research. Further, ZNBC TV1 which provided the sample for the media practitioner's survey is also located in Lusaka.

1.9 Conclusion

This chapter has brought out the Introduction, background of the study, overview of the broadcast media in Zambia, background of ZNBC TV1, statement of the problem, significance of the study, objectives of the study, research questions and delimitation of the study. The next chapter discusses the literature review used in the study in relation to climate change.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature that has been done on media coverage of climate change. The chapter has looked at studies on media coverage of climate change from a global, regional and finally, Zambian context.

2.2 Global Perspective

Much of the existing literature looks at print media coverage, newspapers specifically, of climate change with a limited number of studies examining broadcast media coverage, in particular television (TV). Therefore this study focused more on the general media coverage of climate change.

A study by Sampei and Usui (2008) on Mass Media Coverage, its influence on public awareness of climate change issues and implications for Japans campaign to reduce greenhouse gas emissions showed that the increase in media coverage of climate change issues and global warming correlated with an increase in public concern for the issue.

The study consisted of three parts in which it reviewed newspaper coverage of climate-change, examined the effects of its national campaign program on coverage by the mass-media, performed a monthly public opinion survey during the period of the study and investigated the influence of newspaper coverage on public awareness of climate-change issues.

The study which was conducted from January 1998 to September 2007 found that the level of public concern about climate change and environmental issues tended to be affected by the amount of media attention they received, rather than by the substantive content of the news reports.

The study revealed that coverage of climate change had an immediate but short term influence on public concern and suggested that for more effective communication of climate change, strategies aimed at maintaining its mass-media coverage were required.

The study concluded that the Japanese mass media's overall trend of covering climate change and global warming was characterised by sudden peaks caused by international events such as the Kyoto protocol in 2005 and the attention given by the Japanese mass media to the implementation of domestic events as part of its national campaign.

Sampei and Usui's study certainly brought out an important point that the more the media report on an issue, in this case climate change, the more the attention of the public will be captured concerning the issue. Therefore, the media as an important stakeholder in information dissemination and awareness creation need to consider the content and continuously find new ways and angles for these stories in order to promote high levels of public awareness of climate change.

In another study by McCann (2010) in a thesis for a master's degree titled 'A framing study of media coverage on climate change from 1989 to 2009, submitted that the public focussed on climate change as a political issue rather than the actual science or impact on society and culture.

The quantitative study found that the political economic frame accounted for a higher percentage of articles published followed by the cultural and society frame.

Most articles focussed on possible legislation to regulating climate change and on governments taking responsibility for emissions. It also focussed on the United States of America's (USA) efforts to move away from carbon emissions and government support towards nuclear power.

Under its cultural and society framing, the study found that the articles mostly discussed the effects of climate change on different populations throughout the world. The study also looked at health hazards of climate change upon human race or certain population. The study also found one of the framing techniques used was the use of visual elements in portraying climate change to the general public.

Both Sampei and Usui (2008) and McCann (2010) revealed an upward trend in Japan and the USA respectively on the coverage of climate change. However, Sampei noted that this upward trend was tied to sudden peaks caused by international events. This increase shows that climate change is an important topic in the news media.

However, McCright and Dunlap (2011) in their study on the politicisation of climate change and polarisation in the American public's views of global warming showed that climate change in America is politicised. The study looked at to what extent liberals and democrats and conservatives and republicans in America differ in their beliefs and concern about global warming.

The study found that the liberals and democrats were more likely to hold beliefs about global warming consistent with the scientific consensus and to express concern about this environmental problem than are conservatives and republicans.

The study found that this divide has grown substantially over the past decade and that current flow of political messages and news concerning global warming is likely contributing to the growing divide.

They found that given this conflicting information from the elites on both sides of the political spectrum, ideology and partisan camps, the general public was likely receiving very different information on global warming in ways that reinforce their existing political differences.

2.3 The African Perspective

A study by Evelyn Tagbo of the media coverage of climate change in Africa using a case study of Nigeria and South Africa submitted that the media in the two countries had evolved significantly in the last 100 years.

The study reported that how the media presents an issue goes a long way to determine how the public sees the issue and how it reacts to it. It said that the quantity of climate change coverage in the African continent is disproportionate to the level of threat it poses to the continent and

added that broader public understanding of a range of climate change issues is required if Africa is to respond and adapt to climate change.

The study used Nigeria and South Africa for the case study due to their large size and strength of their economies. Both countries have the most robust media in Africa and in the 2008 United Nations Development Programme (UNDP) Human Development Report, the two countries were identified among the countries that will be hard hit by the impact of climate change. Specifically, the report projects that Lagos and Cape Town, two very important coastal cities in these countries, could be inundated by 2080 if measures are not taken.

According to the study, the results from the Nigerian media showed that most climate change articles were driven by domestic and international events. Most of the climate change stories were taken from foreign media and gave little or no Nigerian context.

Similarly in South Africa, the studies found that majority of the articles were tied to international events and that many of them were about climate change impact outside South Africa and did not give a South African or African background.

In both countries, the study found that the use of foreign reports, mostly from international wire services, even though it had helped to somewhat keep climate change in the news in most African countries, has meant that African media owners and managers cared little about developing the capacity of their own reporters to cover the subject.

The study concluded that improving media coverage of climate change issues is critically important for tackling the challenges of climate change and that the media often plays the role of a catalyst for social change and the orderly progress of society.

A 2011 policy brief on why the media matters in a warming world by the climate change media partnership stated that strengthening the capacity of the media to cover climate change can help countries plan and implement domestic policies that work on the ground while also meeting their international obligations.

The brief also stated that the fight against climate change could be won or lost on the pages of newspapers, in television and radio broadcasts, on the internet and mobile phones. This is because people need good information to make effective decisions at the household or global level and that most people get their information about climate change from the media.

The brief added that Journalists can warn of extreme climatic events, explain complex policies, highlight coping strategies that work on the ground, act as watchdogs that protect the public interest, and promote the necessary actions from consumers, businesses and governments to build green economies.

According to the policy brief, recent studies of climate change coverage in countries such as Malawi, Nigeria, South Africa and Zimbabwe suggested that the international politics of climate change tend to dominate over coverage with more direct implications for people's lives.

Atieno and Njoroge (2014), in their study on how climate change impacts representation in Kenya's news media, found that in developing countries, a lot of emphasis is put on how climate change impacts agricultural productivity.

The study found Sub Saharan Africa would be worst hit with food insecurity issues due to the dependence on rain fed agriculture.

It also stated that, climate change impacts would create a conflict problem when immediate human needs are at risk of not being met due to scarcity of resources.

The study noted that climate change had a local effect and that adaptation had to be encouraged at regional/ community level. The study added that information flow from global policy to national platforms had to be encouraged.

The study stated that the media is a key player in reporting the climate change crisis to elicit appropriate public response and that media efforts could be relied upon for making headway in responding to the growing pressures of climate change impacts by the public and policy makers.

The study however found that there has been comparatively little media coverage of climate change in developing countries yet they are likely to suffer the worst effects. It found that there was still low awareness of climate change among African populations including Kenya.

According to the study, two problematic issues stand out in media reporting of climate change which are the reluctance to publish climate science reports and the reconstruction of scientific claims in media. This implied that the general public was rarely enlightened on climate change issues.

2.4 The Zambian Perspective

Panos Institute Southern Africa (2008) conducted a study on media coverage, community perspective and policy response on climate change in Africa in which Zambia was among two other countries used as a case study.

One of the objectives of the study was to identify how both the electronic and print media report issues of climate change, adaptation and constraints faced by the media in reporting climate change issues.

The study found that media coverage of climate change issues still remained low and of poor quality in the countries of study including Zambia and that media houses had not prioritised the issue. It found that most detailed articles or radio/ television features are either from foreign media or news agencies; specialised and or sponsored columns, television and radio programmes.

The content analysis of the study revealed that the focus of climate change stories in the local media was on the effects of climate change and that most focussed upon droughts and floods. The study also revealed that 90 per cent of the published stories were tied to government leaders and that less than 5 per cent of the stories were attributed to environmental advocates and only about 2 per cent attributed to environmental experts.

Katongo (2014), in his report on overcoming Zambia's lack of environmental reporting: lessons from a journalism training workshop, stated that there was a lack of environmental reporting in Zambia.

The report argued that business, political and sports stories were often guaranteed space in the media because of their ability to attract large audiences.

The report added that environmental stories that are covered, were usually politically inclined and often lacked in-depth articulation of critical issues at hand.

The report stated that the media's role in influencing policy change and public debate is crucial

While the revelations by Katongo (2014) are vital and relevant to this study, they focus on the environment in general.

2.5 Contribution to Literature

A number of studies were conducted globally and in Africa on climate change issues, however very limited studies were conducted in Zambia.

In reviewing the literature presented in this chapter, it was evident that the scholars recognised that the media play an important role in information dissemination and raising awareness of climate change issues. It was also clear that not much has been done by the media especially in Africa and Zambia in particular to raise the level and quality of reporting of climate change issues. It was found that most stories on climate change were event based or as a result of an important government official commenting on the matter. With this contribution, it is clear that there still remains a lot to be done to enhance the coverage of climate change in Africa and in particular, Zambia. It is also clear that there is still room for further study on media coverage of climate change issues in Zambia in order to add to the very little available studies on the same. This research has added to the literature.

2.6 Conclusion

This chapter has presented and reviewed literature related to this study on media coverage of climate change issues. The next chapter looks at the conceptual and theoretical framework of the study.

CHAPTER THREE

CONCEPTUAL AND THEORETICAL FRAMEWORK

3.1 Introduction

This chapter explains the conceptual and theoretical framework used in this study. It has defined key concepts and has looked at three theories namely agenda setting theory, gate keeping theory and framing theory. The theories underpin the role of the media in public information dissemination.

3.2 Conceptual and Operational definitions

3.2.1 Climate Change

According to the United Nations Framework Convention on Climate Change (UNFCCC) (2008), climate change is defined as a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

3.2.2 Media

According to Garcia (2008), the media are defined as communication devices which can be used to communicate and interact with a large number of audiences in different languages. They are communication channels through which news, entertainment, education, data or promotional messages are disseminated. Media includes every broadcasting and narrowcasting medium such as newspapers, magazines, TV, radio, billboards, direct mail, telephone, fax and internet, (The business dictionary, 2007). The media that this study has focused on is the broadcast media and television in particular.

3.2.3 Broadcasting

According to McQuail (2000), broadcasting is the transmission of radio and television signals over air from fixed terrestrial transmitters and with limited range. In this study broadcasting refers to television broadcasting.

3.2.4 Media Coverage

Buzzle (2015), defines media coverage as the way in which a particular piece of information is presented by media either as news or entertainment. It can affect the extent of information dissemination as well as influence the audience opinion while giving out the information. Media coverage in this study refers to the extent to which climate change issues are reported or analysed.

3.2.5 Promote

The Cambridge online dictionary (c2016), defines promote as to encourage people to like, buy, use, do, or support something. In this study the word promote has been used in reference to promoting media coverage of climate change.

3.2.6 Awareness

The free dictionary (2003), defines awareness as having knowledge of something or being attentive or well informed about something. In this study awareness refers to being informed, knowledgeable and attentive to something.

3.2.7 Content

McQuail (2000) defines media content as messages produced by a few for the many and delivered to large audiences simultaneously through print or electronic media. In this study, content refers to news stories, current affairs programmes and documentaries produced by the media.

3.3 Theoretical framework

3.3.1 Agenda setting theory

Also known as The Agenda-Setting Function of the Mass Media, The Agenda-Setting Theory was first put forth by Maxwell McCombs and Donald Shaw in 1972 .The theory suggests that the media sets the public agenda, in the sense that they may not exactly tell you what to think, but they may tell you what to think about, (McCombs and Shaw, 2003).

The theory describes how news organisations select their agenda and how they use the agenda to convey messages to the masses. The idea states that covering a news story can make that event or issue feel more important to an audience and by controlling what is covered, they are able to influence the general public.

McCombs and Shaw argued that in choosing and displaying news, editors, newsroom staff and broadcasters play an important part in shaping political reality. Readers learn not only about a given issue but also how much importance to attach to that issue from the amount of information in a news story and its position, (McCombs and Shaw, 2003).

Rogers and Dearing identified three types of agenda setting. Public agenda setting is the tradition hypothesis in which the public's agenda is the dependent variable. Media agenda setting is known as agenda building in which the media's agenda is treated as the dependent variable and policy agenda setting or political agenda setting is where elite policy maker's agendas are treated as the dependent variable, (Kincard, 2013).

The media can be seen as setting the agenda in society today through the way they select which items they consider news worthy for dissemination. Society itself relies on the media for information that would otherwise be difficult for them to obtain.

This theory is valid to this study in that consistent media content on climate change issues can set the agenda for public discussion and as a result lead the public into attaching more importance to the issue.

3.3.2 Gate keeping theory

Kurt Lewin, a social psychologist, coined the Gate Keeping Theory in 1943. The Theory was popularised and connected to Mass Communication by David Manning White. It is based on blocking unwanted messages by using a gate.

The concept behind this theory is that a gatekeeper decides what information should move to a group or an individual and what should not. “In mass media, not every incident that occurred is reported by the reporter. And not all reported articles are published by the editor of the media house” (White, 1950).

The selection of the stories is systematically biased, driven by a combination of organisational factors, news norms and audience interests. The resulting news content is skewed towards stories that are for instance more sensational, unusual, conflictual or geographically proximate, (Soroka, 2012).

The most obvious effect of gate keeping is cognitive shaping the thoughts of an audience about what the world is like. Gate keepers determine what a person’s social reality becomes, (Shoemaker and Vos, 2009).

The gatekeeping theory is relevant to this study in the sense that the media engage different approaches in selecting what information to report and what not to. Through the gate keeping process, reporters and the media in general can advance information of climate change issues.

3.3.3 Framing theory

The basis of framing theory is that the media focuses on certain events and places them within a field of meaning called “the frame”. Frames are abstractions that work to organise or structure message meaning. Framing theory suggests that how something is presented to the audience, influences the choices people make about how to process that information, (Davies, 2010).

Framing theory is closely linked to the Agenda setting theory because they both focus on how the media draws the public's attention to specific topics – in this way they set the agenda. But framing takes this a step further in that it creates a frame for the information presented, (ibid).

Framing is the act of defining issues for public consumption and disseminating these definitions through the use of mass media. Framing is an inherent part of the news process. An example is the way media as gatekeepers organise and present the ideas, events and topics they cover.

This theory is relevant to this study in the sense that through the framing process, the media can influence choices by drawing public attention to an issue and in this case, climate change.

3.4 Conclusion

This chapter has explained the conceptual and theoretical framework used in this study. It has defined key concepts used in this study and has looked at three theories namely agenda setting theory, gate keeping theory and framing theory. The next chapter looks at the methodology by which the study was conducted.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses ways in which the study was conducted. It has looked at how data was collected, processed, analysed and interpreted. The chapter also looks at the research methods, sampling techniques, study population, ethical considerations and limitations of the study.

4.2 Research Design

The study employed both the exploratory and descriptive approaches.

The exploratory approach was used to explore attitudes, behaviours and experiences in order to get an in depth opinion on the research matter from respondents whereas, the descriptive approach was used to generate statistical data by using the statistical package for the social sciences (SPSS).

4.3 Research Methods

The research used both quantitative and qualitative methods and specifically exploited the following methods in data collection:

- a) Quantitative survey (Audience and Journalist survey)
- b) In-depth interviews (Qualitative)
- c) Message content analysis (Quantitative)

4.3.1 Quantitative survey

This method is based on the measurement of quantity or amount. According to Babbie (2010), quantitative methods emphasize measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys. It focusses on gathering numerical data and generalising it across groups of people or to explain a particular phenomenon.

The benefit of this method is that it is reliable and objective because it is numerical and therefore cannot be easily misinterpreted. Further, the use of this quantitative research method was beneficial to the study in that it was used in the collection and analysis of data, as well as to quantify the observed facts in order to reach at objective conclusions from the study without bias.

Two quantitative surveys were conducted. A self-administered questionnaire was used to collect data on media coverage of climate change from media practitioners consisting of reporters, producers and editors from ZNBC. The media practitioners were randomly picked from the newsroom and production departments.

Another quantitative survey was conducted on the audience with help from trained research assistants. The questionnaire consisted of both open-ended and closed-ended questions. The study was carried out in Munali constituency in Lusaka District.

Lusaka District was purposively chosen because of its large mixed population, proximity and reasonable costs involved in undertaking the research. Further, ZNBC TV1 which provided the sample for the media practitioner's survey is also located in Lusaka.

To arrive at the sample for audience survey, the study considered the seven constituencies in Lusaka District, from which Munali constituency was then randomly selected. Further, within Munali constituency, three townships namely Avondale, Chelstone and Mtendere were randomly selected based on their classifications as low, medium and high density areas respectively. Further, the questionnaires were proportionately distributed among the three townships.

To ensure the proportionate distribution of the questionnaires, a formula was used in order to find out what the total number of questionnaires for each township would be. The total number of households in each particular township was divided by the total number of households for Avondale, Chelstone and Mtendere and then multiplied by 100 which was the household sample size as shown in this formula: $S = \frac{h}{H} \times 100$.

According to the Central Statistical Office (CSO) census of population and housing, population summary report, the total number for individual households in each particular township is Avondale 8,076 Chelstone 6,395 and Mtendere 22,074 whereas the total number of households for Avondale, Chelstone and Mtendere is 36,545 (CSO, 2010).

The questionnaires were then proportionately distributed as follows:

Township	No. of Questionnaires
Avondale (Low density)	22
Chelstone (Medium density)	18
Mtendere (High density)	60
Total	100

Random sampling was employed when choosing a starting point in each street and participants at household level in these areas were purposively chosen with preference on those that watch ZNBC TV1.

a). Sample size for the quantitative surveys

The sample size for media practitioners was 15 whereas the sample size for the audience survey was 100 households.

4.3.2 In-depth Interviews

In depth interviews were conducted for collecting qualitative data. This method was chosen mainly because of its ability to gain deeper insight in the research subject from people who are experts and are endowed with information on the subject.

The method also allows for much detailed responses to questions by the researcher on the research subject, which might have been missed in the other methods employed. Further, the in depth interviews complimented the quantitative research methods used in the study.

A total of three in depth interviews were conducted for the collection of qualitative data with key informants who were purposively selected or sampled because of their expertise and experience in climate change matters. An interview guide was used to conduct these interviews to ensure uniformity in interviewing. Interviews were conducted with the Assistant Director-Forecasting and Research at the Meteorological Department, Communication and Administration Manager at the Interim Climate Change Secretariat (ICCS) and the Planning Specialist at the Zambia Environmental Management Agency (ZEMA).

4.3.3 Content analysis

Message content analysis was used as part of data collection. According to Berelson (1952), content analysis is defined as a research technique for the objective, systematic and quantitative description of the manifest content of communications.

An advantage of content analysis is that it is considered as an unobtrusive or non-reactive method of social research. The material for content analysis can be letters, newspaper content, messages of radio or television among others, (Prasad, 2008).

Therefore, news, documentaries and current affairs programmes were all purposively chosen and used as units of measure. These units of measure used, convey programmes that are official in nature and have an audience comprised of policy makers as opposed to other programmes that convey programmes that are of entertainment in nature. The content analysis which was done with the aid of a coding sheet, was used to establish both the quantity and trends of climate change coverage on ZNBC TV1.

a). The sample size for content analysis

The content analyses run for a period of one month in February 2017.

b). Coding sheet

To aid analysis, a pre coded sheet was used. The coding sheet comprised content categories for each unit of measure (*See Appendix*).

4.3.4 Data analysis

The study used the Statistical Package for the Social Sciences (SPSS) and Microsoft Excel to analyse the data. The data was analysed in terms of measures of central tendency and dispersion to generate percentages and frequencies tables.

4.3.5 Sampling Techniques

The study employed a combination of sampling technics namely, purposive sampling and multi stage cluster sampling.

Purposive sampling is a non- probability sampling method where items of the sample are selected deliberately, (Kothari, 2004). Multi stage cluster sampling on the other hand, is a sampling procedure in which a population is divided into clusters of geographic boundaries. This technique was employed during the audience survey. It was useful in avoiding problems of for instance, randomly sampling from a population that is larger than the available resources and time.

4.4 Ethical considerations

The study employed utmost confidentiality and objectivity, and ensured that participation in the study was voluntary and informed consent was obtained prior to the interviews.

- i) Confidentiality: Numbers were used to identify questionnaires as opposed to names. Further, all information from the respondents were treated as confidential and solely used for this study.
- ii) Voluntary participation: The study was on voluntary basis and no participant was forced, coerced or manipulated into taking part in the study.
- iii) Objectivity: The study was free from personal prejudices that could undermine the research findings.

4.5 Limitations of the study

Limitations related to this study are that firstly that since the study was broadcast media specific; using a case of ZNBC TV1, therefore generalisation of the findings should be done with caution. The other important limitations related to this study were inadequate funding where the researcher was expected to fund her own research. Further, the study is broadcast media specific using a case of ZNBC TV 1, as result there was a challenge of accessing daily recorded transmission for the purpose of record keeping.

4.6 Conclusion

This chapter has looked at the research methods that the study employed, these being the quantitative survey (audience and journalist survey), in-depth interviews (qualitative) and message content analysis (quantitative). The chapter has also outlined the data analysis, sampling techniques, ethical considerations and limitations of the study.

CHAPTER FIVE

PRESENTATION OF FINDINGS

5.1 Introduction

The chapter presents and interprets the findings of this study. The findings are presented according to the specific objectives. Thus, this section is presented according to the main themes, namely: the frequency of reporting climate change issues on ZNBC TV1; the dominant themes of climate change reported on ZNBC TV1; the challenges that journalists at ZNBC face when covering climate change issues and the influence of climate change stories on the lives of the audience. The chapter has also looked at the audience profile sampled.

5.2 Findings

5.2.1 Frequency of reporting climate change issues on ZNBC TV1

The opening objective of the research was to examine the frequency of reporting climate change issues on ZNBC TV1. To achieve the objective, the study commenced a content analysis of broadcast content of the ZNBC TV1 for the month of February 2017. Specifically: the main news bulletin; documentaries; and current affairs programmes were used as units of measure, the findings of which are described below:

5.2.1.1 Distribution of news stories

In the month of February 2017, ZNBC aired a total of 337 news items in its 19:00 hour's main news bulletin, out of which, only one (0.23 per cent) news item related to climate change. Figure 1 below shows the frequency of climate related stories under the main news bulletin.

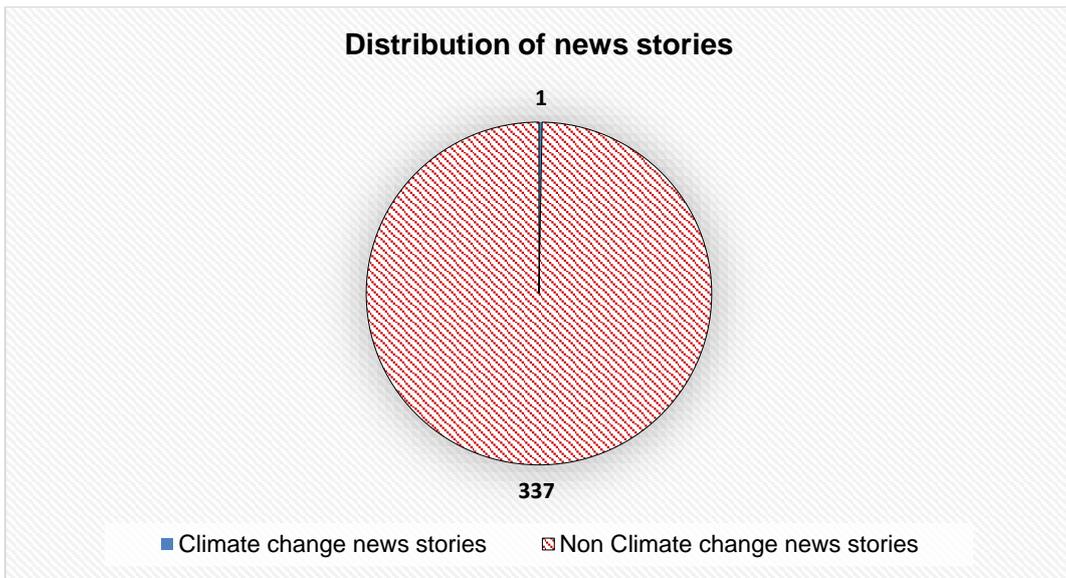


Figure 1. Distribution of news stories

5.2.1.2 Distribution of documentaries

According to the ZNBC TV 1 programme guides, a total of 47 documentaries were scheduled for airing during the study period. From the monitored content, only six documentaries relating to climate change were aired. Out of the six climate change related documentaries (12 per cent) aired, four (67 per cent) had climate change as a major concern or theme while two (33 per cent) did not. See figure below.

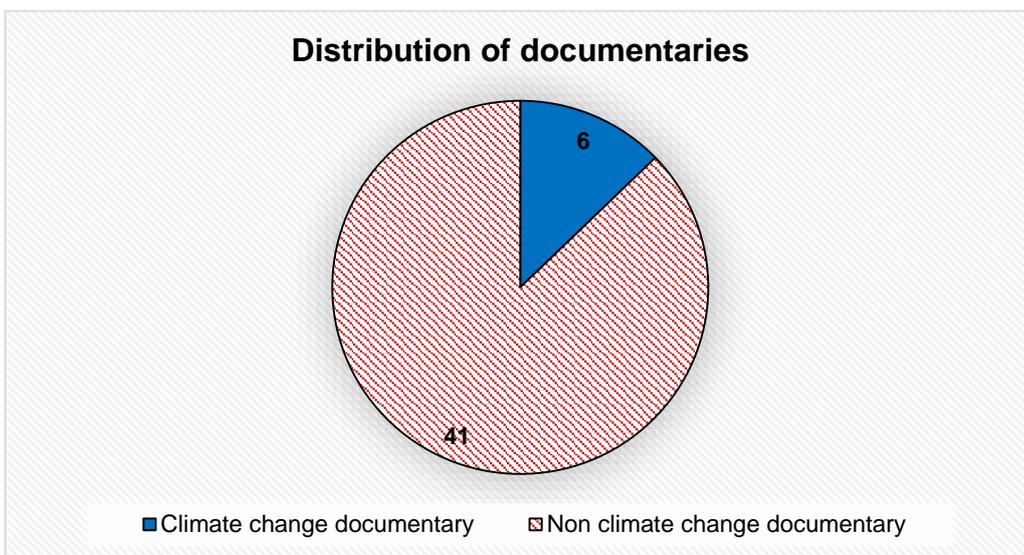


Figure 2. Distribution of documentaries

5.2.1.3 Distribution of current affairs programmes

This section presents the findings on the distribution of current affairs programmes and how many of them that aired on ZNBC TV1 related to climate change.

In the month of February 2017, four (6.3 per cent) current affairs programmes with climate change information were aired on ZNBC TV1 out of a total of 63 different current affairs programmes which were scheduled for airing according to the ZNBC TV 1 programme guides. See figure below.

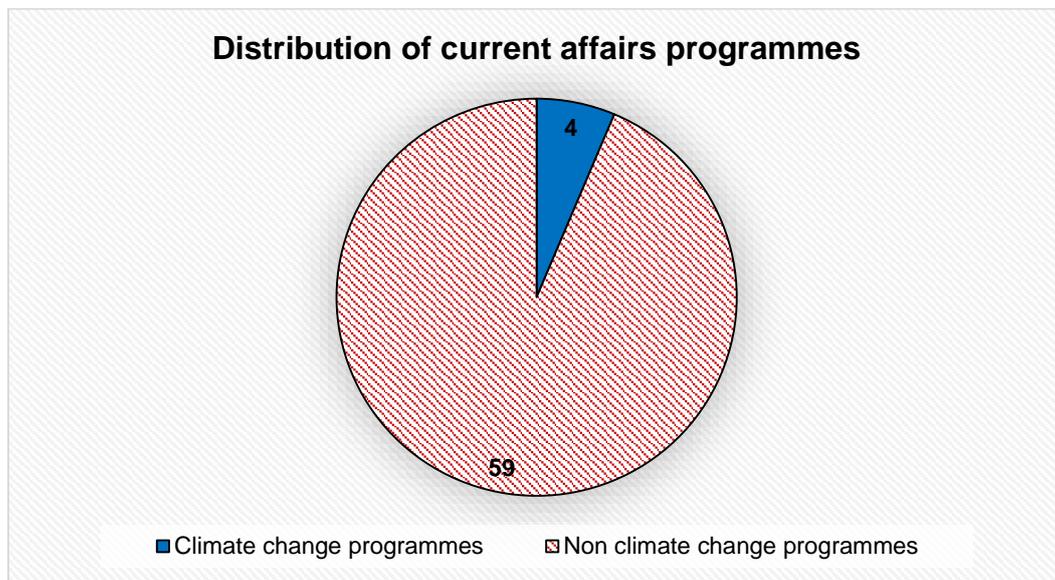


Figure 3. Distribution of current affairs programmes

5.2.2 The dominant themes of climate change reported on ZNBC TV1

The second objective was to examine the dominant themes of climate change reported on ZNBC TV1. This objective was realised through the analysis of broadcast content of ZNBC TV1 for the month of February 2017. Specifically, the main news bulletin, documentaries; and current affairs programmes were examined. This objective was also complimented with findings from the, journalist survey and in-depth interviews with key informants and audience survey

5.2.2.1 Climate change issues prioritized by ZNBC TV1

a) Content analysis perspective

(i) News stories

In the month of February 2017, only one story related to climate change. In the story, climate change was not a major concern or theme. The story, which aired less than two minutes featured a government official, the Minister of Water Development, Sanitation and Environmental Protection, who observed a correlation concerning climate change, and land and water:

“Government is aware of the devastating effects of climate change on land and water... The quality and quantity of water land resource in the lower Kafue sub-basin, where Mazabuka lays will continue to diminish and have major consequences for domestic and industrial sectors...”

This was said when he officiated at the launch of the Sustainable Landscape Management (SLM) programme, in Mazabuka Zambia. Further, in terms of placing, the story ran after the third set of commercials.

(ii) Documentaries

From the monitored content, only six documentaries relating to climate change were aired. Out of the six climate change related documentaries aired, four had climate change as a major concern or theme while two did not. The documentaries were short films that did not exceed thirty minutes of airplay and documented aspects of reality as regards climate change.

Further, in terms of proximity, one of the six documentaries aired was a foreign package that looked at the decline of the Antarctic as a result of increases in temperatures owing to climate change. The other five documentaries were local productions, inclined to agriculture, and were aired on programmes such as *Lima Time* and the Indaba Agricultural Policy Research Institute (IAPRI) sponsored documentary.

Specifically, two of the locally produced documentaries covered topics on prolonged hot and dry seasons, significant decrease in rainfall and low agriculture yields. Also, these two documentaries had climate change as their major concern or theme. In terms of sourcing, they both featured representatives of NGOs and the ordinary people.

Another documentary which had climate change as its major concern or theme only covered the low agriculture yields resulting from climate change and featured an NGO, climate change experts and ordinary people as sources of information. One documentary looked at deforestation and related it to climate change and another documentary made mention of the importance of having in place a climate change policy. The two documentaries featured an NGO and a policy maker respectively as their sources of information.

Overall, all the six climate change related documentaries were packaged in a manner that presented both the problems and solutions associated to climate change and predominantly advocated for conservation farming and an end to deforestation. See table and figure below for distribution of the documentaries.

Table 1. Distribution of climate change documentaries

Documentary	CC issue covered	CC major concern?	Sources used
D1	Prolonged hot and dry seasons, significant decrease in rainfall; and low agriculture yields	Yes	NGOs Ordinary people
D2	Importance of having a climate; and climate change policy	No	Policy maker
D3	Low agriculture yields	Yes	Experts NGOs Ordinary people
D4	Increases in temperatures	Yes	Experts NGOs Ordinary people
D5	Deforestation	No	NGOs
D6	Prolonged hot and dry seasons; significant decrease in rainfall; and low agriculture yields	Yes	NGOs Ordinary people

(iii) Current affairs programmes

In the month of February 2017, four current affairs programmes with climate change information were aired on ZNBC TV1. Out of the four current affairs programmes, only one current affairs programme focussed on climate change while the remaining three did not entirely focus on climate change. The topics discussed in the programmes were on significant increase in rainfall, significant decrease in rainfall and deforestation. Mostly these topics were discussed in relation to agriculture. These studio based programmes did not feature ordinary citizens but rather featured representatives from NGOs as sources of information.

The only programme that focussed on climate change covered topics on significant decrease and increase in rainfall. The programme presented these as being as a result of climate change and added that in times of significant decrease or increase in rainfall, agriculture in affected as crops did not perform well.

Two programmes looked at deforestation in which it was mentioned that deforestation affects climate change. Climate change was however not the focus of the two programmes. The two programmes presented that there was need to put an end to deforestation and to ban the trading of timber logs respectively.

Another programme looked at draught in relation to significant decrease in rainfall. While climate change was mentioned in the programme as a contributing factor to draught, it was not however the focus of the programme.

Overall, there was little coverage specific to climate change. Most of the coverage was focussed on other topics that did not entirely focus on climate change. Climate change was instead mentioned in a transitory manner. See table below for distribution of the dominant current affairs programmes.

Table 2. Distribution of climate change current affairs programmes

Current Affairs Programme	CC issue covered	CC major concern?	Sources used
CAP1	Significant decrease in rainfall Significant increase in rainfall	Yes	NGOs
CAP2	Deforestation	No	NGOs
CAP3	Deforestation	No	NGOs
CAP4	Draught	No	NGOs

b) Journalist’s perspective

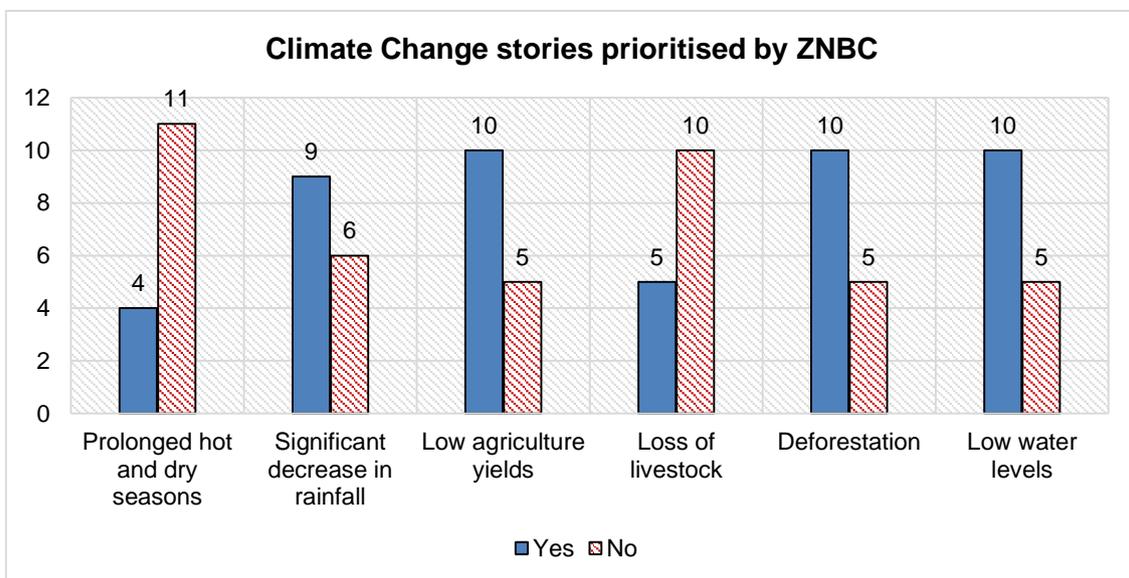


Figure 4. Journalist’s perspective on climate change issues prioritized by ZNBC TV1

c) Expert’s perspective

The interviewees observed that ZNBC TV1 concentrated on government’s response to climate change related issues such as flooding and draught. Further, there was also focus on adaptation measures and challenges in the adaptation programmes. The adaptation measures included crop diversification, planting drought resistant crop varieties and conservation farming.

On the whole, the interviewees observed that ‘agriculture related issues’ and ‘government responses and measures’ as the dominant themes in climate change reportage on ZNBC TV1.

Accordingly, the interviewees recommended that ZNBC TV1 strategically partners with government and different stake holders to increase the frequency of climate change coverage as a sure way of increasing climate change awareness among the general populace.

d) Audience perspective

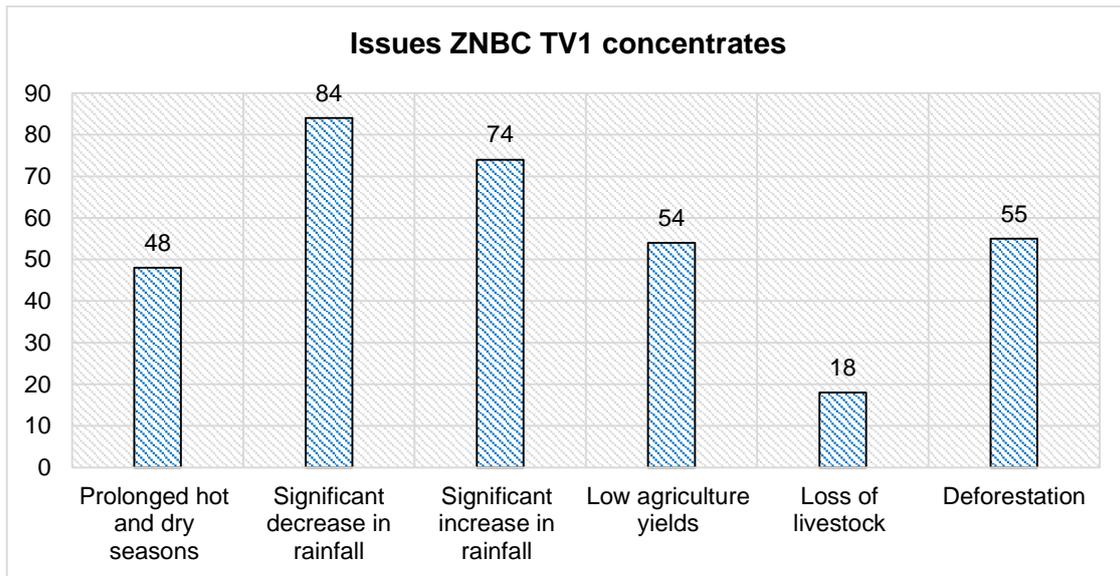


Figure 5. Issues ZNBC TV 1 concentrates on in disseminating climate change information

5.2.2.2 Adequacy of climate change issues reported by ZNBC TV1

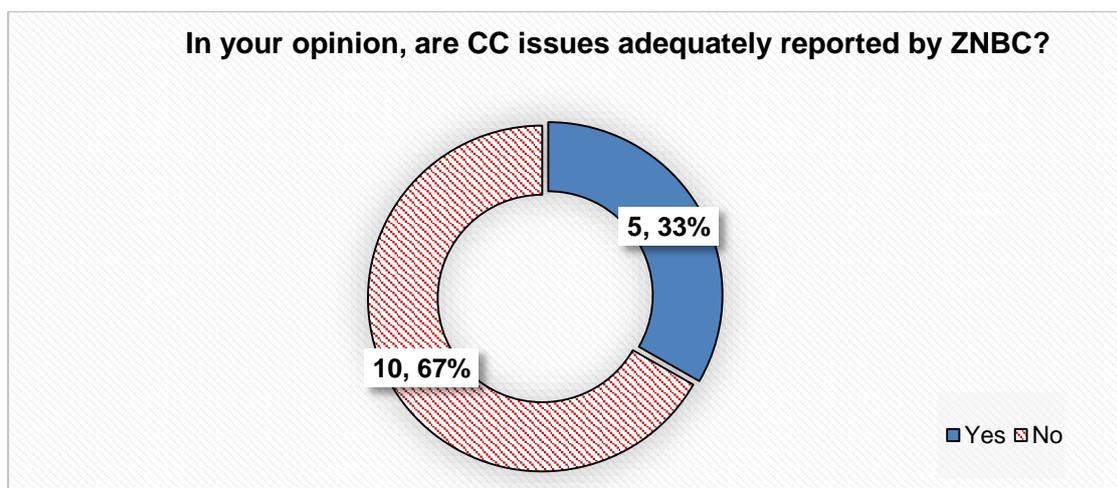


Figure 6. Journalist opinion on adequacy of climate change issues reported by ZNBC

Table 3. Audience perspective on climate change related information on ZNBC TV1

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Adequate	10	10.0	10.0	10.0
	Fairly adequate	52	52.0	52.0	62.0
	Inadequate	33	33.0	33.0	95.0
	Not sure	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

5.2.3 Challenges those journalists at ZNBC face when covering climate change issues

To archive this objective, a total of 15 journalists were sampled from ZNBC's TV1, eight (53 per cent) female and seven (47 per cent) male. In terms of the highest education level attained, 10 (67 per cent) had a diploma in media studies while five (33 per cent) had a degree in the same.

Table 4. Highest education level attained

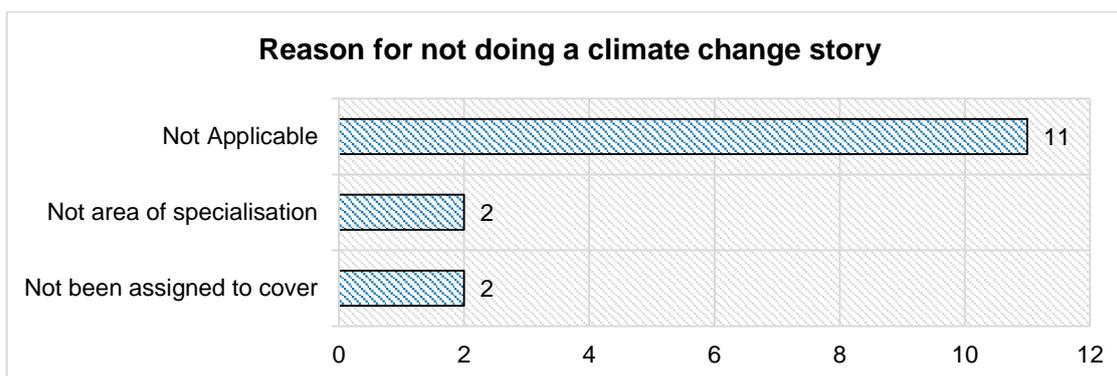
Position at Work			Major field of study	Total
			Media studies	
Reporter	Highest education level attained	Diploma	4	4
Senior Reporter	Highest education level attained	Degree	1	1
Sub - editor	Highest education level attained	Diploma	1	1
		Degree	2	2
Editor	Highest education level attained	Diploma	1	1
		Degree	1	1
Producer	Highest education level attained	Diploma	4	4
		Degree	1	1

With regards to having done a story on climate change, (11) 73.3 per cent of them indicated having done a story on climate change, while (4) 26.7 per cent had never done a story on climate change and this was because it was not their area of specialisation and/or had not been assigned to cover. See tables below.

Table 5. Ever done a story on climate change?

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Yes	11	73.3	73.3	73.3
No	4	26.7	26.7	100.0
Total	15	100.0	100.0	

Figure 7. Reason for not doing a climate change story



In terms of what informs their coverage of climate change, most of the journalists, 13, indicated that it was journalistic instinct while only one journalist indicated personal interest and another indicated the ZNBC policy as the reason. See table below.

Table 6. What informs coverage on climate change?

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
ZNBC policy	1	6.7	6.7	6.7
Journalistic instinct	13	86.7	86.7	93.3
Personal interest	1	6.7	6.7	100.0
Total	15	100.0	100.0	

5.2.3.1 Journalist's sources for information on climate change

The majority of the journalist indicated government officials as their sources of information on climate change, followed by local experts and local events. Internet, international events, international press releases and NGO reports were least. See figure below.

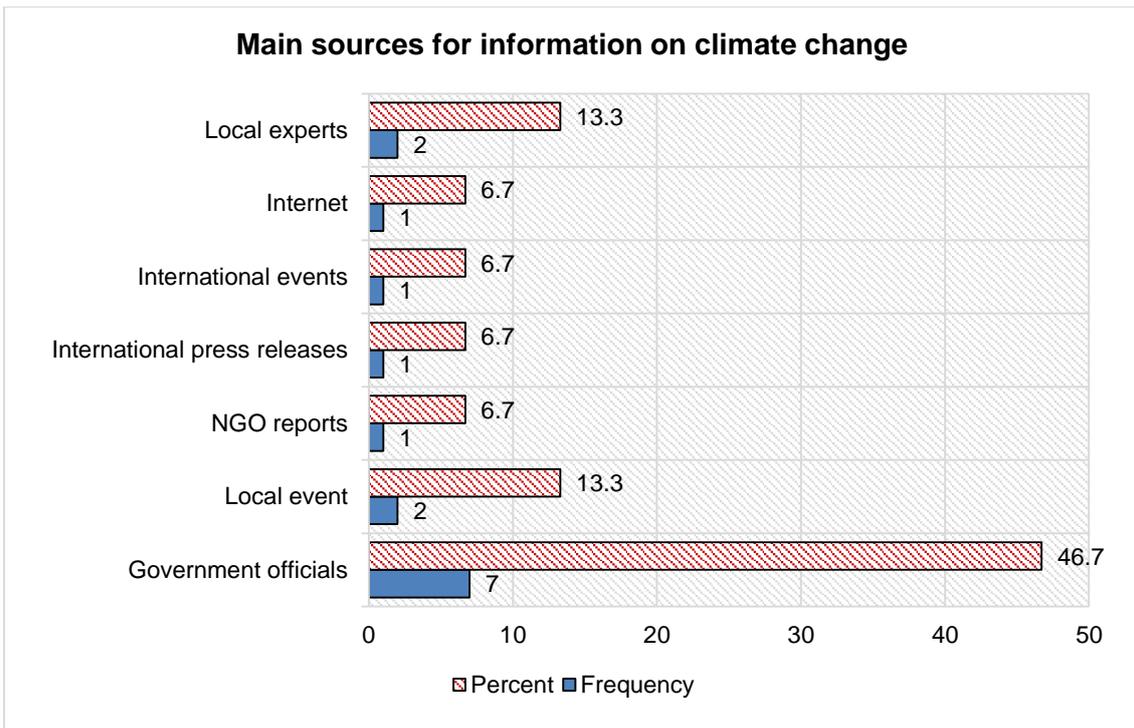


Figure 8. Main sources for information on climate change

5.2.3.2 Journalists' training for climate change reporting

In terms of journalist understanding of climate change reporting, six of the journalists understood it as showing how climate impacts on life and the environment. Five of the journalist shared their understanding as sensitising the public on major climate change issues. Only two journalists understood climate change reporting to be reporting based on changes in weather patterns. One journalist did not understand while another did not respond.

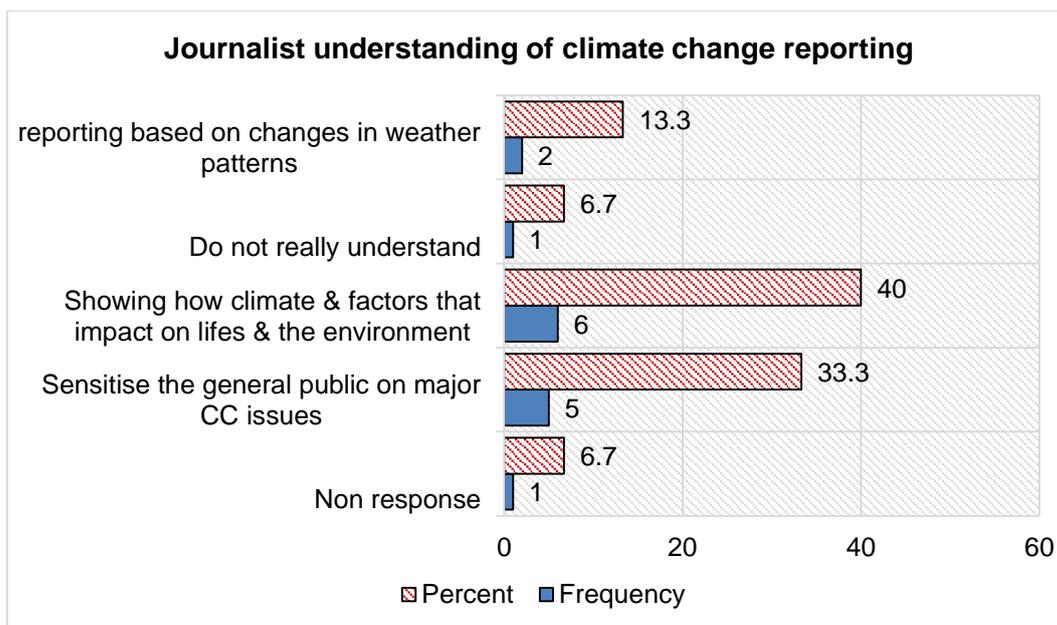


Figure 9. Journalist understanding of climate change reporting

In terms of journalist training for climate change reporting, eight journalists expressed that the journalism training was not adequate while seven said the training was adequate. Further, the majority nine (9) noted that they have never attended workshop or training on climate change and only six have ever attended such a workshop. However, of the six that attended, three attended to merely cover the event while the other three it, was to acquire knowledge. See tables below.

Table 7. Is journalism training adequate for climate change reporting

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Yes	7	46.7	46.7	46.7
No	8	53.3	53.3	100.0
Total	15	100.0	100.0	

Table 8. Ever attended workshop or training in climate change

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Yes	6	40.0	40.0	40.0
No	9	60.0	60.0	100.0
Total	15	100.0	100.0	

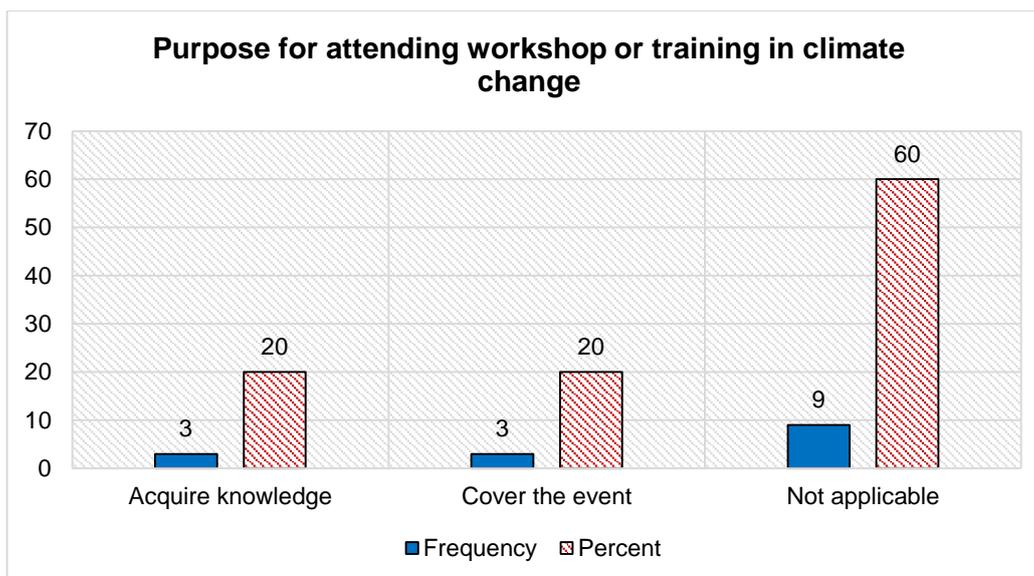


Figure 10. Purpose for attending workshop or training in Climate Change

In terms of journalists feeling sensitised in climate change issues, 11 felt they were not sensitised enough. Only four felt sensitised in climate change issues. See table below.

Table 9. Feeling of being adequately sensitised in climate change issues

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Yes	4	26.7	26.7	26.7
No	11	73.3	73.3	100.0
Total	15	100.0	100.0	

The above findings were echoed in the in-depth interviews when the experts evaluated the preparedness of media practitioners to cover climate change stories. The interviewees said media practitioners were not prepared enough to cover climate change stories and that this was evident from the limited stories on the subject and poorly produced content on the subject.

Accordingly, the interviewees recommended that media practitioners need to cultivate interest to educate themselves and others on climate change and that ZNBC needed to engage more experts. They added that reporters who have received training in climate change reporting usually prepare good climate change stories and some have gone on to win climate change related media awards.

5.2.3.3 Challenges in climate change reporting

In terms of challenges journalists from ZNBC TV1 face in reporting climate change, three were predominant, first being the limited available sources to interview while limitations in financial resources and climate change related materials ranked second among the challenges. Additional challenges cited were a perceived lack of interest by the audience and the fact that Climate Change was not priority for journalists. The least cited were lack of specialised training in climate change reporting, the technicality of the subject and lack of a climate change desk. See Figure below.

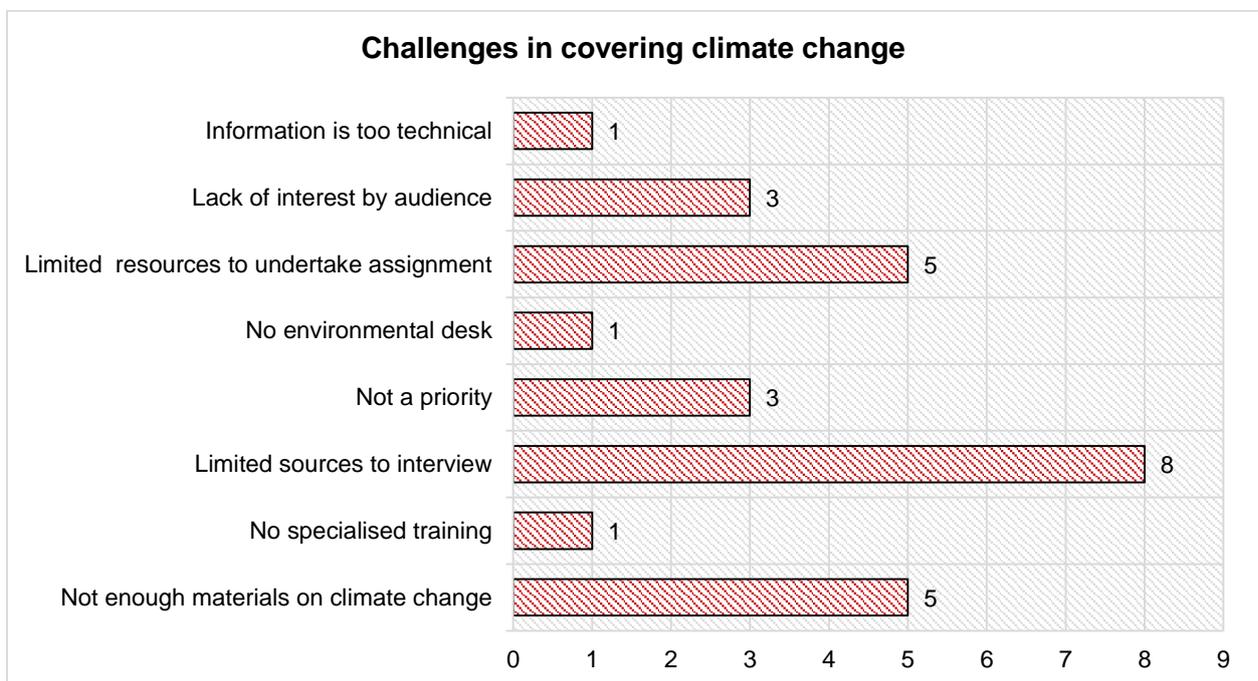


Figure 11. Distribution of challenges in covering climate change

5.2.4 Influence of climate change stories on the lives of the audience

To ensure comprehensiveness in information gathering on the subject, and to establish the contribution of climate change stories on the lives of the audience, the study undertook in-depth interviews with three organisations involved with climate change issues in Zambia. The organisations interviewed were the Zambia National Climate Change Secretariat (ZNCCS); the Zambia Meteorological Department (ZMD); and the Zambia Environmental Management Agency (ZEMA).

a) Zambia National Climate Change Secretariat

The ZNCCS was established in 2012 to take over some of the functions of the Climate Change Facilitation Unit, whose mandate ended in March 2012. The Interim Climate Change Secretariat was established under the Ministry of Finance and National Planning for the purpose of creating a focal point for all climate change related activities in Zambia, including coordination across sectors and projects and to facilitate information sharing and dialogue between governmental and non-governmental stakeholders.¹

b) The Zambia Meteorological Department

The ZMD, under the Ministry of Transport and Communications, is the National Meteorological Service and the primary provider of meteorological services. The department has offices in every provincial capital and some districts, and it is responsible for providing weather and climate information to the public and various sectors of the economy. The ZMD is also the custodian of the official records of Zambian Weather and Climate.²

c) Zambia Environmental Management Agency

ZEMA, formerly Environmental Council of Zambia (ECZ), draws its mandate from the Environmental Management Act (EMA) No. 12 of 2011. ZEMA plays a regulatory, advisory, consultative, monitoring, co-ordination and information dissemination role on all environmental issues in Zambia.³

5.2.4.1 Effectiveness of the media in reporting climate change issues

a) Expert perspective

In terms of the effectiveness of the media in reporting climate change, two of the three interviewees rated the reportage in general as moderate and emphasised the need for enhanced coverage. One of the interviewees did not monitor broadcast media coverage of climate change, instead, focussed on print media coverage. However, collectively they observed a need for journalists to undertake short-term trainings to better understand and cover climate change related issues.

¹ <http://www.znccs.org.zm/about-us.php>

² http://www.zmd.gov.zm/index.php?option=com_content&view=article&id=46&Itemid=53

³ <http://www.zema.org.zm/index.php/about-zema>

b) Audience perspective

Table 10. How do you rate the effectiveness of media in reporting climate change issues?

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	8	8.0	8.0	8.0
Good	39	39.0	39.0	47.0
Moderate	27	27.0	27.0	74.0
Poor	18	18.0	18.0	92.0
Very poor	8	8.0	8.0	100.0
Total	100	100.0	100.0	

5.2.4.2 Effectiveness of ZNBC TV1 in covering climate change issues

a) Expert perspective

The interviewees observed that there was little coverage of climate change stories by ZNBC TV1; however, they noted that when covered, the reports were relevant and well packaged. They further observed that the reportage was on flooding and draughts; and the story would normally feature a politician in terms of sources.

b) Audience perspective

From the audience perspective, the study pre-identified specific climate change issues and requested the respondents to grade them in terms of how they were covered by ZNBC TV1.

In terms of the coverage of prolonged hot and dry seasons, the majority, 32 of the respondents rated the coverage as very poor and only a meagre three rated it as very good. A fairly large number, 29, rated the coverage as good while 19 said it was poor. 17 of them said the coverage was moderate. See table below.

Table 11. ZNBC TV1 coverage of prolonged hot and dry seasons

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	3	3.0	3.0	3.0
Good	29	29.0	29.0	32.0
Moderate	17	17.0	17.0	49.0
Poor	19	19.0	19.0	68.0
Very poor	32	32.0	32.0	100.0
Total	100	100.0	100.0	

Regarding ZNBC TV1 coverage of significant decrease in rainfall, the majority, 46 per cent, rated the coverage as good, only nine said it was poor. While seven per cent said the coverage was very good, a fairly large number, 17 per cent, said it was very poor. Twenty-one per cent of the respondents rated the coverage moderately.

Table 12. ZNBC TV1 coverage of significant decrease in rainfall

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	7	7.0	7.0	7.0
Good	46	46.0	46.0	53.0
Moderate	21	21.0	21.0	74.0
Poor	9	9.0	9.0	83.0
Very poor	17	17.0	17.0	100.0
Total	100	100.0	100.0	

With the coverage of significant increase in rainfall

Table 13. ZNBC TV1 coverage of significant increase in rainfall

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	6	6.0	6.0	6.0
Good	44	44.0	44.0	50.0
Moderate	18	18.0	18.0	68.0
Poor	13	13.0	13.0	81.0
Very poor	19	19.0	19.0	100.0
Total	100	100.0	100.0	

Table 14. ZNBC TV1 coverage of loss of livestock

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	1	1.0	1.0	1.0
Good	9	9.0	9.0	10.0
Moderate	13	13.0	13.0	23.0
Poor	20	20.0	20.0	43.0
Very poor	57	57.0	57.0	100.0
Total	100	100.0	100.0	

Table 15. ZNBC TV1 coverage of deforestation

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very good	8	8.0	8.0	8.0
Good	28	28.0	28.0	36.0
Moderate	11	11.0	11.0	47.0
Poor	26	26.0	26.0	73.0
Very poor	27	27.0	27.0	100.0
Total	100	100.0	100.0	

5.2.4.3 Influence of ZNBC TV1 climate change reportage on societies

a) Expert perspective

With regards to the influence of ZNBC TV1 climate change reportage on societies, the interviewees noted that generally the reportage of climate change issues on ZNBC TV1 did not help societies to either adapt and/or mitigate climate change, on a large scale. They argued that this was the case since:

- (i) the issue of climate change is behavioural and it would take a while for people's behaviours and perceptions to change; and
- (ii) there are very few climate change programmes on the channel, citing 'Lima Time' as a programme that made an effort to educate the farming community on how to adapt to climate change by encouraging crop diversification, planting drought resistant crops and conservation farming among others.

b) Audience perspective

Out of the total number of respondents, 53 who were the majority said they were not sure of seeing any evidence of behaviour change in the community due to information provided by ZNBC TV1 on climate change. And 31 clearly indicated not seeing such evidence while only 16 respondents affirmed seeing evidence of behaviour change in community due to information provided by ZNBC TV1 on climate change.

Table 16. Evidence of behaviour change due to information provided by ZNBC TV1

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	Yes	16	16.0	16.0	16.0
	No	31	31.0	31.0	47.0
	Not Sure	53	53.0	53.0	100.0
	Total	100	100.0	100.0	

Further, of the 16 respondents that indicated seeing evidence of behaviour change in their community because of information provided by ZNBC TV1 on climate change, seven noted the reduction in terms of the use of charcoal by people, five observed an increased awareness of climate change issues, three noted that people have adapted to the weather and are behaving according to the weather and only one person cited the fact that people have stopped burning garbage. See table below.

Table 17. Change in community due to climate change information on ZNBC TV1

		Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid	People have stopped burning garbage	1	1.0	1.0	1.0
	People have adapted to the weather and are behaving according to the weather	3	3.0	3.0	4.0
	Reduction in terms of the use of charcoal by people	7	7.0	7.0	11.0
	Increased awareness of climate change issues	5	5.0	5.0	16.0
	Not Applicable	84	84.0	84.0	100.0
	Total	100	100.0	100.0	

However, of the 84 respondents who indicated not seeing any evidence of behaviour change in their community attributable to information provided by ZNBC TV1 on climate change advanced varied reasons with the majority, 18 citing lack of access to information on climate change issues. 19 cited lack of sensitization while lack of interest in climate change issues; not watching television; and low literacy levels were each attributed by 4 people. Only one person cited the poor coverage of climate change issues by media. See table below.

Table 18. Reasons for your community's non awareness of climate change issues

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Lack of access to information on climate change issues	22	22.0	22.0	22.0
Lack of sensitization	19	19.0	19.0	41.0
Lack of interest in climate change issues	4	4.0	4.0	45.0
They do not watch television	4	4.0	4.0	49.0
Low literacy levels	4	4.0	4.0	53.0
Poor coverage of climate change issues by media	1	1.0	1.0	54.0
Not applicable	46	46.0	46.0	100.0
Total	100	100.0	100.0	

5.2.5 Audience profile

In the audience survey, a total of 100 respondents were sampled to provide insight from the consumers of ZNBC TV1 content. Of the 100, the majority were males at 61 and 39 females and of this distribution, 59 of them were single, 36 were married, three were widowed and two were divorced. In terms of age distribution, they ranged from the age cluster of '15 to 24' to those who were '65 and above'. With regards to the highest education level attained, 46 of the respondents had attained some form of certificate, nine had diplomas, six had degrees, two had masters and an equally large number, and 37 had not attained any level of education. Only 31 of the respondents said they were not employed, the rest were employed.

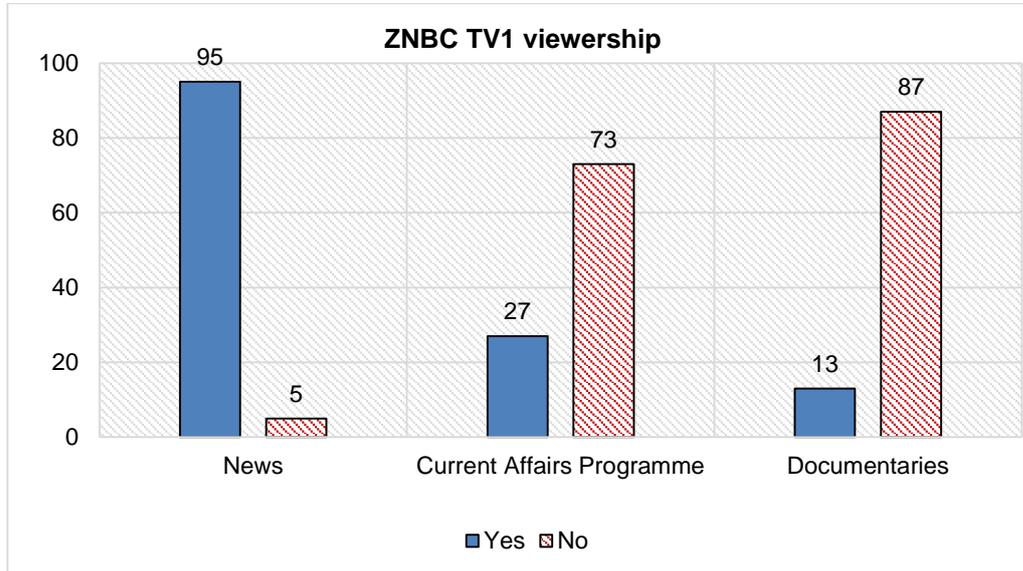
The respondents also indicated their frequency of watching ZNBC TV1, 37 of them said they rarely (3 days a week) watched, another 33 said they watched very often (7 days a week), 27 said very rarely (1 day a week), and three watched often (5 days a week). See table below.

Table 19. How often do you watch ZNBC TV1?

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid Very often (7 days a week)	33	33.0	33.0	33.0
Often (5 days a week)	3	3.0	3.0	36.0
Rarely (3 days a week)	37	37.0	37.0	73.0
Very rarely (1 day a week)	27	27.0	27.0	100.0
Total	100	100.0	100.0	

With regards to specific programmes of interest on ZNBC TV1, 95 per cent of the respondents watch news, 27 per cent current affairs programmes and only 13 per cent watched documentaries. See figure below.

Figure 12. Viewership of ZNBC TV1



In terms of the main channel with which the respondents received information on climate change, the majority, and 81 cited the media. Eleven cited the internet, two cited the school syllabus and six cited all of the three channels. See table below.

Table 20. What is your main channel of information on climate change?

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
Valid The media	81	81.0	81.0	81.0
School Syllabus	2	2.0	2.0	83.0
Internet	11	11.0	11.0	94.0
All the above sources	6	6.0	6.0	100.0
Total	100	100.0	100.0	

5.3 Conclusion

The chapter has presented and interpreted the findings of this study. The findings have been presented according to the specific objectives and research questions of the study. The chapter has also looked at the audience profile sampled. The next chapter discusses the findings of the study.

CHAPTER SIX

DISCUSSION OF FINDINGS

6.1 Introduction

The chapter discusses the findings of the study on the coverage of climate change by the broadcast media in Zambia as characterised by the Zambia National Broadcasting Corporation (ZNBC) TV1. The discussion is based on the main themes emanating from the research objectives and research questions of the study. Particularly: the frequency of reporting climate change issues on ZNBC TV1; the dominant themes of climate change reported on ZNBC TV1; challenges those journalists at ZNBC face when covering climate change issues; and the influence of climate change stories on the lives of the audience.

6.2 Discussion of findings

6.2.1 Frequency of reporting climate change issues on ZNBC TV1

The study examined the frequency of reporting climate change issues on ZNBC TV1 and adopted the main news bulletin, documentaries and current affairs programmes as the units of measure. The subsequent paragraphs discuss the findings.

As presented in chapter five, the coverage of climate change by ZNBC TV1 is minimal. For instance, the content analysis revealed that in the main news bulletin, the frequency distribution of stories which ZNBC TV1 reported on, in February 2017, only one story of the total 338 related to climate change.

Furthermore, concerning the distribution of reporting climate change through documentaries and current affairs programmes on ZNBC TV1 is also minimal, only six out of the 47 documentaries scheduled and four out of the 59 current affairs programs scheduled related to climate change.

The observed limited coverage of climate change across all the three units of analysis relate to those exposed by Tagbo (2010), reviewed in the literature, in her study of the media coverage of climate change in Africa using a case study of Nigeria and South Africa, in which she established that the quantity of climate change coverage by the media in the African continent is disproportionate to the level of threat it poses to the continent.

Nonetheless, the study is suggestive that the limited coverage of climate change by ZNBC TV1 is as a result of various factors.

The finding that the coverage of climate changes was not a priority by ZNBC TV1 could explain why the frequency of climate change coverage on ZNBCT TV1 is minimal.

This finding is in line with Katongo (2014), who argued that climate change was not prioritised by the media and that business, political and sports stories were often guaranteed space because of their ability to attract large audiences.

Further, the limited coverage of climate change can be attributed to the lack of training in climate change issues by the journalists as well as the lack of an environmental desk. It was evident that the ZNBC TV1 has segmented desks such as education, health, business and climate change does not feature.

The manner in which ZNBC TV1 prioritises other topics such as business, justifies the choice of the gate keeping theory to explain how issues make it as news. The theory premises that the media engage different approaches in selecting what information to report and what not to, Lewin (1943).

Additionally, the limited coverage of climate change can also be attributed to the fact that journalists are reactive in their coverage. For instance, the experts interviewed observed that ZNBC TV1 concentrated on government's response to climate change related issues such as flooding and draught and as such it can be perceived that this contributes to the limited coverage of climate change as the journalists have not expanded their information source base on climate change, instead rely on those officials familiar to them. Perhaps it is for this reason that the experts interviewed expressed the need for ZNBC TV1 to strategically partner with not only government but different stake holders to increase the frequency of climate change coverage.

The Audience alike revealed that the frequency at which ZNBC TV1 reported the significant decrease of rainfall, significant increase of rainfall and deforestation was more than they reported on other topics related to climate change. Other topics reported were on low agricultural yields, prolonged hot and dry seasons and loss of livestock.

6.2.2 Dominant themes of Climate Change reported on ZNBC TV1

As stated in the preceding chapter, the study sought to establish the dominant themes of climate change covered on ZNBC TV1. Accordingly, the study noted the following six dominant themes: 1) prolonged hot and dry season, 2) significant decrease in rainfall, 3) significant increase in rainfall, 4) low agriculture yields 5) loss of livestock and 6) deforestation. Furthermore, the study established that content under these themes was mainly aligned to agriculture. These findings are similar to those in a study by Atieno and Njoroge (2014) in a study on how climate change impacts representation in Kenya's news media. The study noted that when climate change was discussed, developing countries placed a lot of emphasis on how it impacts agriculture productivity. Further, this inclination to agriculture can be explained by the fact that ZNBC TV1 has a standing agriculture related programme '*Lima Time*' that airs on the channel. This entails that content was packaged for agricultural purposes.

With regards to the journalist's perspective, out of the 15 Journalists used in each category of the study, 10 representing 67 per cent agreed that low agriculture yields, loss of livestock, deforestation and low water levels was prioritised by ZNBC TV1, while 11, representing 73 per cent agreed to prolonged hot and dry seasons and 9 representing 60 per cent, to significant decrease in rainfall. On the other hand, the audience perspective showed that significant decrease in rainfall was more of a priority in the ZNBC TV1 content on climate change. This finding does tally with those from content analysis of the study, that ZNBC TV1 places high priority on different climate change issues in its coverage.

Further, the experts observed that journalists showed that ZNBC TV1 concentrated on government's response to climate change as well as on adaptation measures, challenges in the adaptation programmes, and agriculture climate change related issues.

This finding corresponds to that of McCright and Dunlap (2011) in their study on the politicisation of climate change and polarisation in the American public's views of global warming, that climate change is politicised in most countries today, and to the study by Panos (2008) on media coverage, community perspective and policy response on climate change in Africa, that climate change stories in the local media were mostly tied to government leaders.

It was evident from the study that other themes not related to climate change in Zambia such as warmer oceans, rising sea levels and shrinking snow and ice cover were left out from local productions. This could be because one of the main variables affecting story choice in the media is proximity, hence their exclusion.

6.2.3 Challenges Faced by ZNBC TV1 Journalists when covering climate change issues

It is clear from the research findings that journalists at ZNBC faced a number of challenges in covering climate change. The research revealed three predominant challenges, the first being the limited sources to interview while limitations in financial resources and climate change related materials ranked second and third among the challenges. Additional challenges cited were a perceived lack of interest by the audience and the fact that climate change was not priority for ZNBC TV1. The least cited were lack of specialised training in climate change reporting, the technicality of the subject and lack of a climate change desk.

While ZNBC TV1 journalists contend that there is a limitation in terms of climate change sources, this does seem to neither be the status quo nor the problem. Instead, the problem is the limited engagement of the available climate change sources. This was amplified by experts in the interviews when they noted that ZNBC TV needed to engage more experts such as those from civil society and private sector as their sources in the coverage of climate change as opposed to the current situation where most journalists' source information on climate change issues mostly from government officials.

The failure to engage more sources on climate change issues entails a lack of variety with regards to information sources from which the journalists can consult to make very informative reports and stories. This in turn implies that the information that would be disseminated would not be sufficient to have the desired influence on the lives of the general public. Like Katongo (2014) argues, environmental stories that are covered were usually politically inclined and often lacked in-depth articulation of critical issues at hand.

On the other hand, the challenge of financial limitations could perhaps be linked to why most journalists at ZNBC lack specialised training in climate change and as such, posing a challenge

in their coverage of climate change. The study found that climate change training was inadequate for the journalists. Amongst the very few that reported to have attended such trainings, the majority attended only to cover the event. Therefore, very few of the ZNBC TV1 Journalists feel sensitized and confident enough with regards to climate change issues. With this in mind, one would question the comprehensiveness of reports given by such journalists. It is highly unlikely that someone with little or no information about an issue would notice its importance and give it the priority it deserves or even convey the right message. Further, the research finding of lack of specialised training in climate change reporting as a challenge for journalists at ZNBC was similar to a study by Tagbo (2010), in which it was found that that African media owners and managers cared little about developing the capacity of their own reporters to cover the subject.

The study further found that journalists at ZNBC TV1 considered climate change a technical subject as such poses a challenge to them in terms of covering the subject. This finding is similar to that by Atieno and Njoroge (2014), who in their study argued that two problematic issues stand out in media reporting of climate change; the reluctance to publish climate science reports and the reconstruction of scientific claims in media. This implies that the general public was rarely enlightened on climate change issues.

Despite the majority of interviewed journalists having covered a climate change story, most of them indicated that journalistic instinct is what mainly informs coverage on climate change. This results in inconsistency with regards to the content being aired owing to the fact that climate change coverage by journalists at ZNBC TV1 is rather instinctive than systematic. On the other hand, the audience tends to lose interest in climate change issues and its influence on the general public is compromised. This can be inferred from McCombs and Shaw's Agenda setting theory as adopted in the study, which states that covering a news story can make that event or issue feel more important to an audience and by controlling what is covered, they are able to influence the general public (McCombs and Shaw, 2003). The perceived lack of interest by the audience is also similar to the findings by Sampei and Usui (2008), on Mass Media Coverage, its influence on public awareness of climate change issues and implications for Japans campaign to reduce greenhouse gas emissions, discussed in chapter two, that the level of public concern about climate change and environmental issues tend to be affected by the amount of media attention they received. In addition, the observation by the experts that journalists at ZNBC TV concentrated on government's response to climate change could also

contribute to the perceived lack of interest by the audience. In order for ZNBC TV1 to be able to cultivate the interest of the audience in climate change stories, there is need for it cover climate change more from a social perspective and include the political aspect for solutions. The finding that that climate change was not a priority for journalists at ZNBC TV1 is similar to that by Katongo (2014) reviewed in Chapter two, in which he argued that climate change was not prioritised by the media and that business, political and sports stories were often guaranteed space because of their ability to attract large audiences.

Journalists at ZNBC TV are well placed to be able to cover climate change issues comprehensively as part of their day to day work however perhaps the role of the gatekeepers could explain why climate change issues still does not receive much coverage.

Further, the evidence of segmented desks on ZNBC TV1 such as education and health shows that the public broadcaster does actively engage in agenda setting through the coverage of some issues while at the same time overlooking others issues such as climate change thereby influencing what the audience view as important. The deliberate setting of an agenda on climate change by ZNBC would ensure the increased coverage of the subject

6.2.4 Influence of climate change stories on the lives of the audience

Under this objective, the study found that generally, the reportage of climate change issues on ZNBC TV1 did not help societies to either adapt and/or mitigate climate change, on a large scale. This could be attributed to various reasons as reported in Chapter Five earlier including inaccessibility to climate change information resources to both the journalists and the intended audience (the general public).

The inaccessibility to climate change information results in the audience being less sensitised and consequently lack interest in the subject. From the audience survey, it is clear that 53 per cent of the respondents were not sure of seeing any evidence of behaviour change in the community, 31 per cent clearly indicated not seeing such evidence while only 16 per cent of the respondents affirmed seeing evidence of behaviour change in the community due to information provided by ZNBC TV1 on climate change.

Alike, the in depth interviews revealed that, climate change coverage has not influenced the general public because the issue is rather behavioural and it would take a while for people's behaviours and perceptions to change.

Further, the in depth interviews revealed that there are very few climate change programmes on the channel, citing *'Lima Time'* as a programme that made an effort to educate the farming community on how to adapt to climate change by encouraging crop diversification, planting drought resistant crops and conservation farming among others.

Therefore, the reasons compounded above go to explain the marginal number of the general public influenced by the climate change coverage.

6.3 Conclusion

This chapter has discussed the findings of the study on the coverage of climate change by the broadcast media in Zambia: A case of the Zambia National Broadcasting Corporation (ZNBC) TV1. The findings were discussed according to the themes which emanated from the research objectives and questions of the study. The next chapter concludes the study and makes recommendations based on the findings.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This section concludes the study, makes recommendations informed mostly by the findings of the study and proposes potential research areas related to this study.

7.2 Conclusions of the study

The research aimed to analyse the coverage of climate change by the broadcast media in Zambia as characterised by the Zambia National Broadcasting Corporation (ZNBC) TV1.

The objectives of the study have been met as shown below:

The first objective was to establish the frequency of reporting climate change issues on ZNBC TV1. Accordingly, it has been established that the coverage of climate change on ZNBC TV1 is limited.

During the month of February 2017, only one news story relating to climate change was aired. Furthermore, only six documentaries relating to climate change were aired, of which only four had climate change as a major concern or theme. With current affairs, four programmes with climate change information were aired, of which only one current affairs programme focussed on climate change while the remaining three did not entirely focus on climate change. As such, it can be concluded that the frequency in which ZNBC TV 1 reports on climate change issues is minimal.

The second objective was to establish the dominant themes of climate change reported on ZNBC TV1. The research established that there were limited climate change themes in the content covered under the news stories, documentaries and current affairs programmes. Inclusion of climate change content in some cases was only done as a subset of other issues reported on the channel. It was evident from the study that other themes not related to climate change in Zambia such as warmer oceans, rising sea levels and shrinking snow and ice cover were left out from local productions. This could be because one of the main variables affecting story choice in the media is proximity, hence their exclusion.

With regards to the journalist's perspective, out the 15 journalist surveyed, 10 representing 67 per cent, agreed that low agriculture yields, loss of livestock, deforestation and low water levels were prioritised by ZNBC TV1, while 11 representing 73 per cent noted prolonged hot and dry seasons while nine representing 60 per cent noted significant decrease in rainfall. On the other hand, the audience survey showed that significant decrease in rainfall was more of a priority in the ZNBC TV1 content on climate change. Lastly, the expert survey unveiled that climate change content and themes on ZNBC TV1 concentrated on government's response to climate change, as well adaptation measures, challenges in the adaptation programmes, and agriculture climate change related issues.

The third objective of the research was to identify the challenges that journalists faced at ZNBC when covering climate change issues. Accordingly, the study established that the coverage of climate change was characterised by several challenges, key among them: limited engagement of the available climate change sources, limitations in financial resources and climate change related materials. Additional challenges cited were a perceived lack of interest by the audience, climate change not being a priority for journalists, lack of specialised training in climate change reporting, the technicality of the subject and lack of a climate change desk.

Further, the study established that the coverage of climate change was largely motivated by journalistic instincts. This arguably results in a lack of consistency with regards to the content being aired owing to the fact that climate change coverage by journalists at ZNBC TV1 is rather instinctive than systematic. More so, the study found that lack of variety with regards to information sources on climate change issues is a problem for the journalists at ZNBC. The study also found that climate change training was inadequate for the journalists, and hence attributed to their limited knowledge on climate change. Amongst the very few that reported to have attended such trainings, the majority were there to cover the event.

Lastly, the fourth objective was to find out the influence of climate change stories on the lives of the audience. The study established that the climate change stories covered by the national broadcaster ZNBC TV1, did not help societies to either adapt and/or mitigate climate change, on a large scale. It only helped the audience to a less extent. The research showed that the majority of people were not sure of seeing any evidence of behaviour change in the community.

Others clearly indicated not seeing such evidence while only a minimal number affirmed seeing evidence of behaviour change in the community due to information provided by ZNBC TV1 on climate change. Through the expert's interview, the research also established that climate change coverage has not had an influence on the general public because the issue is rather behavioural and it would take a while for people's behaviours and perceptions to change.

7.3 Recommendations

Based on the findings from the research, more is expected from ZNBC TV1 for the simple reason that it is a national broadcaster and is mandated to provide information of national importance and climate change is one such matter. The research recommends the following:

- i. ZNBC TV1 and the media in general should expand and diversify their information source base in order to cover the subject comprehensively.
- ii. ZNBC TV1 and the media in general should partner with climate change departments and organisation in order to cover more of other issues related to climate change and to have resources and knowledge on the subject.
- iii. ZNBC TV1 and the media in general should cover climate change more from a social perspective and include the political aspect for solutions in order to make it interesting and educative for the audience.
- iv. ZNBC TV1 and the media in general should set up deliberate learning programmes or training workshops with the help of climate change organisations in order for them to better understand climate change and to be motivated and interested in prioritising its coverage.
- v. Colleges and universities should enhance the training on coverage of climate change, seeing it is a topical subject. This recommendation follows the finding that journalists at ZNBC TV considered their training in climate change reporting inadequate.

7.4 Further Research

As discussed in chapter one of this study, not much has been done in relation to studies on the media and in particular, the broadcast media and climate change. The scope and nature of the findings of this research might not be exhaustive as the subject is wide; therefore there is need for further research that will add to the knowledge shared in this study.

REFERENCES

- Atieno Lucy and Njoroge Joseph M. (2014). *Climate Change Impacts Representation in Kenya's News Media* [Online]. Available from <http://www.ejbss.com/Data/Sites/1/vol3no8november2014/ejbss-1469-14-climatechangeimpactsrepresentation.pdf>. [Accessed 14th January 2017].
- Babbie, Earl R. (2010). *The Practice of Social Research*. 12th ed. Wadsworth. Belmont, CA.
- Berelson Bernard, (1952). *Content Analysis in Communication Research*. Free Press.
- Besada Hany and Sewankabo Nelson K, (Date Unknown). *Climate Change in Africa*. [Online] Available from: https://www.unicef.org/esaro/Climate_Change_in_Africa.pdf. [Accessed on 26th November 2015].
- Buzzle articles, (2015). [Online]. Available from <http://www.buzzle.com/articles/different-types-of-media-coverage.html>. [Accessed 21st December 2015].
- Central Statistical Office, (2012). *2010 Census of Population and Housing National Analytical Report*. Lusaka. [Online] Available from: <http://www.zamstats.gov.zm/report/Census/2010/National/2010%20Census%20of%20Population%20National%20Analytical%20Report.pdf>. [Accessed on 18th December 2015].
- Chima, Ekuma, (2012). *Gatekeeping Theory of Mass Communication* [Online]. Available from <http://wwwchinet.blogspot.com/2012/10/gatekeeping-theory-of-mass-communication.html> [Accessed [Accessed 21st December 2015].
- Davies Gavin, (2010). *Mass Communication: Theory: from Theory to Practical Application*. [Online]. Available from: <http://masscommtheory.com/theory-overviews/framing-theory/>. [Accessed on 16th March 2016].
- Eric Kincaid, (2013). *Agenda Setting Critique*. World press. [Online]. Available from <https://erickincaid.wordpress.com/2013/10/23/agenda-setting-critique/> [Accessed 21st December 2015].

- Freedom Forum Report (2001.) [Online]. Available from:
https://freedomhouse.org/sites/default/files/inline_images/2001.pdf. [Accessed on 18th December 2015].
- Garcia, A,A, (2012). *Mass Media*. [Online]. Available from
http://ffmgu.ru/images/c/c6/MASS_MEDIA.pdf. [Accessed on 23rd October, 2016].
- Global Media, (2011). [Online]. Available from <http://www.caluniv.ac.in/global-mdia-journal/Winter%20Issue%20December%20%202011%20Articles/AR-7%20Yadav.pdf> [Accessed on 26th November 2015]
- Government of the Republic of Zambia, (2016). *National Policy on Climate Change*. Lusaka: Ministry of National Development Planning and Ministry of Lands, Environmental Protection and Natural Resources.
- Intergovernmental Panel on Climate Change (IPCC), (2007). *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva. [Online]. Available from <http://www.ipcc.ch> [Accessed on 26th November 2015]
- Kapeya Mwansa, (2011). *The History of Radio and Television Broadcasting in Zambia and the Producers Manual*.
- Katongo Desmond, (2014). *Zambia's lack of environmental reporting: lessons from a journalism training workshop*. [Online]. Available from:
<http://blog.cifor.org/27297/overcoming-zambias-lack-of-environment-reporting-lessons-from-journalist-training-workshop?fnl=en>. [Accessed 14th January 2017].
- Kothari CR, (2004). *Research Methodology, Methods and Techniques*. New age international publishers.
- McCann, Marie, (2010). *A Framing Study of Media Coverage on Climate Change from 1989 to 2009 Master's Theses. Paper 3817*. [Online] Available from:
http://scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=4813&context=etd_theses. [Accessed on 18th December 2015]
- McCombs, M. E., Shaw, D. L., & Weaver, D. H, (1997). *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory*. Mahwah, NJ: Erlbaum.

- McCright Aaron and Dunlap Riley (2011). *The politicization of climate change and polarisation in the American public's views of global warming 2001 – 2010* [Online]. Available from <http://news.msu.edu/media/documents/2011/04/593fe28b-fbc7-4a86-850a-2fe029dbeb41.pdf>. [Accessed 14th January 2017].
- McQuail Denis, (2000). *McQuail's Mass Communication Theory*. 4th edition. Sage Publications. London.
- Moser Susanne C and Dilling Lisa, (2011). *Communicating Climate Change: Closing the Science- Action Gap*. [Online]. Available from: http://www.climateaccess.org/sites/default/files/Moser_Communicating%20Climate%20Change_0.pdf [Accessed on 26th November 2015]
- National Institute for Environmental Studies, Onogawa, Japan. [Online] Available from: http://128.138.136.233/students/envs_4800/sampey_2009.pdf . [Accessed on 18th December 2015]
- New York.
- Panos Institute Southern Africa, (2008). *Media coverage, community perspective and policy response on climate change in Africa*. [Online] Available from: https://archive.org/stream/PsafClimateChangePolicyBrief/PanosClimateChangeBook_djvu.txt. [Accessed on 18th December 2015].
- Prasad Devi B, (2008). *Content Analysis: A Method in Social Science Research in Research Methods for Social Work*. Rawat, New Delhi. [Online]. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.627.2918&rep=rep1&type=pdf>. [Accessed on 27th October 2017].
- SADC Climate Change Programme, (2011). [Online]. Available from: http://www.sadc.int/files/9613/5293/3510/COMESA-EAC-SADC_Climate_Change_Programme_2011.pdf [Accessed on 26th November 2015]
- Sampei Yuki and Usui Aonga Midori, (2008). *Mass-media coverage, its influence on public awareness of climate-change issues, and implications for Japan's national campaign to reduce greenhouse gas emissions*. [Accessed on 18th December 2015].
- Shannon Mike, (2011). *Climate Change Media Partnership. Policy Brief, Why the media matters in a warming world: A guide for policy makers in the global south*. [Online]

Available from: <http://panos.org.uk/wp-content/files/2011/06/Why-media-matters.pdf>. [Accessed on 18th December 2015].

Shoemaker Pamela J and Vos Tim P, (2009). *Gate Keeping Theory*. Routledge

Soroka Stuart N, (2012). *The Gate keeping Function: Distributions of Information in Media and the Real World*. McGill University. [Online]. Available from <http://www.snsoroka.com/files/GatekeepingJOP.pdf> [Accessed 21st December 2015].

Southern Africa Development Community (SADC), (2011). *Climate Change Programme*. [Online]. Available from: http://www.sadc.int/files/2213/5293/3544/SADC_Climate_Change_Adaptation_for_the_Water_Sector_booklet.pdf. [Accessed 16th March 2016].

Tagbo Evelyn, (2010). *Media coverage of climate change in Africa: A case study of Nigeria and South Africa*. [Online] Available from: <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/Media%20Coverage%20of%20Climate%20Change%20in%20Africa%20A%20Case%20Study%20of%20Nigeria%20and%20South%20Africa.pdf>. [Accessed on 18th December 2015].

The Business Dictionary, (2007). [Online]. Available from <http://www.businessdictionary.com/definition/media.html#> [Accessed 21st December 2015].

The Cambridge Online Dictionary, (c2016). [Online]. Available from. <http://dictionary.cambridge.org/dictionary/english/promote>. [Accessed 21st December 2015].

The Free Dictionary, (2003). [Online]. Available from. <http://www.thefreedictionary.com/awareness>. [Accessed 21st December 2015].

The Independent Broadcasting Authority Act no. 7 of 2002

The Media and Political Change, A freedom Forum Report on the Media in Zambia, (2011).

United Nations (2014). *Environmental Development*. [Online]. Available from: <http://www.un.org/press/en/2014/envdev1457.doc.htm> [Accessed on 26th November 2015]

United Nations Framework Convention on Climate Change, (1992). [Online]. Available from https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf. [Accessed on 23rd October, 2016]

White, David Manning, (1950). "*The "gate keeper": A case study in the selection of news.*" *Journalism Quarterly*.

World Health Organization, (2014). *Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s*. [Online]. Available from <http://www.who.int/mediacentre/factsheets/fs266/en/> [Accessed on 26th November 2015]

Yadav Prabhanjan and Rani Rapaka Jhansi, (2011). *Role of Communication in Climate Change and Sustainable Development*. Article Global Media Journal – Indian Edition/ISSN 2249-5835 Winter Issue / December 2011 Vol. 2/

Zambia Environmental Management Agency [Online]. Available from [#](http://www.zema.org.zm/index.php/about-zema) [Accessed on 5th February, 2017]

Zambia Meteorological Department [Online]. Available from http://www.zmd.gov.zm/index.php?option=com_content&view=article&id=46&Itemid=53. [Accessed on 5th February, 2017]

Zambia National Climate Change Secretariat [Online]. Available from <http://www.znccs.org.zm/about-us.php>. [Accessed on 5th February, 2017]

APPENDICES

Questionnaire serial No:

Appendix 'A': Questionnaire for Journalists

Date of interview:...../...../.....

Dear Respondent,

I am a postgraduate student from the University of Zambia pursuing a Masters in Mass Communication.

I am carrying a research on the coverage of climate change by the broadcast media in Zambia: A case of the Zambia National Broadcasting Corporation (ZNBC TV1), as a requirement for my studies.

You have been randomly selected to participate in this research as a respondent. The information you will provide will be treated with utmost confidentiality and will be used for academic purposes only.

You are not required to provide your name on this questionnaire. Where options are provided, please answer accordingly by ticking in the brackets and where options are not provided, please give your explanation in the spaces provided.

Thanking you in anticipation.

Yours Faithfully,

Katendi N Wandu

QUESTIONNAIRE FOR JOURNALISTS

SECTION A: BACKGROUND

1. Sex

- | | |
|-----------|-----|
| 1. Male | [] |
| 2. Female | [] |

2. Age (as per last birthday)

3. Highest educational level attained

- | | |
|----------------|-----|
| 1. Certificate | [] |
| 2. Diploma | [] |
| 3. Degree | [] |
| 4. Masters | [] |
| 5. PHD | [] |

4. Major Field of study

5. Marital status

- | | |
|--------------|-----|
| 1. Married | [] |
| 2. Single | [] |
| 3. Divorced | [] |
| 4. Widowed | [] |
| 5. Separated | [] |

6. Residential Area

7. In which department are you

8. How long have you worked with your media house?

- 1. Less than a year []
- 2. 1 – 3 years []
- 3. 4 – 6 years []
- 4. Above 7 years []

9. What is your position at work?

- 1. Reporter []
- 2. Senior Reporter []
- 3. Sub Editor []
- 4. Editor []
- 5. Producer []
- 6. Other, Specify.....

SECTION B: CLIMATE CHANGE REPORTING PATTERNS, SOURCES AND CONTENT

10. How important do you regard climate change as an issue worth reporting on?

- 1. Very Important []
- 2. Important []
- 3. Not important []
- 4. Slightly Important []

11. Have you ever done a story on climate change? (If yes, skip to question 13)

- 1. Yes []
- 2. No []

12. Why?

.....

13. What informs the coverage of climate change by ZNBC TV1?

- 1. ZNBC Policy on Climate Change Coverage []
- 2. Journalistic Instinct []
- 3. Other(s), specify.....

14. What is your main source for information on climate change? (Tick only one)

- 1. Government officials []
- 2. Local reports []
- 3. Local press releases []
- 4. Local event []
- 5. NGO reports []
- 6. International reports []
- 7. International press releases []
- 8. International events []
- 9. Other(s), specify.....

15. Who can you say is your target for the information you collect?

- 1. Government officials []
- 2. Policy makers []
- 3. General public []
- 4. Other(s), specify.....

16. What challenges do you face when covering climate change stories?

- 1.
- 2.
- 3.
- 4.
- 5.

17. In your opinion, are climate change issues being adequately reported by your organisation? (if yes skip to question 19)

- 1. Yes []
- 2. No []

18. Why?

.....
.....

19. What climate change stories are prioritised in your organisation? (Tick all that apply)

- 1. Prolonged hot and dry seasons []
- 2. Significant decrease in rainfall []
- 3. Low agriculture yields []

- 4. Loss of livestock
- 5. Deforestation
- 6. Low water levels in lakes

Other, specify.....

20. Do you engage ordinary people in the coverage of climate change? (if no skip to question 22)

- 1. Yes
- 2. No

21. If yes, how do you engage ordinary people in the coverage of climate change?

.....

22. How many selected environmental journalists does ZNBC TV1 have?

.....

SECTION C: CLIMATE CHANGE AWARENESS AND EDUCATION

23. What is your understanding of climate change reporting?

.....

.....

24. What do you consider to be the country's major climate change issues? (Tick only one)

- 1. Prolonged hot and dry seasons
- 2. Significant decrease in rainfall
- 3. Low agriculture yields
- 4. Loss of livestock
- 5. Deforestation

Other, specify.....

25. What climate change issues does your organisation cover? (Tick all applicable).

- 1. Prolonged hot and dry seasons
- 2. Significant decrease in rainfall

- 3. Low agriculture yields []
- 4. Loss of livestock []
- 5. Deforestation []
- 6. Nil []

Other, specify.....

26. Do you think the training for a journalist in Zambia adequately equips him/her for climate change reporting?

- 1. Yes []
- 2. No []

27. Have you ever attended any workshop/training on climate change

- 1. Yes []
- 2. No []

28. If yes, what was your purpose of attending the workshop/ training

- 1. Acquire knowledge []
- 2. Cover the event []
- 3. Other, specify.....

29. Do you feel yourself adequately sensitized regarding climate change issues?

- 1. Yes []
- 2. No []

THANK YOU FOR YOUR PARTICIPATION

Appendix 'B': In depth interview guide

Topic: Coverage of climate change by the broadcast media in Zambia: A case of the Zambia National Broadcasting Corporation (ZNBC TV1).

BACKGROUND

Interviewer's name:.....

Interviewee's Name:.....

Organisation:.....

Position:.....

Years with institution:.....

Contact details:.....

Date of interview:...../...../.....

QUESTIONS

1. What is your understanding of climate change issues?
2. Is climate change a reality in Zambia? Explain. (Impacts, effects, examples)
3. Does your organization actively seek media attention on climate change issues? (Was the media coverage satisfactory?)
4. How does your organization actively seek media attention on climate change issues?
5. In general, how do you rate the effectiveness of the media in reporting climate change issues?
6. How would you rate the effectiveness of ZNBC TV1 in covering climate change issues?
7. How would you describe the climate change related information you get from ZNBC TV1
8. What issues do you think ZNBC TV1 concentrate on in their dissemination of climate change information?
9. What are the dominant themes reported on climate change on ZNBC TV1?
10. Does the coverage of climate change issues on ZNBC TV1 help societies to adapt and mitigate climate change?
11. Do you think ordinary people are engaged in covering climate change stories? Explain.

12. Do you think media practitioners are prepared well enough to cover climate change stories? Explain.

13. Is there anything else about climate change and the media you think I might be interested to know about?

Appendix 'C': Quantitative Survey Questionnaire

Dear Respondent,

I am a postgraduate student from the University of Zambia pursuing a Masters in Mass Communication.

I am carrying a research on the coverage of climate change by the broadcast media in Zambia: A case of the Zambia National Broadcasting Corporation (ZNBC TV1), as a requirement for my studies.

You have been randomly selected to participate in this research as a respondent. The information you will provide will be treated with utmost confidentiality and will be used for academic purposes only.

You are not required to provide your name on this questionnaire. Where options are provided, please answer accordingly by ticking in the brackets and where options are not provided, please give your explanation in the spaces provided.

Thanking you in anticipation.

Yours Faithfully,

Katendi N Wandu

QUANTITATIVE SURVEY

QID	QUESTION NUMBER	DESCRIPTION
	Residence	
	Address: (Physical location) Tel.
	a) Province	
	b) District	
	Name of interviewer	
	Date of interview	____/____/____/ DD/MM/YYYY
	Name of field editor	
	Date of editing	____/____/____/ DD/MM/YYYY
	Name of data entry clerk	
	Date of completion	____/____/____/ DD/MM/YYYY

QUANTITATIVE SURVEY

SECTION A: BACKGROUND

1. Sex

1. Male []

2. Female []

2. Age (as per last birthday).....

3. Highest educational level attained

1. Certificate []

2. Diploma []

3. Degree []

4. Masters []

5. PHD []

6. Nil []

4. Marital status?

1. Married []

2. Single []

3. Divorced []

4. Widowed []

5. Separated []

5. Residential Area

.....

6. Employment status

1. Employed []

2. Unemployed []

If answer is 2, go to question 8.

7. Type of employment
- 1. Formal sector []
 - 2. Informal sector []

SECTION B: MEDIA KNOWLEDGE, VIEWERSHIP SURVEY AND USAGE

8. How often do you watch ZNBC TV1?
- 1. Very often (7 days a week) []
 - 2. Often (5 days a week) []
 - 3. Rarely (3 days a week) []
 - 4. Very rarely (1day a week) []
 - 5. Never []

9. If your answer to question 10 is 5 (Never), what reason would you give for not watching ZNBC TV1?
- 1. Boring []
 - 2. Lack of access []
 - 3. Others, specify.....

10. What do you watch on ZNBC TV1? (Tick all that apply).
- 1. News []
 - 2. Programmes []
 - 3. Documentaries []
 - 4. Other, specify.....

11. What is your understanding of climate change issues?
-

12. How do you rate the effectiveness of the media in reporting climate change issues?
- 1. Very good []
 - 2. Good []
 - 3. Moderate []
 - 4. Poor []
 - 5. Very poor []

13. How would you describe the climate change related information you watch on ZNBC TV1?

- 1. Adequate []
- 2. Fairly adequate []
- 3. Inadequate []
- 4. Not sure []

14. What issues do you think ZNBC TV 1 concentrates on in the dissemination of information on climate change? *(Tick all applicable)*

- 1. Prolonged hot and dry seasons []
- 2. Significant decrease in rainfall []
- 3. Low agriculture yields []
- 4. Loss of livestock []
- 5. Deforestation []
- 6. Nil []
- 7. Other, specify.....

15. In your own opinion, how would you rate the performance of ZNBC TV 1 in covering the issues below?

Climate Change Issue	1. V/good	2. Good	3. Moderate	4. Poor	5. V/ poor
A. Prolonged hot and dry seasons					
B. Significant decrease in rainfall					
C. Loss of livestock					
D. Deforestation					

16. In your opinion, do you think people in your community are aware about climate change issues?

- 1. Yes []
- 2. No []

17. Do you see any evidence of behaviour change in your community due to information provided by ZNBC TV1 on climate change? (If no skip to question 21)

- 1. Yes []
- 2. No []
- 3. Not sure []

18. If yes, what changes?

.....
.....

19. If No in question 19, what do you think are the reasons for your community's non awareness of climate change issues?

.....
.....

20. What is your main channel for information on climate change? (Tick only one)

- 1. The Media []
- 2. School Syllabus []
- 3. The Church []
- 4. Home []
- 5. Public Gatherings []
- 6. Internet []
- 7. All the above sources []
- 8. Other(s), specify.....

Go through the questionnaire and make sure all the questions have been answered

THANK YOU FOR YOUR PARTICIPATION

Appendix 'D': Content Analysis Coding Sheet

Serial number.....

Coding sheet for ZNBC TV1 content	
Units of analysis: news stories, programmes and documentaries	
NEWS	
Date:	Prolonged hot and dry seasons
Time:	Significant decrease in rainfall
	Significant increase in rainfall
Topic:	Low agriculture yields
	Loss of livestock
	Deforestation
Prominence	Lead sorry
	Non-lead
Headline treatment	
Sources engaged	Policy makers
	Experts
	NGOs
	Ordinary people
	Reports
Sound bites	Yes
	No
Breaking story or follow-up	Breaking story
	Follow-up
Story angle	Problem
	Solution
	Both
Duration	Less than a minute

	One to 2 minutes
	Above 3 minutes
Was Climate Change the focus	Yes
	No
Total number of bulletins	
CURRENT AFFAIRS PROGRAMMES	
Date:	Prolonged hot and dry seasons
	Significant decrease in rainfall
Time:	Significant increase in rainfall
	Low agriculture yields
Topic	Loss of livestock
	Deforestation
Who participated	Policy makers
	Experts
	NGOs
	Ordinary people
How was the programme conducted	On stage (all present)
	Off stage (e.g. phone)
	Mix of above
	Open programme/special transmission
Breaking story or follow-up	Breaking story
	Follow-up
Programme focus	Problem
	Solution
	Both
Time allocated to programme	Less than 15 minute
	15 to 30 minutes

	30 minutes to 1 hour
	Above 1 hour
Was Climate Change the focus of discussion	Yes
	No
Total number of current affairs programmes	
DOCUMENTARIES	
Date:	Prolonged hot and dry seasons
	Increase in temperatures
Time:	Significant decrease in rainfall
	Significant increase in rainfall
Topic	Low agriculture yields
	Loss of livestock
	Deforestation
Sources used	Policy makers
	Experts
	NGOs
	Ordinary people
	Reports
Origin	Local/domestic
	Foreign/international
Engaged research e.g. use of statistics	Yes
	No
Programme focus	Problem
	Solution
	Both
Time allocated to programme	Less than 15 minute
	15 to 30 minutes
	30 minutes to 1 hour
	Above 1 hour

Was Climate Change the focus of discussion	Yes
	No
Total number of documentaries	