

**THE INSTITUTIONAL, STRUCTURAL AND POLICY DIMENSIONS OF CLIMATE  
CHANGE COVERAGE IN ZAMBIA: A CASE OF THE *ZAMBIA DAILY MAIL* AND  
THE *DAILY NATION* NEWSPAPERS**

**By**

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## **DEDICATION**

This dissertation is dedicated to, Namaluwa Evah Mukata. Poppa, loves you to the moon and back.

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I thank GOD for preserving my life so I can see through this project and blessing me with a support system that I can only describe as, ‘heaven on earth’; my family!

Dad, thank you. Mummy, wow, as I type this with tears in my eyes, I am taken back to the many times you asked me, “*Iwe Papa*, when will you finish your Masters *kanshi?*”, well, *Nasiliza manje!*

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To the many mentors and peers encountered along this journey, you have contributed to making me a ‘master’ at this communication thing.

CHEERS!!

## **DECLARATION**

I, **MICHELO PASCAL MUKATA**, do hereby declare that I am the sole author of this dissertation and that it is my own work which has not been submitted to the University of Zambia (UNZA) or any other learning institution for the purpose of being awarded a degree or academic qualification. All the sources referred to therein or cited have been duly acknowledged by means of complete references.

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## **CERTIFICATE OF APPROVAL**

This is to certify that this dissertation by **PASCAL MICHELO MUKATA** has been approved as a partial fulfillment of the requirements for the award of the degree of Master of Communication of the University of Zambia (UNZA).

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>GRZ</b>	-	Government of the Republic of Zambia
<b>ICSU</b>	-	International Council of Scientific Unions
<b>IPCC</b>	-	Intergovernmental Panel on Climate Change
<b>NAS</b>	-	National Academy of Sciences
<b>ND-GAIN</b>	-	Notre Dame Global Adaptation Initiative
<b>NGO</b>	-	Non-Governmental Organisation
<b>NPCC</b>	-	National Policy on Climate Change
<b>PF</b>	-	Patriotic Front
<b>SADC</b>	-	Southern Africa Development Community
<b>UK</b>	-	United Kingdom
<b>UN</b>	-	United Nations
<b>UNEP</b>	-	United Nations Environment Programme
<b>UNFCCC</b>	-	United Nations Framework Convention on Climate Change
<b>UNIP</b>	-	United National Independence Party
<b>USA</b>	-	United States of America
<b>WMO</b>	-	World Meteorological Organisation
<b>ZEMA</b>	-	Zambia Environmental Management Agency
<b>ZCCN</b>	-	Zambia Climate Change Network
<b>ZIS</b>	-	Zambia Information Services
<b>ZSA</b>	-	Zambia Statistics Agency
<b>ZANA</b>	-	Zambia News Agency
<b>ZANIS</b>	-	Zambia News and Information Services
<b>ZNS</b>	-	Zambia National Service

## ABSTRACT

Climate change coverage by both the print and electronic media in Zambia is very sparse compared to topics such as sports, politics or entertainment, yet it impacts significantly on our daily lives. Thus, having observed the foregoing, the study sought to investigate the structural, institutional and policy concerns which affect both the *Zambia Daily Mail* and the *Daily Nation* newspapers coverage of climate change. Key objectives of the study were: to determine the institutional, structural and other factors that influence the *Zambia Daily Mail* and the *Daily Nation*'s decisions to cover climate change stories, the role of editorial policy in coverage of climate change by the *Zambia Daily Mail* and the *Daily Nation*, and the levels of coverage of climate change by both the *Zambia Daily Mail* and the *Daily Nation* newspapers. Although there were similar available scholarly works on the subject, their context was not focused on climate change coverage by the press in Zambia, but was rather more widely focused and general in nature. The study applied mixed methods utilising both Qualitative and Quantitative research designs. In particular, the study used Content Analysis and Explanatory Case Study. Significant findings of the study showed that among the factors affecting climate change coverage in Zambia is the lack of specific editorial policies for coverage of climate change by the media. This is compounded by lack of specialised training for journalists and reporters on climate change. It was further observed that the *Zambia Daily Mail* had more climate change coverage compared to the *Daily Nation*. This was attributed to the deliberate effort by the Zambia Climate Change Network (ZCCN) which has been supporting a reporter within the *Zambia Daily Mail* to cover climate change, while the *Daily Nation* has no such arrangements. Additionally, the *Zambia Daily Mail*, being state owned, has a bigger budget as compared to that of the *Daily Nation*, thus, had more capacity to cover climate change.

# CHAPTER ONE

## INTRODUCTION AND BACKGROUND

### 1.0 Introduction

This dissertation explored existing institutional, structural, role of policy and other factors that influence climate change coverage by the print media in Zambia using the case of the *Zambia Daily Mail* and the *Daily Nation*. The study further investigated the levels of climate change coverage between the two newspapers (*Zambia Daily Mail* and the *Daily Nation*). This dissertation reflects upon the Zambian media's role in the dissemination of information pertaining to climate change.

### 1.1 Background

The United Nations Framework Convention on Climate Change (UNFCCC, 1992) defines climate change as a measurable transformation in climate variables such as temperature or precipitation over a given period of time. The changes in climate are attributed to direct or indirect human activities that transform the global atmosphere composition. The UNFCCC gives the overall framework which functions as a guiding mechanism for inter-governmental interventions that respond to challenges associated with climate change. Effectively, these mechanisms are part of the remedial response to the adverse impacts of climate change. The mechanisms provide a basis for finding solutions that can potentially assist state parties to adapt and mitigate the severe negative impact of climate change (UNFCCC, 1992).

Climate change is a global challenge that has negatively impacted countries globally including Zambia in distinctly unpredictable ways. For instance, Zambia recorded reduced rainfall in the past five years experiencing dry spells and very hot temperatures than usual. These changes are attributable to human induced hazards. Therefore, efforts and interventions are being directed towards actions that are projected at minimising the potential future negative impacts of climate change (NPCC, 2016).

Based on the foregoing, the prominence and role of the media in supporting interventions on climate change has become very critical and pronounced in the last two decades. Governments and non-state actors such as the United Nations (UN) agencies have increasingly realised the



extent to which the media can be used to promote climate change through information dissemination, awareness raising and educating people. Contemporary studies and discourses on climate change indicate that globally there was limited attention given to the coverage of environment issues by the media, in particular climate change concerns, until around the mid-1950s (Starr, 2004; Patchen, 2006).

However, the status gradually started to change as the impact of climate change became adverse and there was more evidence of climate change being an important component within the context of achieving sustainable development. Early studies on climate change coverage show that it was around the first half of the 1900s that modern media began to have proclivity to climate change issues. This was amidst the innumerable constraints and limitations the media encountered as a result of competing and contradictory factors which included high handed state-control over the public sphere, colonial legacies, low literacy levels, as well as technological inadequacies and capacity (Starr, 2004). Boykoff and Roberts (2007) assert that by the mid-1900s, media communications tremendously stretched their reach and influence particularly in North America and Europe. This also meant widening the latitude of disciplines covered that ranged from social, political, financial, business, economic and cultural perspectives.

The first major coverage of climate science was recorded by the *New York Times* in 1930 when the newspaper reported about how the earth was inevitably changing its aspect and its climate and how that transformation was slowly taking place and what the result would be. In subsequent years, the media reported more on topics of atmospheric temperatures and carbon dioxide and how human activities affected the environment (Dunwoody & Griffin, 1993).

According to Boykoff and Roberts (2007), by 1957 – the International Geo-Physical Year – science reporter, Robert C. Cowen, wrote an article that appeared in the *Christian Science Monitor* called, “Are Men Changing the Earth’s Weather?” However, although there was some coverage regarding climate change and the environment in general, in the subsequent three (3) decades, media coverage of climate change was still very sparse. These reported instances associated with climate sciences were very rare.

Boykoff and Rajan (2007), advance the view that there was scant newspaper, radio and television news coverage on topics such as United States National Academy of Sciences (NAS) reports in the 1960s and 1970s that made repeated reference to the emergent climate science. This scenario was evidently worse in developing nations, particularly in Africa, where formal mass media were only introduced at the advent of colonialism in the late 1880s and early 1900s.

Climate change coverage, however, started to improve globally with the introduction of different international policies on climate and the environment in general, especially after the late 1980s. This was primarily through the activities of the International Council of Scientific Unions (ICSU), the United Nations Environment Programme (UNEP) and the World Meteorological Organisation (WMO). More conferences and discussions were held by different stakeholders including governments and UN agencies on the impact of greenhouse gas emissions. This precipitated media coverage of climate change concerns at a global scale. Overtime, media coverage has proved to be a key contributor and opinion maker, thereby, shaping and impacting climate science and policy discourse as well as public understanding, awareness and actions.

Within the context of climate change coverage, prominent issues under discussion have mainly been about, and around two broad terms, which are adaptation and mitigation (Weingart & Engels, 2000). Boykoff and Roberts (2007), Starr (2004), Weingart and Engels (2000), have all contributed various works over the last three (3) decades that examine how the media have covered a range of environmental issues including climate change and how climate change can be mitigated, and what adaptation mechanisms can be fostered. According to these scholars, the interface and intersectionality of mass media, climate science and policy is a particularly fluid, dynamic and significant feature because it forms a nexus that interconnects these variables in the dissemination and sharing of information. It is a nexus that seeks to create a cohesive approach in reporting climate science both as a public discourse and in terms of policy.

In view of the aforementioned, climate change mitigation and adaptation then require a well-designed public discourse and discussion and must be understood both for their benefits to the public and how they can be integrated into policy refers to adapting to life in a changing climate and involves adjusting to actual or expected future climate. The goal is to reduce vulnerability to

the harmful effects of climate change such as sea-level encroachment, more intense extreme weather events or food insecurity. It also encompasses making the most of any potential beneficial opportunities associated with climate change (UNFCCC, 1992). According to UNFCCC (1992), climate change mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour.

For the public to buy into the policy agenda on climate change they must understand that mitigation and adaptation entail an appreciation of the premises of the causes of climate change. Therefore, the media have an important role in disseminating information that can help the public understand these perspectives.

The media, also, have a largely unexplored role in the future of climate adaptation and mitigation. This is so because, despite their limited coverage of climate change, they have been very instrumental in shaping climate science discourses and policy direction globally. The media have also increased the awareness and understanding of climate issues among members of the public. The influences of media on practices, politics, public opinion and understanding of climate change, have to be explored in more detail in order to appropriately situate their approaches in shaping opinion among the public (Luganda, 2005).

Wilson (1995) postulates that there are several studies that have found out that the public learns more about climate science when mass media news is used as a form of information sharing. Although widespread coverage on climate science has scaled up in most parts of the world, in most developing countries it remains an illusion. Luganda (2005) argues that in developing countries, particularly, in the rural areas, radio is a principle medium through which climate change news is communicated. However, very limited content on climate change is broadcast and covered in the print media.

### **1.1.1 Country Profile**

Zambia is a landlocked country situated in the Sub-Saharan Africa between 8 and 18 degrees south latitude and 20 and 25 degrees east longitude (Davis, 2003: 77). Administratively, the

country is divided into ten (10) provinces which are further delimited into several administrative centres or districts. Zambia has an estimated population of 17 to 19 million people (ZSA, 2020).

According to Clark (2011), Zambia has a tropical climate and vegetation with three (3) distinct seasons being, the cool dry winter from May to August, a hot dry season during September and October and a warm wet season from November to April. The northern part of the country has the highest rainfall with an annual average ranging from 1,100mm to over 1,400mm. The southern and eastern parts of the country have the lowest rainfall ranging from 600mm to 1,100mm annually which sometimes result in droughts. The country has several major rivers that serve as main sources of water. Some of them are the Zambezi, Kafue, Luangwa and Luapula rivers. Zambia also has major lakes namely; Tanganyika, Mweru, Bangweulu and the man-made, Lake Kariba (Ibid).

### **1.1.2 The Historical Context of the Print Media in Zambia**

Zambia's print media landscape can be traced back to 1906. It is generally averred and accepted that the first newspaper published in Zambia was the *Livingstone Pioneer* which was owned and published by a W. Tranter. Very little is known about the paper except that it was a weekly bulletin that was partly hectograph and partly print, with a circulation that was mainly restricted to Livingstone town (Kasoma, 1986). Makungu (2004) suggests that, also in 1906, after being highly inspired by Tranter's newspaper enterprise, a politically ambitious chemist named Leopold Frank Moore set up a newspaper called the *Livingstone Mail*. The content of this newspaper was 90 per cent advertisements while only ten per cent was for news, very little of which was about the indigenous Africans.

The 'print-wave' reached the Copperbelt on 18<sup>th</sup> March, 1932, with the roll-out of the *Copperbelt Times*. This publication, started by two miners namely, E.C. Wykerd and E.B. Hovelmeier, is recorded as the first newspaper published on the Copperbelt and the second to be published within the country, as the *Livingstone Pioneer* and the *Livingstone Mail* were both published in Zimbabwe (formerly known as Southern Rhodesia). The *Copperbelt Times* mostly reported local gossip and social news of white miners within the mine camps (Makungu 2004).

Chirwa (1997) claims that between 1906 and 1990, Zambia witnessed the birth of a number of newspapers such as *Mutende*, *African Eagle*, *Central African Post*, *African Times*, *Weekender*, *National Mirror* and a few others. Most publications either struggled for survival and ceased operations, or soldiered on under new names, or as ownership changed hands. Upon gaining independence in 1964, Zambia's print circulation included the *Central African Mail* and subsequently the *Northern News*, *Zambia Times* and *Sunday Zambia News*.

Today, the print media in Zambia have flourished with recorded newspapers and magazines varying in frequency, print quality, circulation and ownership among other distinctions. In as much as the National Archives of Zambia registered over 400 publications as of 2014, however, very few are presently active (Sakala, 2014). Makungu (2004), submits that Zambia has two government-owned daily newspapers namely the *Times of Zambia*, which includes the *Sunday Times*, and the *Zambia Daily Mail*, with its sister publication called the *Sunday Mail*. Apart from these two, the government public relations unit known as the Zambia Information Services (ZIS) used to publish vernacular-based monthly newspapers or bulletins in Cibemba, Citonga, Silozi, Lenje, ChiChewa and Kiikaonde. The newspapers were called by the local language names. The following were their names: *Imbila*, *Ngoma*, *Liseli*, *Lukanga*, *Tsopano* and *Intanda*. These publications continued to be published even after the merger of ZIS and the *Zambia News Agency* (ZANA) to form the Zambia News and Information Services (ZANIS) in 2005.

The main purpose of the aforesaid publications was to disseminate government policies and programmes of a social and developmental nature. However, on account of inadequate funding or other logistics, publication of the vernacular newspapers became erratic and often many months passed without any editions being published and eventually could not continue under the Patriotic Front (PF) government despite some efforts to bring them back (GRZ, 2012).

The country also has privately owned publications that include *The Mast*, the *New Vision*, *Diggers* and the *Daily Nation*, which also are published seven days a week. The main daily newspapers with wide circulations are the *Zambia Daily Mail* with 15,000 to 20,000 copies, the *Times of Zambia* at 7,000 to 15,000 and the *Daily Nation* at about 10,000. *The Mast*, which was first published in November 2016 has a wide circulation of around 7,000 to 10,000 copies (African Media Barometer, 2019; ZDLM, 2015).

### 1.1.3 Origins of the *Zambia Daily Mail*

The *Zambia Daily Mail* is an offshoot of the *African Mail*. The *African Mail* started in 1960 and was later renamed the *Central African Mail* in 1962. The publication was founded on pro-African principles by Mr. Alexander Scott, Mr David Astor and Mr. Richard Hall. In its news columns, the *African Mail* gave wide coverage to both local and international African Nationalists, thereby, playing a key role of stimulating political freedom in Northern Rhodesia and the Federation of Rhodesia and Nyasaland as a whole (Kasoma, 1986). Owing to the newspaper's doubled circulation of up to 24,000 copies within two years of existence, the *African Mail* changed its name to *Central African Mail* and was widely popular within the Federation. Although it published a wide range of political news from Africa as a whole, the *Central African Mail* was inclined to report on Northern Rhodesia with a deliberate editorial policy that seemingly favoured the United National Independence Party (UNIP) (Kasoma, 1986).

In May 1965, under Zambia's first independent government led by Kenneth Kaunda, the *Central African Mail's* ownership handover was announced, and later that year on 6 August 1965, the government-owned *Central African Mail* was released as a government weekly newspaper with a circulation of 20,000 copies. According to Makungu (2004), this was also the last time it was published under that name. It subsequently became the *Zambia Mail* and it was managed by a board of directors appointed by government that promised to reflect public opinion and awareness in Zambia although it was generally unusually critical of the government of the day. In fact, on a number of occasions it embarrassed government in its editorials that contradicted official government thinking and policy. It is noteworthy that between 1965 and 1969, although published by government, the newspaper was not officially recognised as a government mouthpiece. On 15 July 1969, the *Zambia Mail* became a daily newspaper and by 1970 it was officially called the *Zambia Daily Mail* (Kasoma, 1986).

Chirwa (1997) points out that the evolution of the *Zambia Daily Mail* continued through time and in 1992, two sister newspapers were launched namely the *Financial Mail* and the *Sunday Mail*. The *Zambia Daily Mail* is a limited company whose equity is solely subscribed by the Zambian government with a circulation rate estimated to be between 7,000 and 20,000 copies according to the African Media Barometer (2019) and ZDLM (2015). The newspaper has a clear

policy that specifically pronounces among other things coverage of wide ranging issues such as business, entertainment, sports, political, social and cultural issues. However, despite covering a diverse range of subjects, the newspaper does not seem to have a specific focus on issues of climate change or the environment in comparison to the aforementioned topics.

#### **1.1.4 Origins of the *Daily Nation***

The *Daily Nation* is an independent daily publication whose aim is to pursue justice and equity with integrity. The *Daily Nation* asserted itself as an independent and privately owned newspaper after *The Post Newspaper* was liquidated in 2016. The newspaper came into being immediately after the Patriotic Front (PF) assumed power in 2011. The founder and owner of the newspaper is Mr Richard Sakala, former presidential press aide to the late ex-President Frederick Titus Jacob Chiluba. The newspaper takes a conventional approach to news coverage and categorically places health, sports, politics, economics and entertainment at the heart of the core issues it covers (*Daily Nation*, 2019). Despite specifying these aspects in its policy, the newspaper does not specifically mention the category of climate change or the environment. The assumption is that issues of climate change or environment are categorised under other issues. This in itself is a demonstration of the lack of importance the newspaper attaches to climate change coverage.

In general, the newspaper's mission is motivated by a desire to live by journalistic ethics including objectivity, providing accurate real time information and professional reporting to enable the public make informed decisions on topical issues. As such, the publication seeks to be Zambia's leading independent newspaper by providing objective, accurate, unbiased and up to date information on a daily basis and to serve the nation with integrity (*Daily Nation*, 2019).

The newspaper covers various aspects of reporting ranging from politics, economics, social, sports, entertainment, environment, culture and other life stories. With a countrywide circulation of 25,000 copies daily, the newspaper aspires to be the 'people's paper' with an impact on the life of average Zambians (*Daily Nation*, 2019).

As shown above, both the *Zambia Daily Mail* and the *Daily Nation* newspapers do not pronounce, in their editorial policies and mission statements, that they will cover environmental issues which ordinarily would include climate change as they have done for other topics.

However, the *Zambia Daily Mail* perhaps shows predilection towards more coverage of climate change issues as compared to the *Daily Nation*. This is affirmed by Katongo (2014) who argues that state owned newspapers are better predisposed to cover and devote more space to environmental issues than privately owned newspapers. According to Katongo (2014), this is because state owned media are not motivated by profit and their financing model is largely dependent on government funding as opposed to the private media that have to raise resources entirely from commercial ventures. Thus, the choice of content for the private media is according to public demand and what sells. Climate change is not one of the areas that appeal to the Zambian public as much as political issues do.

#### **1.1.5 Climate Change Coverage in Zambia**

Coverage of climate change is relatively a new phenomenon in Zambia which can be traced back to the 1980s. This is more so because it is an area that is relatively unfamiliar. However, with increasing concerns around the impact of human activity induced climate change, more interventions and efforts are being directed towards mitigation and adaptation to climate change. From the foregoing, the media are seen as important conduits through which various awareness and educational programmes can be undertaken and promoted (Panos, 2008).

Like many countries around the world, Zambia's physical and biological systems are adversely affected by climate-induced changes. As of 2015, the Notre Dame Global Adaptation Initiative (ND-GAIN) Index ranked Zambia as the 34<sup>th</sup> most vulnerable and 69<sup>th</sup> least ready to adapt to climate change. Furthermore, it should be highlighted that, Zambia recognises the impact of climate change on its environment, thus, has signed to various international treaties on climate change (NPCC, 2016).

The UNFCCC, as an overall framework on climate change, incorporates a scientific arm called the Intergovernmental Panel on Climate Change (IPCC) comprised of experts from around the world who discuss and offer direction on climate change issues globally. This organ provides



scientific views on the current state of knowledge on climate change and its potential environmental and socio-economic impact. State parties are supported in various ways to promote interventions on climate change including creating awareness through mass media (IPCC, 2007).

Zambia is an active member of the aforementioned institutions and her involvement is largely due to the realisation that climate variabilities have great potential to undermine genuine attempts to reduce poverty and advance economic development. Most of Zambia's poor population consists of rural small-scale farmers who rely on agricultural incomes and any adverse climatic impact shall negatively affect them (NPCC, 2016).

Climate change impacts need to be addressed in the short and long term because they can affect agricultural productivity and economic development. As a result, climate change has been receiving prominence at a policy level as witnessed by various interventions that the Zambian government has embarked upon including adoption of climate change policies as well as the establishment of the ZCCN Secretariat. These pronouncements have led to increased media coverage of climate change issues. According to the National Policy on Climate Change - NPCC (2016), deliberate programmes and interventions intended to promote awareness and education on climate change are being sponsored in mass media and this has also increased coverage.

Climate change has been a notoriously difficult subject for journalists to report on, for editors to sustain interest in, and for audiences to grasp and be conversant with. Particularly, in Zambia, there is a lack of skills and specialised knowledge among reporters and journalists on climate sciences. According to Katongo (2014), most journalists and reporters are not well vested when it comes to understanding topical environmental stories, often relying on press statements because they do not have the initiative to generate ideas. He further notes that most reporters feel stories to do with the environment are difficult and not appealing, thus, are unlikely to get published.

Katongo (2014) asserts that in rare cases where environmental stories are given space either in the electronic or print media, these stories are either politically inclined and often lack in-depth articulation of critical issues at hand. In addition, such stories rarely see the front page of a newspaper or get to be among the top stories in a news bulletin. It is common to see these stories

buried under other stories, thus, making it difficult for readers or viewers to see them. This inhibits the flow of reliable, substantial and credible information to the Zambian public (Wise, 2012).

It is evident that, although the *Zambia Daily Mail* and the *Daily Nation* newspapers do cover climate change issues, this coverage is laced with political connotations as highlighted by Katongo (2014).

## **1.2 Statement of the Problem**

The adverse effects of climate change are a global concern requiring concerted efforts by different stakeholders including citizens, Governments, Non-Governmental Organisations (NGOs), UN agencies and the media. In order to effectively address the negative effects of climate change, each stakeholder has a significant role to play, especially, in mitigation and adaptation of climate change. Not only do the media have a pertinently crucial role in disseminating vital information that has the potential to inform and create public awareness on the impacts of climate change, but they also contribute to publicising the policy interventions as well as mitigation and adaptation interventions.

To effectively address climate change, Nkandu (2008) argues that the press should have a sustained commitment to various elements such as primary frames, depth of coverage, framing of climate change science, sources of information, section placement and verbiage, in pushing the agenda of public environmental awareness, education, and action as compared to what must be done. The potential of the media to cover climate change needs to be harnessed and fully applied.

However, despite their strategic role and potential to report and disseminate information on climate change, there is a general assertion especially among stakeholders that deal with climate change issues that the media in Zambia still sparsely cover climate change concerns. This is echoed by ZCCN (2020) which asserts that, despite Zambia being in a vulnerable position when it comes to the impact of climate change, little coverage is devoted to the impact of climate change. Zambia Environmental Management Agency (ZEMA), equally submits similar concerns that despite having the instruments and institutions to adequately cover climate change,

the subject still remains ill-reported and miscommunicated. ZEMA attributes this to the absence of a deliberate policy from the media to significantly cover the phenomenon (ZEMA, 2019). Consequently, there is an information gap among members of the public on issues pertaining to climate change. They lack both awareness on climate change issues and information on the policy interventions being fostered around climate change.

From the aforesaid, it is established that the main problem is that, there is poor media coverage of climate change issues in Zambia. Despite efforts made by various stakeholders who include local and international organisations to prioritise media coverage of climate change issues in Zambia over the past few years, this coverage has not substantially increased. This problem has negatively affected the flow of information on climate change issues in Zambia to the public because of, among other things, the limited technical knowledge and expertise among journalists on climate change issues and/or the commercial imperatives of the private media. The difficulty arising from this problem is that the impact of climate change may not be taken seriously.

The Zambian community and citizens will continue to be deprived of information pertaining to policies and interventions intended to mitigate and adapt to the effects of climate change due to the lack of, or inadequate dissemination of the climate change information by the media. Accordingly, this study investigated the reporting of climate change issues in the *Zambia Daily Mail* and the *Daily Nation* newspapers by exploring the challenges and determinants of climate change coverage by the two newspapers and the extent to which the two print media covered climate change issues. The study deployed content analysis and comparative analysis as its research methods in seeking to explore the aforementioned factors and compare the extent to which the public and private print media print media covered climate change issues in Zambia.

### **1.3 Purpose of the Study**

The study investigated the challenges and determinants of climate change coverage by the *Zambia Daily Mail* and the *Daily Nation* as well as assessed the extent to which the two print media institutions covered climate change.

## **1.4 Research Objectives**

### **1.4.1 Main Objective**

The main objective of the study was to establish the institutional and structural factors that influence climate change coverage and the role of editorial policy, as well as, levels of coverage of climate change by the public and private print media in Zambia.

### **1.4.2 Specific Objectives**

The specific objectives of the study were as follows:

- (i) To determine the institutional, structural and related factors that influence the coverage of climate change stories by the *Zambia Daily Mail* and the *Daily Nation*.
- (ii) To establish the role that editorial policy plays in the coverage of climate change by the *Zambia Daily Mail* and the *Daily Nation*.
- (iii) To compare the coverage of climate change between the *Zambia Daily Mail* and the *Daily Nation*.

### **1.4.3 Research Questions**

The study formulated four research questions in order to achieve the objectives as follows:

- (i) What are the institutional, structural and related factors that determine the coverage of climate change stories by the *Zambia Daily Mail* and *Daily Nation*?
- (ii) What is the role of editorial policy in determining coverage of climate change by the *Zambia Daily Mail* and the *Daily Nation*?
- (iii) How does the *Zambia Daily Mail* and *Daily Nation* compare in coverage of climate change issues?

## **1.5 Significance of the Study**

The research contributes towards filling an existing research gap in the literature. Particularly, regarding a holistic understanding of the technical challenges associated with the coverage of climate change in Zambia and unmasking the factors that influence the coverage of climate change in the print media. The study also contributes to the academic discourse of media coverage on climate change issues from Zambia's context and provides an opportunity for

increased academic engagement in the discipline. Despite its significance, climate change coverage in the Zambian media has been mainly concerned with whether or not climate change is reported by the news media, and how often.

On that backdrop, this research gave an insight on editorial policy significance, given the global rise in support for a need to create a deeper public awareness on climate change, the research helps to create a foundation for viable strategies for the media to engage with climate change communication. Furthermore, this study will help journalists, not only those working for the *Zambia Daily Mail* and the *Daily Nation*, to become aware of how much they need to do in climate change communication to ensure that the public is aware of the challenges that journalists face in covering matters of climate change mitigation and adaptation. Due to the fact that environmental problems, in particular climate change, call for interaction and collective action, between governments, stakeholders and the public, this study highlights the crucial role that journalists and media have an important role in mediating these interactions by providing critical information, scrutiny and analyses to different stakeholders including the public, NGOs and Public institutions. Therefore, the study provides relevant information for policy conjectures and efforts that can further be exploited by relevant stakeholders.

Lastly, the study adds on to the much-needed literature for overall climate change communication in various stakeholder institutions that advocate for heightened public engagement in climate change communication, climate change mitigation and climate change adaptation.

## **1.6 Limitation of the Study**

The major limitations related to this study were access to secondary data which is very limited especially on media coverage and climate change related to the Zambian situation. The second limitation was the generalisation of data, especially, that the focus was only on two Zambian newspapers, the *Zambia Daily Mail* and the *Daily Nation*. Thus, the findings and the conclusions could not be generalised to, or be valid for, all the media in Africa, or the world.

## **1.7 Conceptual and Theoretical Framework**

The key concepts used in this study are; climate change, weather events, media, content, mitigation, adaptation, media coverage, political actors, environmental journalist and journalism, economics and awareness. The study was underpinned by three (3) Mass Communication theories that reinforce the role of the media in public information dissemination and these are: Gate-Keeping theory and Agenda Setting theory.

### **1.7.1 Conceptual and Operational Definitions**

Conceptual frameworks are used to express the relationships between and amongst the various components of a study, the concepts and how they are linked to the overall study. In this study, the highlighted terms were taken to mean the explanations as follows;

#### **1.7.2 Climate Change**

According to the UNFCCC (2008), climate change is the change in climatic conditions that are directly or indirectly attributed to human activity. Such human activity alters the composition of the global atmosphere which results in natural climate variability observed over comparable time periods.

#### **1.7.3 Extreme Weather Events**

Balasubramanian (2018) defines extreme weather or climate event as the occurrence of a value of a weather or climate variable above (or below) a threshold value near the upper (or lower) ends of the range of observed values of the variable. Extreme weather events include unexpected, unusual, unpredictable, severe or unseasonal weather conditions. This means that the weather is at the extremes of the historical distribution. These types of extreme events are based on a location's recorded weather history.

#### **1.7.4 Media**

Luhmann (2000) describes media as channels of communication that serve many diverse functions such as dissemination of news and information, entertainment, sports with either mass or specialised appeal. They are also defined as the publishers, editors, journalists and others who constitute the communications industry and profession, and who disseminate information, largely through newspapers, magazines, television, radio and the internet (Liverman & Sherman, 1985).

In this study, reference is made to print-media (newspapers) only, and the focus is on the *Zambia Daily Mail* and the *Daily Nation* newspapers.

### **1.7.5 Content**

According to McQuail (2000), media content are messages produced by a few for the many and delivered to large audiences simultaneously through print or electronic media. Therefore, in this study, content refers to news articles, columns, letters to the editor, advertisements and editorials published by the *Zambia Daily Mail* and the *Daily Nation* newspapers.

### **1.7.6 Media Coverage**

According to Buzzle (2015), media coverage is the manner in which a specific kind of information is presented by media either as news or entertainment. Its presentation can impact the degree of information dissemination as well as influence the opinion of the audience while providing the information. Bird (2010) adds that coverage of an issue or information could be done in an inclined manner, be it in support or against a particular issue. This is regarded as biased coverage. Other times, coverage could be un-biased where impartial presentations of facts and figures without holding a particular stance on the issue are made. Coverage could also be interactive in its presentation by also including the audience's views, thus making it interactive. Consequently, for the purposes of this study, media coverage referred to the degree to which climate change issues are observed, reported, and analysed by the *Zambia Daily Mail* and the *Daily Nation* newspapers.

### **1.7.7 Political Actors**

Wolfsfeld (2015) asserts that political actors are “individuals who have obtained at least some measure of political power and/or authority in a particular society who engage in activities that can have a significant influence on decisions, policies, media coverage, and outcomes associated with a given conflict”. In democratic dispensations, political actors mainly encompass all elected leaders, candidates who are running for election, including high-level policy makers with significant impact and influence on the formulation and execution of policies that have a bearing on society. This description includes all those in power who have been elected to those positions such as government ministers, duty bearers and Members of Parliament.

### **1.7.8 Economics**

For this study, Boykoff (2008) provides a definition of economics as, the cost of climate change. This includes, costs to individuals, costs to governments and costs to the future generations. Economics is a social science that delves into detailed breakdowns and analysis of how economies function and grow. It offers a systematised and structured assessment of different variables such as costs, statistical data and value for monetary and fiscal dimensions.

### **1.7.9 Awareness**

In this study's context, awareness is the state or ability to perceive, to feel, or to be conscious of events, objects or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding. It is the first stage in the process of learning about a new product, service, or idea in which the individual has received information about the existence of the innovation but has not yet formed an opinion. It is the state of being fully conscious of pertinent stimuli and really experiencing a task or situation (LaBark & Distrehoft (1998).

### **1.7.10 Mitigation**

According to UNFCCC (1992), climate change mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behaviour. UNFCCC (1992) describes greenhouse gases as heat-trapping gases that can be thought of as a blanket wrapped around the Earth, which keeps it toastier than it would be without them. Greenhouse gases include carbon dioxide, methane and nitrous oxides. Greenhouse gases arise naturally, and are part of the make-up of our atmosphere.

### **1.7.11 Adaptation**

This refers to adapting to life in a changing climate and involves adjusting to actual or expected future climate. The goal is to reduce vulnerability to the harmful effects of climate change such as sea-level encroachment, more intense extreme weather events or food insecurity. It also encompasses making the most of any potential beneficial opportunities associated with climate change (UNFCCC, 1992).



## **1.8 Theoretical Framework**

### **1.8.1 Gate-Keeping Theory**

The Gate-Keeping theory explains how social reality is transmitted and re-constructed by the news media. It is the process through which ideas and information are filtered for publication, that is, the internal decision making process of relaying or withholding information from the media to the masses. It is also the process by which countless messages are reduced to the few offered in the daily newspapers. The Gate-Keeping theory asserts that there are forces which may either constrain or facilitate the passage of news through the gate-keeping process (Shoemaker, 1991).

The process of gate-keeping occurs at all levels of the media structure, from a reporter deciding which sources are chosen to include in a story, to editors deciding ultimately which stories are printed or even covered in a daily newspaper. Gate-keeping occurs on five levels of analysis which are the individual, routine, organisational characteristics, extra media and finally, ideological (Barzilai-Nahon, 2000).

Thus, the basic idea of the Gate-Keeping theory is that there is some selectivity in how, and how many news items are presented in all the newspapers all the time. This means that the Gate-Keeping theory's chief value comes in summarising the various forces that come into play as news people make decisions about what messages will be selected for presentation to their audiences.

The term 'Gate-keeping' was coined by Kurt Lewin, whose social experiments showed that the person who orders or shops for food is influential in changing the food habits of the entire family. The experiments also concluded that not everyone is equally important in making food selection choices (Shoemaker, 1991). These people that made the decisions in food selection are what were referred to as "gate-keepers" and their choices were called "gates".

According to Shumsky and Pinker (2003), 'Gate-keeping' was first applied to journalism and mass communication by one of Lewin's study assistants named David Manning White. In 1950, White carried out a study of a small city daily newspaper during a one-week period in which he examined the copy submitted to the Editor. The Editor of the small city newspaper was asked to provide information on why stories were rejected and others published. In conclusion, White

found the decision making process to be highly subjective as the Editor's decisions were, among other reasons, also based on his (the 'gate-keeper') own experiences, attitudes and expectations as to what constitutes the news.

All mass communication includes gate-keeping of some kind. As a result, gate-keepers exist in all media institutions and they control the flow of information. Moreover, their decision making is based on principles of news values, organisational routines, input structure and common sense.

Gate-keeping is inevitable as much as it is useful. It can be deduced that gate-keeping has three (3) prime goals which are; preventing the entrance of undesired information (according to the gate-keepers) from the outside world, preventing the exit of undesired information to the outside and finally, controlling information just inside the media circles. This entails that gate-keeping can be quite dangerous most times since it can lead to an abuse of gate-keepers' powers by deciding what information to discard and what to publish (Barzilai-Nahon, 2000).

Thus, the application of the Gate-Keeping theory to this study demonstrated how the two newspapers reached the decisions to include, or not include, climate change issues in their reporting and who was responsible for the final decisions. It also provided a theoretical framework on how the two newspapers' gate-keepers prevent access to certain kinds of information pertaining to climate change by the members of the public.

### **1.8.2 Agenda Setting Theory**

The origins of the Agenda Setting theory are traced to the period when Lippmann (1922) expressed concern on the crucial role that mass media play in influencing the creation of certain images on the public's mind. Lippmann (1922) cites an example of people who are supposed to be enemies during a war between their countries that they may not be enemies at all, until they have access to information about the war through the media. Before then, those individuals are able to live harmoniously in a secluded island. Although Lippmann never used the theory, his work provided the ordinate foundation as an organising concept for the Agenda Setting theory.

Consequently, the Agenda Setting theory was promulgated by Maxwell McCombs and Donald Shaw in the 1960s who built on the arguments by Lippmann (1922). They posited that the agenda for public opinion was set by the mass media which appropriately choose particular issues to highlight and cover for public consumption. Despite having been actively working on

the Agenda Setting theory, McCombs and Shaw first publicly introduced the theory in 1968 in their ground-breaking study of the role of the media during presidential campaign in Chapel Hill, North Carolina, USA. They studied the way political campaigns were covered in the media. McCombs and Shaw found out that the main effect of news media is agenda setting; telling people not what to think, but what to think of (McCombs & Shaw, 1972).

The Agenda Setting theory has two levels. The first level enacts the common subjects that are most important, while the second level decides what parts of the subject are important. These two levels of agenda setting lead into what is known as the function concept. The function referred to is a process which is divided into three parts. The first part of the process is the importance of the issues that are going to be discussed in the media. The second part of the process is that the issues discussed in the media have an impact over the way the public thinks, this is referred to as public agenda. Thirdly, the public agenda influences the policy agenda. In a nutshell, the media agenda affects the public agenda and the public agenda affects the policy agenda (Littlejohn, 1999).

The Agenda Setting theory submits that mass media play an influential role in making particular issues that they choose as a public agenda. The public agenda is the main focus or prime issue which the members of the society or public are concerned about. The theory particularises the link in terms of relationships between the importance that the mass media put as an issue and the media audiences or the public's reaction or attributes to such issue (Littlejohn & Foss, 2008). Over the years, the theory has consequently stimulated and developed a number of innumerable latter explorations on how the mass media primes and frames issues for their audiences. Not only limited to such, the discussion also covers how the mass media colours a particular event for their media audiences (Matsaganis & Payne, 2005).

## **1.9 Organisation of the Study**

As shown above, Chapter One of this dissertation introduces climate change and media coverage at a broader scale. It starts by historicising the coverage of climate change by the media, then gives the background to the media coverage of climate change in Zambia through to the brief profiling of the two newspapers under that study. Further, the Chapter focuses on the statement of the problem; research objectives and questions; the study's scope and limitations; discusses

the conceptual framework and outlines the two theories employed for this study, namely, Gate-Keeping and Agenda Setting. Chapter Two builds upon these and highlights the gaps which exist in the literature on media coverage of climate change. Chapter Three illustrates the methodological approaches including the research design methods, and how the data was collected and analysed through the deployment of both Qualitative and Quantitative methods, and the use of Content Analysis and Explanatory Case Study methods. Chapter Four presents and analyses the study findings. Chapter Five concludes the discussions and makes formal recommendations for further research in climate change reporting.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This Chapter reviews literature on media coverage of climate change and identifies the specific gaps related to similar work done in the past. The focus of the literature review is framed around the work which discusses challenges, media approaches to coverage of climate change, and influencing factors for climate change coverage by the media. The approach was to look at the global, regional and local dimensions of the aforementioned aspects. Discourse on media coverage of climate change has in the last three decades, gained prominence particularly due to the increasing negative impact climatic changes have caused globally such as, high temperature, drought, rise in precipitation patterns and increasing food insecurity (Biel & Lundqvist, 2012).

Issues surrounding climate change have already generated much research interest in a diverse array of disciplines within climate sciences. Within communication and media studies, researchers and scholars have investigated issues such as the levels of coverage of climate sciences, motivations for covering climate change and determining variables and other influences at play in covering climate change by the media (Grundmann & Scott, 2012, Mbozi, 2008, Tagbo, 2010; Weingart, 2000).

These researches, among many others, attend to have varied conceptions and comprehensions of the levels, roles and impact of the media in the coverage of climate change. Based on the foregoing, this study was immersed within the ambits of critical research. Halloran (2005) posits that, contrary to conventional research premised on serving narrow interests of the media institutions, critical research predicates the study of the media on “the major social issues of our time”. By so doing, the study adopts an unflustered disposition that allows it to critically explore the role and potential of the media in covering climate change in Zambia.

## **2.1 Climate Change Coverage - Global Dimensions**

According to Kunelius and Eide (2017), climate change poses a number of challenges such as drought and pollution that impact everyday life and decision making from local politics to global governance. Conversely, everyone is affected by climate change, thus, integrating climate change issues in structural functions and societal activities including social orders becomes a very important intervention. From the foregoing, it is evident that biases and subjectivity are difficult to avoid when analysing climate change because of the way it affects us. In turn, this limits the opportunity to provide an objectively outside position from which to formulate questions, construct knowledge or give advice, but rather every participant in the climate change discourse is encapsulated in it because they are part of the problem, thereby, becoming an interested party. This could be the conjecture for most countries that are covering more external climate change issues than their own local issues as alluded to by Anderson (2011), Tolan (2007) and IPCC (2007), who all confirm that most studies show that coverage of climate change issues is more inclusive of international content and not local content especially in developed countries. The aforesaid has its own implications with the potential to affect the extent to which national policy pertaining to climate change is covered.

Shannon (2011) highlights policy gaps and identifies an incoherent approach to climate change information dissemination in several global south countries. This lacuna on information dissemination could be associated with poor and ineffective coverage of climate change policies as asserted by Mbozi (2008), Shanahan (2009) and Tagbo (2010) who all affirm that climate change issues are poorly covered in non-industrialised states. A number of factors are attributable to this situation including commercial interests of media institutions. Nonetheless, any well-functioning society thrives on information and discourse as provided by the media because the right information and debates form an important juncture between public capabilities and the media. This is, primarily, because the media decide that the kind of information to disseminate shapes opinion and also provides platforms for debate, consequently triggering the social and political functions of society (Shumsky & Pinker, 2003). Thus, the gate-keeping role of the media in reporting climate change is very significant.

Barzilai-Nahon (2000) takes a critical look at the deployment of gate-keeping activities regarding information flow from the media to the public, thus, bringing into sharp focus the cardinal role that the media play in influencing personal, national and international interventions in addressing different issues including climate change.

Shumsky and Pinker (2003) posit that gate-keeping is hinged both on a moral and legal fulcrum and in media it is a critical aspect, particularly, in information conveyance. This assertion suggests that the prerogative of the media on whether to constrain or avail information of a social nature for public consumption should significantly be guided by a moral or legal compass and boundaries. Therefore, climate change issues are an important component of our social order and everyday life, thus, the media should give their coverage a central priority.

Over time, the media have proven to be key contributors in shaping public opinion on climate science and policy discourse as well as galvanising public understanding and actions on social issues. Weingart (2000), asserts that media interfacing of different practices have generally affected transformations between climate science and policy, thereby, creating public perceptions of various issues of environment, technology and risk that have had impact.

According to Peters and Heinrichs (2005), the news media are the principal interpretative system and cog of modern societies. Due to their strategic influence and ability to shape public opinion, the media are crucial for the societal uptake of climate change and climate politics. This view reinforces the importance of the gate-keeping role that the media play in society.

Moser (2010), Neverla and Schäfer (2012), observe that the media are fundamental agents in the creation of awareness, understanding and information dissemination. Correspondingly, various researches have demonstrated that the mass media are the main sources of knowledge and information for the public (Anderson, 2011). This position asserts the media as suitable and legitimate platforms for discussing different subjects of importance for any discourse, including climate change. The media engagements and platforms form a significant component in shaping public opinion. Thus, if keen interest is taken by the media to cover climate change, it has the potential to stimulate public interest and participation in various interventions that are being fostered by government and non-state actors in mitigating climatic impact.

Brulle *et al.* (2012) and Kriesi (2001) all argue that mass media provide platforms for debate which are very vital for decision makers. This is because they indicate the importance of the issue and its significance for related societal views and preferences which subsequently create an appropriate environment for government to make better informed decision on policy action to take based on public opinion.

McCann (2010) acknowledges that various scholars and academicians such as (Graber, 1984; Iyengar, 1991; Kreighbaum, 1967), all observed that people use mass media to learn about events that are external to their own direct experiences. He further postulates that people seek out facts and interpretations because they have little or no information pertaining to current issues and events, especially those that are outside of their daily experience. Subsequently, they seek out the media as the main source of information. Over the years, there has been a realisation of the multi-pronged benefits of the media in information dissemination and shaping opinion on climate change, thus, attempts have been made to systematically and strategically work with the media to increase coverage of climate change globally.

Countries are taking both collective and independent efforts to increase the use of media in coverage of climate change. For instance, an IPCC (2007) report shows that a review of climate change coverage in 50 Brazilian newspapers, from July 2005 to June 2007, found that coverage had increased markedly since late 2006. The rise in reporting followed the release of the *Stern Review on the Economics of Climate Change 2006*, Al Gore's film, *An Inconvenient Truth*, and the reports published in 2007 by the IPCC.

According to the IPCC (2007) report, newspapers that covered climate change as environmental facets equated to 35.8 per cent while 19.7 per cent of newspapers under the study reported climate change from an economic-impact angle. 41.7 per cent of media reports focused on more climate change mitigation whereas, 2.7 per cent of the stories looked at it as based on adaptation. Less than 15 per cent of articles related climate change to broader development issues and just 2 per cent highlighted impacts of climate change on low-income populations. Less than 24 per cent of articles reported on government policies that related to climate change issues. Notably, when it comes to climate change coverage, it was established that Brazilian newspapers depended heavily on material from international news agencies and that the dominant voices were those of the foreigners rather than local scientists (IPCC, 2007; Tolan, 2007).



In China, the literature shows higher percentages of climate change coverage compared to Brazil and as of 2006, China's coverage of climate change was reported to be at 90 per cent by the media institutions under the study. Most articles were published on-line, deemed "recycled" from Western media, and/or were reported to have contained scientific reports that lacked local comment. For instance, instead of reporting on climate change impacts on local people, the articles focused heavily on the impacts of climate change in distant areas, such as the Arctic and how polar bears there were being affected (Bord *et al.*, 2000; Shanahan, 2009; Tolan, 2007).

The remaining 10 per cent of the articles proved to be relevant because they covered local events such as the threat posed by rising sea levels to the Port of Shanghai and the melting of glaciers in Tibet. This is similar to the findings in Brazil which showed that the local media integrated more of international or external climate issues as opposed to their own surrounding. However, the literature acknowledges that by 2006 the media in China made very significant connections between China's largely growing emissions and the climate change problems being faced although the media hardly ever mentioned official concern or local research on the phenomenon (Tolan, 2007).

Significant changes were witnessed in 2007 as a consequence of a national policy shift, the impact of influential reports from the IPCC and the Chinese Academy of Science and extreme weather events which resulted in a rise in climate change coverage. It appears that China has reached an advanced stage in coverage of climate change, although, Tolan (2007) notes, among others, that there is still little discussion of China's emissions as the media portray emissions even less as a major responsible factor for climate change and very little actions to address it are reported.

The Chinese and Brazilian experiences in terms of climate change coverage differ from the African situation in that, most media on the continent do not cover climate change that much despite the climate change impacting more adversely on the African continent. However, the Chinese and Brazilian experiences are seemingly more relatable to the Western coverage of climate change.

Carvahlo (2010) submits that a number of studies in the United States of America (U.S.A.), United Kingdom (U.K), Australia and Germany show that mass media, especially, newspapers and the internet, were the major sources of information on climate change issues. Much has been

written about how the media reported on climate change in Western countries like the U.S.A. and U.K. (Brossard *et al.*, 2004). However, very little is understood about how journalists in non-industrialised states, that are highly vulnerable to climate change and where adaptation is urgently needed to reduce emissions, are covering the phenomenon (IPCC, 2007).

Both Carvahlo (2010) and Shanahan (2009) observe that even with constraints, there is an exponential increase of coverage of climate change in non-industrialised countries especially of local content. Mass media are fundamental arenas and agents in the production, reproduction, and transformation of information on climate change.

## **2.2 Climate Change Coverage in Africa**

According to the Population Reference Bureau (2009), the African continent presents a number of intriguing contradictions which capture its development challenges in several different ways. Thompson (2008) writes that until recently, Africa's climate has been generally uniform. This is owed to the continent's position in the tropical zone, the impact of cool ocean currents and the absence of mountain chains serving as climatic barriers.

However, across Africa, the landscape is changing. According to Thompson (2008) he further submits that the snowy caps of Mount Kilimanjaro are melting and the shorelines of Lakes Chad, Tanganyika and Victoria are receding. The once mighty Lake Chad is half the size it was thirty-five years ago. These and many other changes have led to unreliable farming seasons and low water supplies; thereby, presenting a serious problem for a continent that almost entirely depends on rain for its agriculture. Despite the given scenario, Shanahan (2009); Tagbo (2010); Mbozi (2008) all advance the view that climate change coverage by the media on the continent is very sparse and sometimes the information is inaccurate and does not depict the challenges surrounding climate change on the continent.

The IPCC (2007) reports that the Southern Africa region is one of the most vulnerable regions to climate change. Factors such as low access to income, poor technology and dependence on rain fed agriculture make Southern Africa highly vulnerable to climate change. In as much as there is an urgent need for climate change mitigation and adaptation, national and regional policy responses remain either scanty or uncoordinated.

Like Shanahan (2009), Mbozi (2008), Tagbo (2010), the report further states that generally, due to the uneven media landscape, information on climate change tends to be affected. Media ownership and control, insignificant investment in media, limited training in communication for development and a poor media resource base often characterise the media background in Southern Africa which ultimately impacts on the coverage of climate issues.

Mbozi (2008), specifically identifies that among the critical challenges of climate change coverage especially in Southern Africa is that journalists and editors do not view climate change stories as saleable compared to political stories. He also asserts that the journalists lack credible central sources of information for issues relating to climate change. In addition, journalists in Mbozi's study, admitted to having almost zero incentives and resources to report climate change issues and implied that a culture for science reading was inexistent.

The aforementioned assertions are confirmed by Shannon (2011) who claims that most countries in the global south had climate change policies, however, these were said to be inadequate to fully address climate change issues due to funding and clarity challenges. There were complaints about a lack of consultation at design stage, poor coordination and synergy on climate change with the regional Southern Africa Development Community (SADC), and the policies also lacked a practice interface in many countries. This situation has a net effect of not having well guided awareness and information dissemination interventions of climate change issues.

From the foregoing, it can be asserted that the media have a gate-keeping duty when it comes to public policy. The illustration in the above section demonstrates that if policy is not explained or publicised it can be a problem when it comes to practice and implementation. Climate change concerns are a matter of national policy and fall within topics of public interest. Thus, it is incumbent upon the media to promote matters of policy and national interest or global interest such as climate change which have an overarching influence in the conduct of human activities.

Tagbo (2010) advances the view that in order to effectively tackle climate change challenges, it is critical that media coverage of climate change issues is improved and systematic. Katongo (2014), Tagbo (2010) all argue that stories of politics, corruption, entertainment and business are given prominence because they are believed to sell newspapers. However, it may seem that the challenges of less coverage of climate change are beyond mere lack of priority, but financial return from stories.

Both Mbozi (2008) and Tagbo (2010) identify that another core problem is technical inadequacies associated with the capacity of the journalists to report on climate change because they lack training and an in-depth understanding of climate sciences. Kakonge (2011: 1) makes similar claims that, in developing countries, most journalists are generalists, with little specialised training in science or the environment, or specialised areas of climate change. As a result, many journalists are uncomfortable covering climate change and its related issues. If the journalists and editors alike show interest in climate change, training in its reportage tends to be expensive, and most media organisations either lack the funds or are otherwise unwilling to fund their journalists to attend specialised courses.

McCann (2010) and Fortunato (2005) identify another thread of constraints which pertain to time, space and formats when producing news stories and asserts that these constraints limit the media's ability to present every aspect of issues affecting society and on critical subjects such as climate change. Fortunato (2005) further states that these constraints tend to create inconsistencies in reporting and affects the dissemination of information on climate change to the members of the public.

Tagbo (2010) and Cramer (2008) notes that in Nigeria and South Africa respectively, there was a low amount of coverage of climate sceptics, thereby, implying that little space was allocated to sceptics to explain their scepticism. In terms of climate change coverage, prominence was given to environmental impacts like rising sea levels, melting ice caps and effects on species in the wild. Political rhetoric such as discussions at the G8 Summit, were the second most covered. Fundamentally, these studies clearly demonstrate that climate change coverage is more advanced in developed states compared to less developed states. This is seen from the coverage levels in Brazil and China compared to the extent to which climate change is covered in countries such as Zambia, Nigeria or South Africa (Mbozi, 2008; Tagbo, 2010 & Katongo, 2014).

### **2.3 The Local Dimensions of Climate Change Coverage: Zambia**

The fewer number of scholarly research carried out in the fields of media and climate change coverage especially on Zambia is perhaps, evidence of how the subject is not prioritised. Although, generally, there has been an increase in academic research on media, it is apparent that a decade ago media in Zambia were a sparsely researched area from academic dimensions as

affirmed by Matibini (2006), who argues that mass media was rarely accorded much respect as a scholarly endeavour in Zambia even among those who study politics and legitimate media study. This is evident from the fact that, much of the available literature on media and climate change does not derive from academia, but in most cases it is done by interested organisations such as advocacy groups whose interests and objectives are not academic in nature (Chirwa, 1997; Chizuni, 1994; Katongo, 2014).

Most of the available literature on media and climate has biases towards structure and their consequences for the operations of media organisations and the work of journalists. However, these studies scarcely discuss media content on climate change to provide a strong basis for examining how this content is shaped by structural issues such as editorial policy, institutional and technical challenges associated with climate change coverage.

For instance, Chirwa (1997) discusses the restrictions on press freedom in Zambia including the harassment of journalists while Matibini (2006) focuses on reviewing the history of media law reforms and highlighting efforts made to persuade government to enhance media freedom and independence by enacting laws that are consistent with appropriate enforceability for effective functioning of the media. More recently, Phiri (2016) details perspectives on access to media laws and discusses how similar media laws have worked in other countries. Although, the previous authors focus more on the general regulation of press freedoms and laws, Katongo (2014)'s study is more closely associated to this study as it outlines the challenges associated with reporting climate change. However, Katongo fails to detail the correlations between the challenges and the structural basis of the media as well as their causal linkages and how these affect the content covered on climate change. Thus, Katongo's study does not provide much basis for any in-depth scholarly discourse.

Mbozi (2008) in his study, ascertains public perceptions and opinions about climate change, the effectiveness of policy measures, the attitude of the media to climate change issues, obstacles to reporting on climate change and steps that would make reporting climate change issues easier and more effective in Zambia. By so doing, Mbozi establishes that there is very little media coverage of climate change and environmental issues by Zambian journalists. He further noted

that hard news stories by the Zambian media, both print and electronic, were based on political or official pronouncements, or the official opening of some event. This evidently indicates the preferred topic for Zambian journalism is not climate change, but perhaps political issues.

Further, Mbozi (2008) indicates that in Zambia, the *Zambia Daily Mail* was the major newspaper that carried the most stories on climate change as it has a permanent weekly column dedicated to environmental issues. However, most other newspapers covered climate change especially when a political source is talking about it, or policy pronouncements related to the issue are made. Both Mbozi (2008) and Katongo (2014) stress that the standards of climate change reporting were poor because of technical challenges. They further argue that reporters and editors do not possess much knowledge on climate change and this affects the quality and number of articles on climate change in newspapers. Thus, most reports in the media on climate change are not in-depth, due to technical deficiencies and the limited understanding of the topic.

ZEMA (2011) in a report to determine the role of the Zambian media in public environmental awareness and education show that *The Post Newspapers*, the *Zambia Daily Mail* and the *Times of Zambia* reporters who were tasked with the collection and publication of environmental information were not trained in environmental matters, hence their inability to successfully communicate environmental information in an interesting and educative manner.

From the above review of the available literature on media and climate change reportage in Zambia, it can be argued that the major problems are in the quality of the reports, limited coverage and generally lack of technical capacity to understand climate change issues by the reporters. However, it should be added that all these reports and available literature, do not explore the correlation and causal relationships between editorial policies, lack of technical capacity by the reporters and commercial interests of the newspapers. Instead, the studies only do acknowledge that there are many structural and technical challenges that impede effective reporting of climate change issues. The current study sought to bring to the fore a deeper and critical analysis of these factors, both as independent aspects and as interlinked facets.

## **2.4 Contribution to Literature**

From the discussions in sections 2.2 and 2.3 above, it is evident that past works recognised that the media played an important role in information dissemination and raising of awareness on climate change issues. Having identified the gaps in literature, the current study sought for a much more nuanced understanding of why climate change has received minimal coverage in the Zambian media. More specifically, the study sought to widen the perspectives of the media about factors that were directly linked to climate change and its coverage (Schäfer *et al.*, 2014). Further, the study wanted to debate some specific factors that shape the media agenda for both the *Zambia Daily Mail* and the *Daily Nation* on climate change.

Through this research, there will be a possibility to critically reconnoitre the role and potential of the media in effectively covering climate change in Zambia. Available literature has concisely demonstrated that there are various challenges associated with climate change, however, they do not critically investigate the various related causal linkages on such factors as editorial policies, lack of technical capacity by the reporters and commercial interests of the newspapers despite acknowledging in general that there are structural and technical challenges affecting effective reporting of climate change issues in Zambia. Profoundly, by highlighting the extent to which the two newspapers under the study cover climate change, a basis of analysing the differences with other studies in developed countries will be established. Thus, future studies can generate theories and variables that can establish scientific evidence on the influencing factors for the differences in coverage of climate change between Zambia and other countries.

### **Chapter Summary**

Chapter Two has presented and reviewed literature relating to climate change coverage by the media under identified themes and authors who have contributed within the discipline. The various dimensions include global perspectives associated with climate change coverage, the African context of climate change coverage and climate change coverage in Zambia. The next Chapter discusses the methodological approaches used in this study.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The previous Chapter discussed and reviewed the literature in relation to the focus of this dissertation and identified the gaps. This Chapter details the methodological approaches used in the study. It discusses aspects of research design, data collection methods, data analysis, sample size, ethical issues and sampling techniques. It also outlines the study population, instrumentation, coding sheet and procedures for data analysis.

#### **3.1 Research Design**

According to Creswell and Clark (2007), a research design is the structure of a research that connects all the elements of the research project together and outlines the plan of the proposed research work in clear terms. Creswell (2014) defines research design as “the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure”. Basically a research design is composed of the plan, structure and strategy and investigation which help in making empirically proven conclusions and hypotheses. The research design is considered as the overall strategy for interlinking the conceptual research problems with the empiricism of the study.

Given (2008), asserts that how the researcher designs their study is very important because it directs a series of decisions on how they will conduct the study. It is an outline for conducting the study that maximises the leverage over factors that have the possibility to interfere with the validity of the findings. Generally, the research design will vary with regards to how much structure is imposed by the researcher on the research situation and how much flexibility is allowed once the study is under way. Usually, these aspects should be within the control of the researcher at all times.

In this study, both secondary and primary data were gathered using mixed methods namely; Quantitative and Qualitative approaches. The use of both Quantitative and Qualitative methods was critical in allowing the research to produce quantitative data such as statistics as well as qualitative data which are more explanatory in nature. It also allowed the study to preserve wide-



ranging and substantial characteristics of actual events within the study. Qualitative methods are used to gain a deeper understanding of the perceptions of people regarding a particular phenomenon (Marshall & Rossman, 2011).

Creswell (2013) describes Qualitative research as collecting data from a variety of resources, evaluating the data, analysing evaluations to produce findings and presenting the findings.

Kothari (2004) refers to Quantitative method as a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical, or computational techniques. Denscombe (2014) adds that most Quantitative research designs tend to be highly structured. He however, notes that Qualitative research designs are more flexible and fluid.

There are various advantages that this study derived from using mixed methods approaches of research, and these include the fact that the reliability and validity of the study was enhanced. Creswell (2013) avers that the use of mixed methods increases the reliability and validity of the study because it creates the possibility for triangulation of both qualitative and quantitative data. At the same time qualitative data can be supported with statistical information and vice-versa. Additionally, the use of mixed methods enabled the study to have access to multiple types of data which also increased the chances of validity of the study. Marshall and Rossman (2011) observed that a researcher can be much more confident about the validity of the findings when they are supported by multiple and complementary types of data.

### **3.2 Research Methodology**

Kothari (2004) asserts that the research methodology is the overall approach to the research process starting from definition to selection of the appropriate research method and analysis of data and subsequent making of conclusions. He further argues that the research process is a systematic, logical and scientific arena that should adhere to the logical structure and characteristics as follows:

- (a) Identify and articulate the research problem;
- (b) Hypothesis and have questions to address the research problem;
- (c) Clear design of the apposite research process;
- (d) Clear methodological interventions for data collection and analysis to answer the research questions;

- (e) Analysing the data; and
- (f) Findings and conclusions that attend to the hypothesis and research problems.

These aspects are fundamental in correctly conducting a credible and reliable research. Using the stated aspects as a guiding frame work, this study deployed Content Analysis and Explanatory Case Study as the main methods to conduct this research. The section below discusses these methods in detail and how they were used for this study.

### **3.2.1 Content Analysis**

Bryman (2012) defines Content Analysis as a research technique for the objective, systematic, and quantitative description of the noticeable content of communication. This study used Content Analysis for various reasons among them, its suitability for analysing and summarising large amounts of content especially, news articles and stories. Secondly, content analysis is very applicable when it comes to exploring patterns and relationships (Hardt, 1995). Thus, Content Analysis successfully helped the study to bring out quantities, aggregates, relationships, patterns and trends especially when analysing the extent to which the *Zambia Daily Mail* and *Daily Nation* covered climate change.

Content Analysis is, however, criticised because on its own, it has limitations in explaining its results such as, quantities and patterns, as noted by Bryman (2012). It, therefore, requires a complementary approach to aid explicate findings and provide justifications for the why aspects. Thus, Hartley (2011) submits that the most appropriate application of content analysis is to deploy it alongside other methods. In view of that aspect raised by Hartley (2011), the study deployed explanatory case study to back up whatever quantities and patterns were identified from the findings. Bryman (2016) argues that critics of traditional content analysis reject the claim of ‘objective’ description of ‘manifest’ content because the process of designing content analyses, including the selection of variables and designing coding schemes cannot be said to be

objective because of the interpretation involved, particularly when the coding is thematic, or seeks to reveal dispositions.

Notwithstanding its limitations, however, Content Analysis was appropriate for the type of research questions considered in this study because it provided the basis for standardisation of criteria which enabled the researcher to compare the quality of information and deliberations across the two newspapers under study. Moreover, the researcher carried out a physical search for noticeable climate change content within specified periods and took note of the details in a Coding Sheet, specially drafted for the study. This was to determine the quantity and trends of climate change coverage and to take into account the large capacity of data generated, and the need to bring out and summarise the general position regarding the coverage of climate change in the *Zambia Daily Mail* and the *Daily Nation* newspapers. Content Analysis was used because; it was convenient in summarising large amounts of data sorted from the newspapers and provided a better foundation to uncover patterns and relationships (Bryman, 2012). The study focused on news stories, editorials, columns, pictures, advertisements and letters to the editor as units of measure.

Based on the study's theoretical articulation and disposition regarding media coverage of climate change, a comparative analysis of the climate change content and extent of coverage between the *Zambia Daily Mail* and the *Daily Nation* for a period of three (3) months was done. In conducting Content Analysis, the two newspapers were identified and arranged for periods between January and March 2020. The newspapers were searched through to trace climate change articles. After tracing the articles, code categories were determined and numbers were assigned to each category. The codes were mutually exclusive to avoid the coding being compromised. This was also useful in ensuring that counting of frequencies and computation of numerical information at data analysis stage would not pose a problem. During the coding process, four important characteristics were identified which included frequency, direction, intensity, and space.

Through frequency, the study was able to determine how often a specific code occurred. Direction helped to inform the appearance of the code in terms of being positive or negative

while intensity was crucial in denoting the extent of strength towards a certain direction. Space informed the amount of space that was assigned to the climate change content in the newspapers. Statistical analysis was done to develop correlations and trends that were integrated with qualitative data in the interpretations to draw conclusions. Subsequently, the data was analysed to form patterns and conclusions in relation to the research questions.

### **3.2.2 Explanatory Case Study**

Yin (2003) defines case study method as the in-depth study of one or a few events or cases in order to understand the phenomenon being investigated. Case studies are appropriate when answering the how, why, what, and who questions. Yin (2003), further posits that there are three conditions for use of a case study: the purpose must be to answer “how” or “why” questions, investigators must have little control over events, and the focus of the research must be on a contemporary phenomenon within a real-life context, especially when boundaries between the phenomenon and context may evidently not be obvious. The aforesaid is buttressed by Creswell (2013) who posits that when a researcher uses a case study method, he/she reconnoiters a real-life, present case or multiple contemporary systems using detailed in-depth data collection from numerous information sources. Yin (2003) suggests that a case study is used to explore presumed causal links that are too complex for a survey or experiment.

There are several types of case studies including Explanatory and Exploratory Case Studies. However, for this study, Explanatory Case Study approach was used. In the Explanatory Case Study, the questions answered are “how” and “what.” This type of case study is used when there is no pre-determined outcome and the intention is to gain an extensive and in-depth description of a social phenomenon.

Explanatory Case Study was deemed as a significant approach for this study, particularly, in establishing the determining factors for the *Zambia Daily Mail* and the *Daily Nation* when reporting on climate change; what their editorial policy was on climate change reporting; and the difficulties they encountered when reporting climate change. Thus, the Explanatory Case Study method was deployed to effect reporting comparisons between the *Zambia Daily Mail* and the *Daily Nation* newspapers. The Explanatory Case Study also aided in providing qualitative

explanations for the quantified findings, patterns and relationships that emanated from the content analysis of the study. Use of Explanatory Case Study was expedient for the study because it enriched the credibility of the research by deploying multiple data sources.

Based on the foregoing, Explanatory Case Study provided a basis for a synthesised, critical and systematic examination into the why and how aspects of specific conditions and elements that may not have been explained by the outcomes of the content analysis alone in this study. Yin (1984) advances the view that an Explanatory Case Study helps to deeply probe and extensively analyse complex phenomena that are intricate and complex including those elements constituting the life of the unit, with the anticipation of instituting generalisations concerning the broader population from which it is categorised.

### **3.3 Sample Size and Interviews**

The study's sample included ten (10) interviewees chosen from the two media institutions under study, namely, the *Zambia Daily Mail* and the *Daily Nation*. The interviewees were one (1) Board Member each from the two newspapers to discuss their perspectives on the policy direction of the newspapers pertaining to coverage of climate change; one (1) member of the management team each from the two newspapers to discuss both the challenges and editorial policies on climate change coverage; two (2) reporters each from the two newspapers to highlight their limitations and the critical hitches they face when covering climate change issues. Interviews were also conducted with one (1) officer from the ZCCN and one (1) from ZEMA. The study used purposive sampling targeting specific interviewees. A total of ten (10) in-depth interviews were conducted with the aforementioned respondents because they are important stakeholders who possess ample knowledge on climate change issues.

### 3.3.1 Rationale for Selection of Interviewees

**Table 1: Rationale for Selection of Interviewees**

S/No.	Interviewee	Organisation	Number of Interviewees	Significance of the study
1	Board Members	<ul style="list-style-type: none"> <li><i>Daily Nation</i></li> <li><i>Zambia Daily Mail</i></li> </ul>	2	<ul style="list-style-type: none"> <li>The interviewees were important to this study because they provided dimensions on the policies of the two newspapers in relation to climate change coverage.</li> <li>The interviewees also offered insights into the structures of the newspapers.</li> </ul>
2	Editors	<ul style="list-style-type: none"> <li><i>Daily Nation</i></li> <li><i>Zambia Daily Mail</i></li> </ul>	4	<ul style="list-style-type: none"> <li>The editors provided information on matters concerning actual editorial issues within the two newspapers.</li> <li>Offered perspectives on the challenges and operational approaches deployed in their institutions</li> <li>Discussed the technical and operational capacities in their institutions</li> </ul>
3	Reporters	<ul style="list-style-type: none"> <li><i>Daily Nation</i></li> <li><i>Zambia Daily Mail</i></li> </ul>	4	<ul style="list-style-type: none"> <li>Reporters gave information on the challenges associated with climate change reporting</li> <li>They provided data on the levels of training, capacity building and technical knowledge on climate change reporting</li> </ul>
4	Development and Environmental Officers	<ul style="list-style-type: none"> <li>ZCCN</li> <li>ZEMA</li> </ul>	2	<ul style="list-style-type: none"> <li>Brought dimensions that demonstrated their role as stakeholders in promoting coverage of climate change by the media</li> <li>Gave validity by corroborating some of the challenges that the media highlighted in covering climate change</li> </ul>

### **3.4 Data Collection Approaches**

#### **3.4.1 Primary Data**

The study's primary data was collected through one on one interviews using an interview guide with semi-structured open-ended questions. This type of interview guide was used in order to provide interviewees an opportunity to fully clarify themselves when providing answers. Additionally, as a study that used mixed methods, it was necessary to interact with the interviewees in order to gain comprehensive perspectives, explanations and justifications for their responses. Marshal and Rossman (2011) aver that a semi-structured interview guide with open ended questions is useful in qualitative studies because of its disposition to facilitate for the transference of the contextual nuances of the interviewee's reactions. That way the interviewee is also in a good position to answer questions with insightful liberty and minutiae.

#### **3.4.2 Secondary Data**

A rigorous review was involved in collecting and analysing secondary data mainly through literature review and primarily, through content analysis which was principally relying on secondary data from the newspapers. For the literature review, the selection of the reading materials was rather strategic and not indiscriminate. The specific categories for secondary data used were newspaper articles, journal articles, academic books, textbooks, reports on climate change, websites, published and unpublished dissertations and book reviews. The literature review was mainly guided by the main research question and articles, books and reports related to climate change and media coverage which were identified using parameters such as the number of studies that needed to be reviewed, the topic and the years covered. These were then put in folders after which reviews of each of them was done in order to come up with conclusions indicating the extent to which similar data existed. The guiding aspects included identification of the key hypothesis of the authors and what they were trying to discover and the research methodologies. Eventually, the identified materials were interpreted and analysed in a synthetic way.

## **4.0 Data Analysis**

In analysing data from in-depth interviews, the study used the theories for benchmarking and categorising the data and placing it in different clusters, using Content Analysis, as indicated in section 3.2.1 of this dissertation. Thematic approach of sorting of data was used for grouping similar ideas. After delimiting data under each category, the data were theorised and given meaning. The data were activated and crisscrossed against preceding theoretical knowledge from which the following themes were developed as News Stories, Features or Columns, Pictures, Advertisements, Letters to the Editor and Editorials. Reisigl and Woodak (2017) explain the term ‘activation’ as the process that entails remembrance, reading and discussion of previous research similar to the topics. Subsequently, the data were downscaled according to appropriate criteria and sorted from the interview guides.

Yin (2003), submits that the process of ordering the data in a case study, does not always proceed in a linear manner and sometimes this process can be very frustrating and challenging when conducting research. In dealing with this challenge, the study utilised categorical aggregation, a common technique that produces linear and prearranged analysis for the data collected. This is a technique in which data are sorted while interpreting relevant meanings from them. This involved putting up themes from the data and theorising them as indicated in the content analysis section. Creswell (2013) suggests that this type of technique in research is very informative as it establishes significant meanings across numerous cohorts of the data.

## **4.1 Coding**

Once the data were sorted, they were put into several categories. The core dependent variables were divided into five main categories in line with the aspects of coverage: those relating to the amount of the coverage for each newspaper under the study and those associated with the quality and type of information. Quality of news and information was coded on evaluation criteria for content based on normative standards set out in McQuail (2010), regarding the practice of journalism. Separation of editorial opinion from news reports and articles were coded as to whether or not they mixed news reports with comment or opinion.



The coding sheets comprised content categories for each unit of measure as indicated below in Table 2.

**Table 2: Summary of Coding Sheet for Content Analysis**

<b>News Stories</b>	<b>Columns</b>
<ul style="list-style-type: none"> <li>• Climate Change Classification</li> <li>• Headline treatment</li> <li>• Type of article</li> <li>• Local or international</li> <li>• Use of research data</li> <li>• Accompanying picture</li> <li>• Climate change issue/subject</li> <li>• Total number of stories</li> <li>• Total number of climate change stories</li> </ul>	<ul style="list-style-type: none"> <li>• Climate Change Classification</li> <li>• Written by an expert (Determined by qualifications, institutions and experience)</li> <li>• Use of research data</li> <li>• Prescribing solution</li> <li>• Language used easy to comprehend</li> <li>• Climate change issue/subject</li> <li>• Total number of Features/Columns</li> <li>• Total number of climate change columns</li> </ul>
<b>Letter to the Editor</b>	<b>Editorials</b>
<ul style="list-style-type: none"> <li>• Climate change classification</li> <li>• Writer's location</li> <li>• Any response</li> <li>• Total number of climate change letters</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change classification</li> <li>• Use of research data</li> <li>• Prescribing solution</li> <li>• Length</li> <li>• Total number climate change editorials</li> </ul>
<b>Advertisements</b>	<b>Pictures</b>
<ul style="list-style-type: none"> <li>• Climate change classification</li> <li>• What is the advertisement suggesting?</li> <li>• Climate change issue/subject</li> <li>• Number of climate change advertisements</li> </ul>	<ul style="list-style-type: none"> <li>• Gate-Keeping</li> <li>• Agenda Setting</li> </ul>

## **5.0 Reliability and Validity**

Qualitative and Quantitative research methods were used in this study and resulting data were triangulated which helped the study to attain validity and capture different dimensions of similar singularity and phenomena. In order to attain validity and reliability, systematic verification and checking of the data afterwards, fitting the data in appropriate categories and themes, was done. There was constant confirmation and monitoring of the theoretical work of analysis and inquiry. This way the study was in a position to classify data and show when to continue, stop or adjust the research process in order to achieve reliability and validity (Bryman, 2012; Creswell, 2013).

## **6.0 Ethical Considerations**

Shamoo and Resnick (2009) assert that there are principles that underpin much of the ethical thinking and application when conducting research and these are theorised to answer the research questions and prove or disprove the hypothesis. They further state that many of these principles have been originated from codes such as the Nuremberg Code and the Belmont Code which arose as a consequent of the mistreatment and torture of victims in medical research in World War II. Some of the core values that Shamoo and Resnick (2009) refer to are:

1. Respect for persons including their confidentiality and non-disclosure of their details.
2. Justice which demands that people are fairly and justly treated regardless of their position within the research.
3. Beneficence or doing good.
4. Non-maleficence which entails doing no harm.
5. Fidelity which encompasses honesty and truthfulness.
6. Academic freedom.

The study took into consideration the ethical issues associated with research and worked within the ambit of the above stated values from the inception of the research to its conclusion. Ethical concerns are very critical in research because they help to cast a good legal and moral posture that fosters respect and ethical standing in guiding the activities of the research (Bryman, 2012). Therefore, one of the ethical considerations taken into account by this study was, firstly, to be objective and not subjective. Other critical ethical aspects the study incorporated were that the

respondents' names were to be withheld unless participants had given prior consent. The study respected the privacy and confidentiality of the participants of the study. Other ethical considerations include the right to informed consent and value-neutrality. Participation was voluntary with prior informed consent being sought from respondents. In addition, assurances were given that all information from respondents would be used for purely and entirely academic purposes, specifically, for this study. Thus, the study was conducted with clearance from the University faculty as part of fulfilment of the study/academic requirements.

## **7.0 Chapter Summary**

Chapter Three looked at the methods used in the study; content analysis, case study, in-depth interviews and all the methodologies employed in the study. The Chapter also outlined the procedures for sampling and tools for data analysis, coding, a description of the study population, reliability and validity and ethical considerations. The next Chapter is the presentation of the findings and analysis of the data or information.

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS**

#### **4.0 Introduction**

The previous chapter discussed the methodological approaches of the study. In this chapter, the findings of the dissertation are presented for this study according to according to the specific objectives. Thus, this section is presented according to the main topics which are: Institutional, structural and other factors influencing coverage of climate change in the *Zambia Daily Mail* and the *Daily Nation*, role of editorial policies on climate change coverage by both the *Zambia Daily Mail* and the *Daily Nation*, and levels of coverage for climate change by both the *Zambia Daily Mail* and the *Daily Nation* newspapers.

#### **4.1 Background Information of Study Participants**

The study gathered the biographical data of the interviewees specifically covering areas such as their sex, age distribution, education level, areas of study and years of experience. These variables were significant for a clear comprehension of the type of the sample population, and for characterising them and putting into perspective their responses. Table 3 below presents the overview of the background characteristics of the research participants.

**Table 3: Background Information on Research Participants**

<i>Variable</i>	<i>Frequency</i>	<i>Percentage</i>
<b>SEX</b>		
<i>Male</i>	6	60
<i>Female</i>	4	40
<b>AGE</b>		
<i>25-29</i>	2	20
<i>30-34</i>	2	20
<i>35-39</i>	1	10
<i>40-44</i>	4	40
<i>50-54</i>	1	10
<b>EDUCATION LEVEL</b>		
<i>Certificate</i>	2	20
<i>Diploma</i>	4	40
<i>First Degree</i>	3	30
<i>Master's Degree</i>	1	10
<b>FIELD OF STUDY</b>		
<i>Development Studies</i>	1	10
<i>Communication for Development</i>	1	10
<i>Media &amp; Communication Studies</i>	1	10
<i>Development &amp; Environment</i>	1	10
<i>Journalism</i>	6	60
<b>EXPERIENCE</b>		
<i>0-5</i>	7	70
<i>6-10</i>	1	10
<i>11-15</i>	1	10
<i>16-20</i>	1	10

Source: **Researcher**, 2021

Table 3 above shows that a total of ten (10) participants were purposively sampled and interviewed using the interview guide. The majority of the interviewees were male, accounting for 60 per cent compared to 40 per cent females. The age distribution was 40 to 44 years old as the majority at 40 per cent, followed by age ranges 25 to 29 years old and 30 to 34 both at 20 per cent. The age ranges 35 to 39 years and 50 to 54 years olds were both perched at 10 per cent respectively. In terms of the education levels, 40 per cent of the interviewees possessed Diplomas, 10 per cent had Master's degrees, 30 per cent held undergraduate degrees and 20 per cent were certificate holders. The study also established that 60 per cent of the interviewees had majored in Journalism, 10 per cent in Development Studies, 10 per cent in Communication for

Development, 10 per cent in Media and Communication Studies while 10 per cent in Development and Environment. The study further revealed that 70 per cent of the interviewees had experience of zero to five years in the positions they held at the time of the interviews.

## **4.2 Findings**

The first objective of the research was to determine the institutional and structural factors that influence coverage of climate change by both the *Zambia Daily Mail* and the *Daily Nation*. To achieve the objective, the study conducted interviews with different respondents as outlined in Chapter Three.

## **4.3 Determining Institutional, Structural and Other Factors Influencing Climate Change Coverage by both the *Zambia Daily Mail* and the *Daily Nation* Newspapers**

### **4.3.1 Institutional and structural factors**

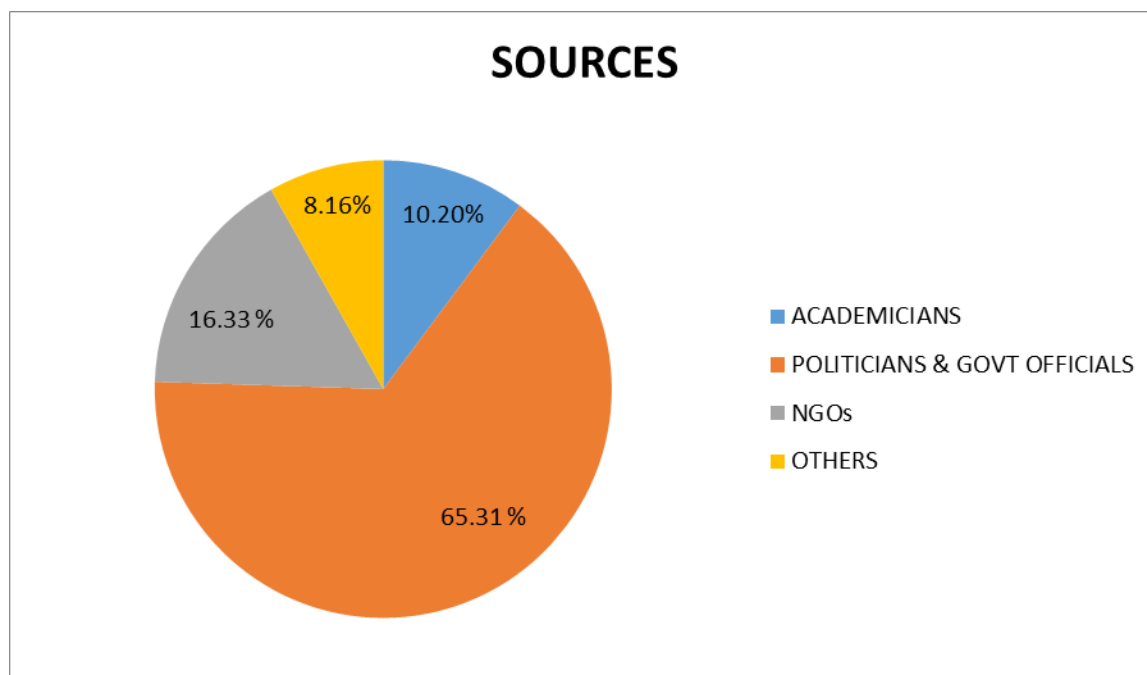
The study sought to understand the institutional and structural factors that influence climate change coverage by both the *Zambia Daily Mail* and *Daily Nation* newspapers. Interviewees were drawn from the two media institutions under the study. The interviewees were probed to explain the structural issues and challenges that they faced in covering climate change. The study established some underlying factors that determine the coverage of climate change in both the *Zambia Daily Mail* and the *Daily Nation* newspapers which include media structures and institutional technical capacities. From the study findings, it was evident that both the *Zambia Daily Mail* and the *Daily Nation* had structural challenges because both media houses did not have deliberate systems and mechanisms purely intended to promote coverage of climate change within their institutional framework. For instance, both the *Zambia Daily Mail* and the *Daily Nation* interviewees confirmed that they did not have a deliberate training programme for their staff structured within their institutions on aspects such as climate change. The *Daily Nation* Editor also indicated that there were no specialised journalists to report on climate change within the institution. It was further noted that within the two media institutions, there existed structures that were responsible for making decisions on different aspects concerning the newspapers. These included the Board of Directors, Management, Editors and Reporters who formed part of the structural presence of the institutions. It was revealed that these structures were responsible,

both collectively and individually, for making decisions pertaining to what should be published or not by the newspaper.

#### 4.3.2 Other Factors (News Sources)

According to both the Editors at the *Zambia Daily Mail* and the *Daily Nation*, other factors that influenced the coverage of the stories on climate change included the consideration of the news sources. For instance, if the President made any statement or pronouncements on climate change, then that inevitably became a story that received coverage in the newspapers. The study shows that most stories covered on climate change cited high ranking public officials and politicians as sources. According to the findings, political and government sources were at 65.31 per cent followed by NGO sources at 16.33 per cent. Academicians were at 10.20 per cent.

**Figure 1: The New Sources on Climate Change Stories**

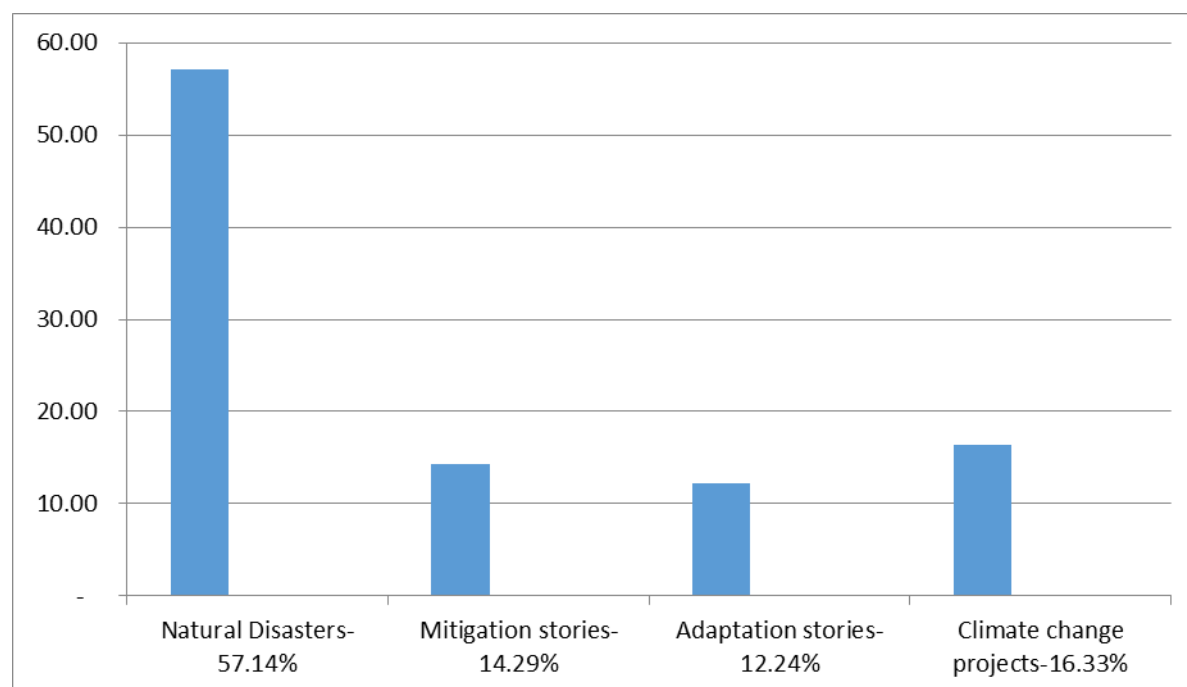


#### 4.3.3 The Types of News Stories Covered on Climate Change

The findings in Figure 2 show that the types of stories covered on climate change in both the *Zambia Daily Mail* and *Daily Nation* newspapers were mostly natural disasters such as floods. The stories on natural disasters were covered by both newspapers at 57.14 per cent followed by stories on climate change projects at 16.33 per cent, then mitigation stories at 14.29 per cent,

with the lowest being the adaptation stories at 12.24 per cent. The findings indicated that coverage of climate change was dictated by a responsive or reactive approach as it was evident that most content was reporting on natural disasters that had already occurred such as floods in Mambwe district.

**Figure 2: The Types of News Stories Covered on Climate Change**



#### **4.3.4 Public Influence on the Nature of Stories Covered**

In terms of the nature of the stories that the newspapers decided to cover, the Editor from the *Daily Nation* stated that sometimes it depended on the public response on a particular issue. She stated that if the topic was not appealing to the public, most likely it did not receive much coverage. Similar sentiments were echoed by a reporter from the *Zambia Daily Mail* who cited an example of stories on politics and how the public responded positively towards them. She indicated that other topics such as climate change did not get the same kind of appeal from the public, therefore, the newspaper limited its coverage on climate change.

#### **4.4 The Role of Editorial Policy on Climate Change Coverage**

The stakeholders such as Board Members and Reporters from both the *Zambia Daily Mail* and the *Daily Nation* newspapers indicated a lack of specific editorial policy for coverage of climate



change. Interviews with both Board Members and Managements of the two newspapers under study confirmed the absence of an editorial policy specifically directed towards climate change coverage. However, what exists is the general editorial policy of the newspapers which guides coverage of all the contents published by the newspapers.

#### **4.5 Levels of Climate Change Coverage by both *Zambia Daily Mail* and the *Daily Nation* Newspapers**

In order to compare the levels of coverage of climate change by both the *Zambia Daily Mail* and the *Daily Nation* newspapers, Content Analysis was conducted to establish the quantity, type, frequency and nature of stories in the two newspapers. The period examined was from 1 January to 31 March 2020. Table 4 presents a summary of the number of climate change stories covered by both the *Zambia Daily Mail* and the *Daily Nation* newspapers.

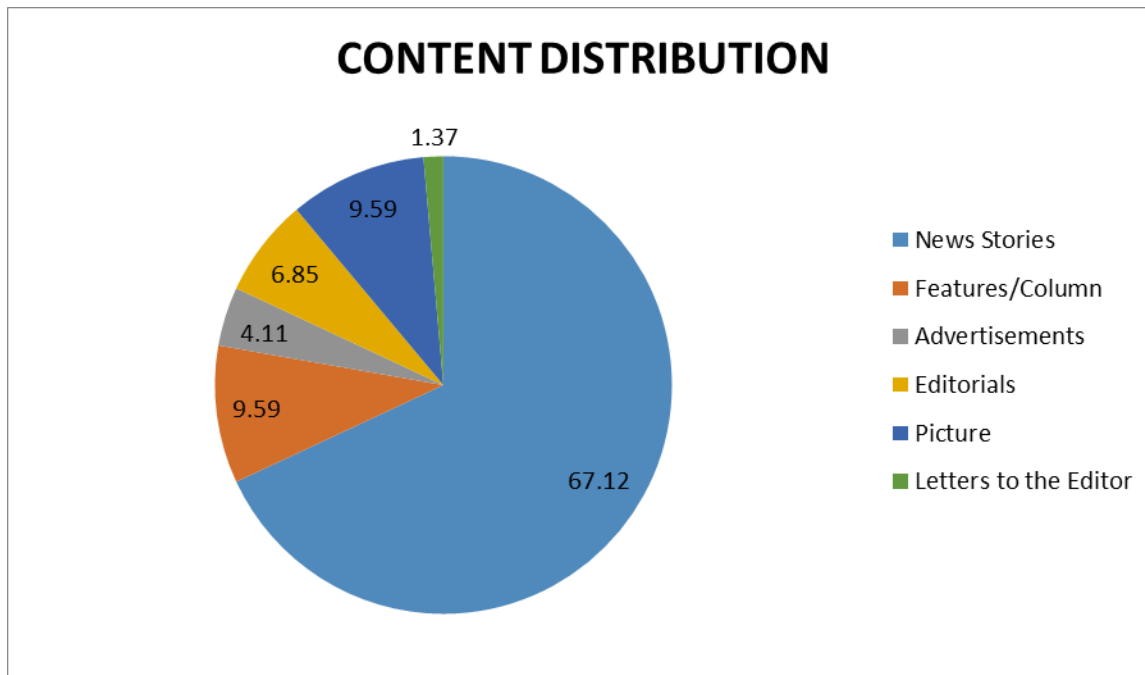
**Table 4: Summary of Climate Change Coverage**

<b>CATEGORIES</b>	<b>ZAMBIA DAILY MAIL</b>	<b>DAILY NATION</b>
News Stories	32	17
Feature/Columns	6	1
Advertisements	3	0
Letters to the Editor	0	1
Editorials	4	1
Pictures	7	0
Local	50	19
International	3	1
<b>TOTAL COVERAGE</b>	<b>53</b>	<b>20</b>

##### **4.5.1 Climate Change Coverage Content Distribution**

Figure 3 illustrates that the majority of the stories published by both newspapers fell in the category of news stories at 67.12 per cent followed by climate change features and pictures at 9.59 per cent respectively. This category is then followed by editorials that were at 6.85 per cent. This shows that the two newspapers provided climate change coverage mostly in the form of news stories. The distribution of these stories was based on the newspapers as illustrated in Figure 3.

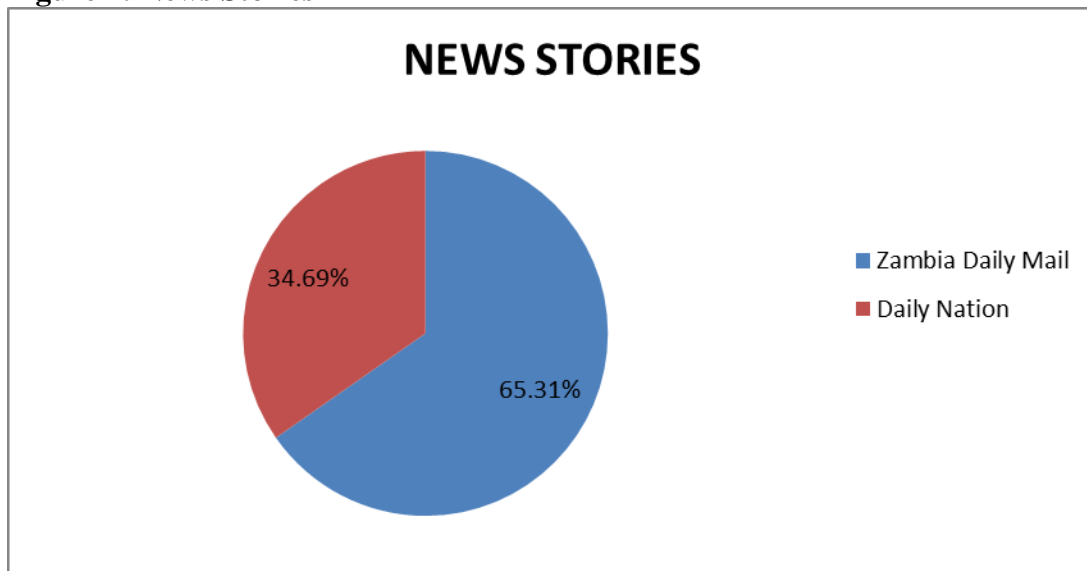
**Figure 3: Overall Distribution of Climate Change Coverage in the *Zambia Daily Mail* and the *Daily Nation* Newspapers**



#### **4.5.2 Climate Change Coverage Content Distribution**

A total of forty-nine (49) news stories were covered by both the *Zambia Daily Mail* and the *Daily Nation* newspapers during the period under examination. Figure 4 shows that the *Zambia Daily Mail* covered climate change content as news stories thirty-two (32) times and this represented 65.31 per cent of the total news stories covered by both newspapers. The *Daily Nation* was at 34.69 per cent coverage of climate change news stories which accounts for seventeen (17) news stories. This distribution shows that the *Zambia Daily Mail* had more climate change content as news stories compared to the *Daily Nation* during the period under review.

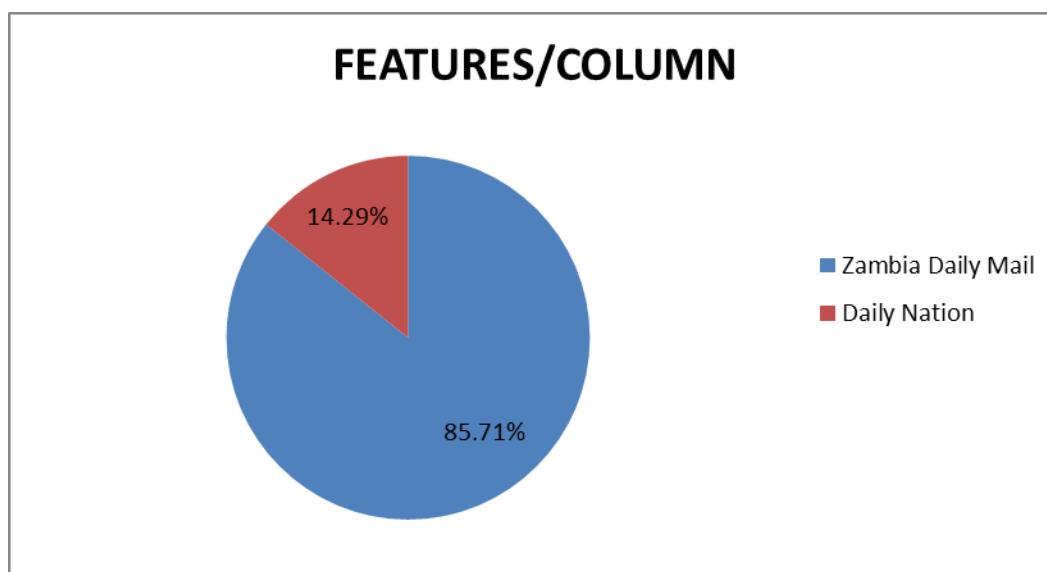
**Figure 4: News Stories**



#### **4.5.3 Climate Change Coverage Content Distribution**

Figure 5 shows that the *Daily Nation* only had one (1) feature article on climate change during the time under inquiry representing 14.29 per cent in comparison to six (6) feature articles by the *Zambia Daily Mail*, representing 85.71 per cent of the total number of features covered by both newspapers.

**Figure 5: Features and Columns**



#### **4.5.4 Advertisements**

The findings indicated that there was a total of three (3) climate change-related advertisements during the period under review, and all of them were placed in the *Zambia Daily Mail*, representing 100 per cent distribution. The advertisements were from the Ministry of National Planning in conjunction with the ZCCN calling for applications to fill vacancies in the project implementation unit for the Strengthening of Climate Resilience in the Barotse sub-Basin Project. According to the ZCCN interviewee, they have a close working relationship with the *Zambia Daily Mail* which includes placement of adverts and supporting reporting of climate change issues in the newspaper, as well as, covering ZCCN events. This explains why all the adverts were placed in the *Zambia Daily Mail*, and none were in the *Daily Nation*.

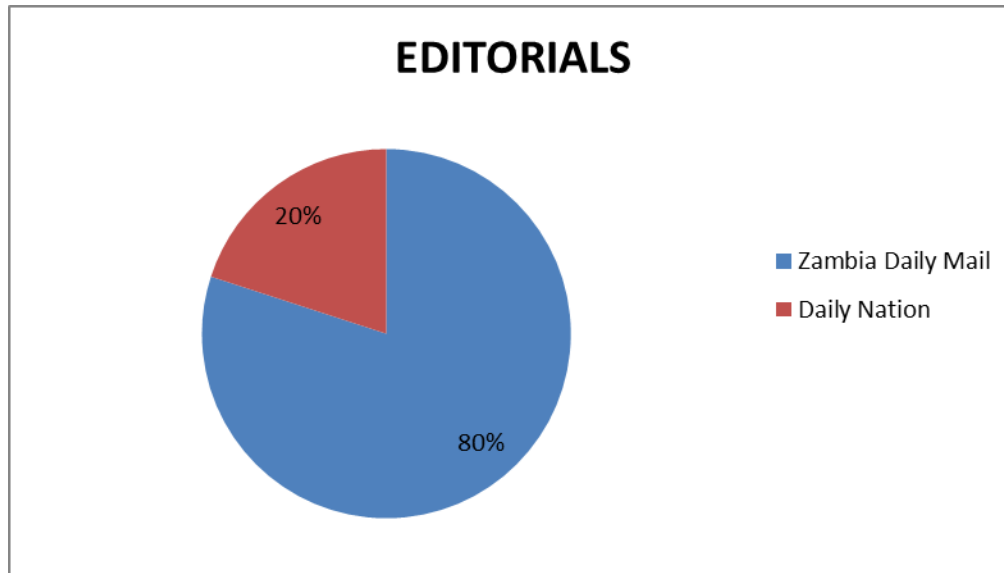
#### **4.5.5 Letters to the Editor**

The study showed that there was only one (1) Letter to the Editor on climate change published during the period under review. The letter was published in the *Daily Nation*.

#### **4.5.6 Editorials**

Figure 6 shows that a total of five (5) editorials were published in the two newspapers under study on climate change. Four (4) out the five (5) editorials were in the *Zambia Daily Mail*, representing 80 per cent of the total editorials captured in the two newspapers, while only one (1) was covered in the *Daily Nation*, accounting for 20 per cent of the total coverage.

**Figure 6: Editorials**



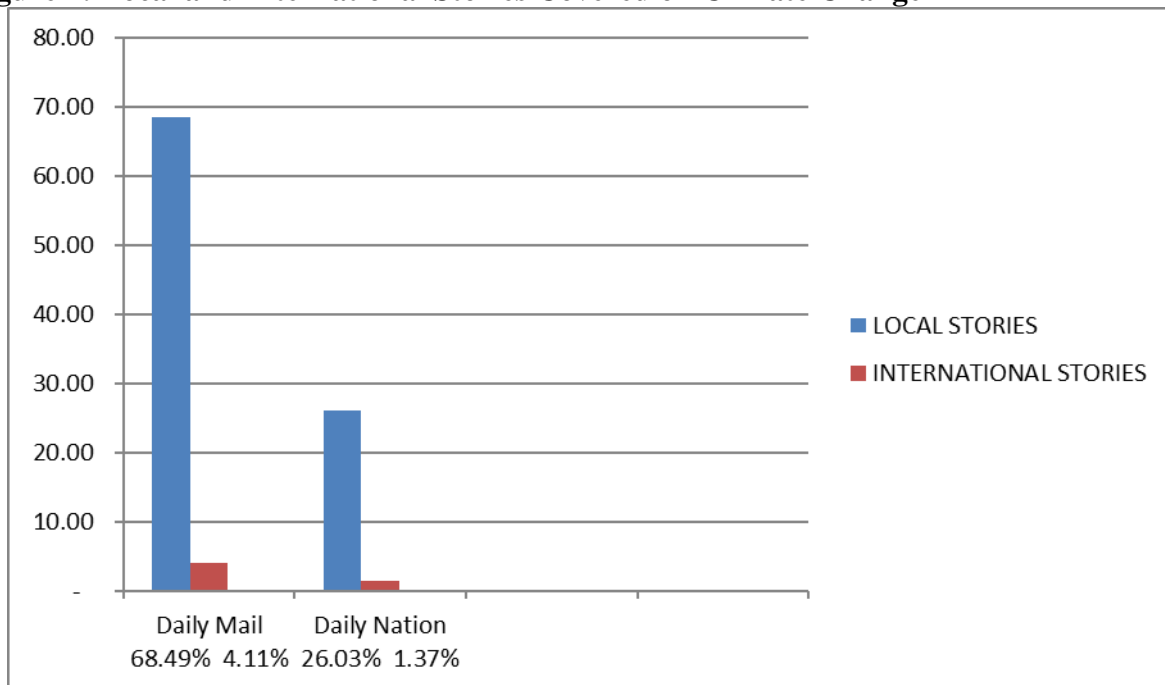
#### **4.5.7 Pictures**

Climate change related content in terms of pictures totaled seven (7), and all of them appeared in the *Zambia Daily Mail*. Thus, representing 100 per cent of the total of climate change pictures in the *Zambia Daily Mail* and the *Daily Nation* newspapers.

#### **4.5.8 Local and International Stories Covered on Climate Change**

Figure 7 shows that 68.49 per cent of that the *Zambia Daily Mail's* content on climate change was based on local issues, while only 4.11 per cent was on international-related climate change issues. Other findings showed that the *Daily Nation* was at 26.03 per cent content coverage of local climate change and at 1.37 per cent on international content. The data showed that out of a total of seventy-three (73) climate change-related content published by the newspapers, the *Zambia Daily Mail* had fifty (50) climate change-related content on local subjects and just three on international aspects, while the *Daily Nation* had nineteen (19) local content related articles on climate change and only one (1) on international climate change aspects.

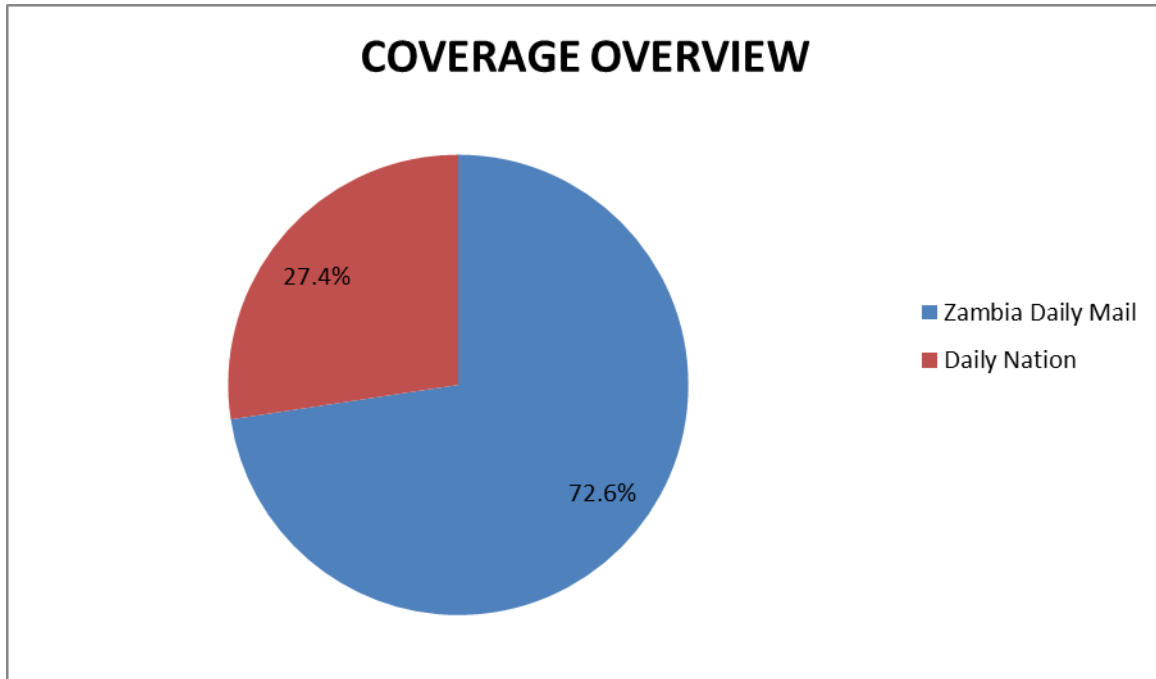
**Figure 7: Local and International Stories Covered on Climate Change**



#### **4.5.9 Coverage of Climate Change Stories between the *Zambia Daily Mail* and the *Daily Nation* Newspapers**

Figure 8 in Section (4.7) demonstrates how the *Zambia Daily Mail* covers more climate change content compared to the *Daily Nation*. During the examined period, the *Zambia Daily Mail* had 72.60 per cent of climate change content compared to the *Daily Nation*'s 27.40 per cent.

**Figure 8: Overview of Climate Change Coverage in the *Zambia Daily Mail* and the *Daily Nation* Newspapers**



#### **4.6 Chapter Summary**

This Chapter has presented and interpreted the findings of this study. The above presented findings have been outlined in line with the study's specific objectives and research questions. The next Chapter analyses the findings of the study.

## **CHAPTER FIVE**

### **ANALYSIS OF THE FINDINGS**

#### **5.0 Introduction**

The preceding Chapter presented the findings of the study, while this Chapter follows up and presents the analysis of the findings. This Chapter has three (3) themes aligned with the research objectives namely: institutional, structural and other factors influencing climate change coverage, the role of editorial policy in climate change coverage and the levels of climate change coverage between the *Zambia Daily Mail* and the *Daily Nation* newspapers.

#### **5.1 Institutional, Structural and other factors influencing Climate Change Coverage**

The study determined the institutional, structural and other factors as highlighted in the findings in Chapter Four. The two media institutions under the study face a number of structural and institutional factors including challenges that influence and affect the coverage of climate change. Among the identified factors are decision making structures within the media institutions. The study showed that there existed structures that were responsible for making decisions on different aspects concerning the newspapers.

According to the Editor from the *Zambia Daily Mail*, the newspaper had a Board of Directors, Management, Editors and Reporters who formed part of the structural presence of the institutions and all play a role in making decisions. He further explained that it was these structures that were responsible, both collectively and individually, for making decisions pertaining to what should be published or not by the newspaper. This is something that is echoed by Morris (1964) in his description of decision making within the media in which he emphasises its significance as a model for providing a logical structure necessary for bringing an element of conceptual order out of the endless variety of observations that steers the course of society and its economic and government organisations. He observes that decision making is the work of choosing issues that require attention, setting goals, finding or designing suitable courses of action as well as, evaluating and choosing among alternative actions. When it comes to media institutions, the aforementioned aspects are pivotal considerations within the hierarchy of decision making in terms of deciding what should be covered or not.



In view of the foregoing, gate-keeping plays a crucial role in decision making within media institutions. Hammersley and Atkinson (1995) identify formal gate keepers in media institutions as being very crucial to the selection of what should be covered and the general communication processes in media institution, because gate-keeping provides key people within the structures of the media institutions who permit or forbid access to information that can be disseminated or not authority to do so. They are also well networked and connected to internal and external audiences. Therefore, the structures and how they play the gate-keeping role in the media institutions become a very important determinant in coverage of climate change for both the *Zambia Daily Mail* and the *Daily Nation* newspapers.

The Editor at the *Zambia Daily Mail*, further, indicated that the reporters were usually assigned to cover specific content and only they [reporters] decided on which sources to interview and once their story was submitted, the Editor decided whether to publish the story, or not. Similarly, the Editor of the *Daily Nation* newspaper also indicated that decisions on what needed to be covered, including climate change, issues were made by a combination of people from the Board, Management, Editors, Reporters and others within the structures of the newspaper. He stated that the process started with what the reporters were assigned and chose to cover, and what the Editors ultimately decided to publish. The aforesaid procedure for deciding what is ultimately covered by both the *Zambia Daily Mail* and the *Daily Nation* newspapers resonates with the view underscored within the Gate-Keeping theory that in most media houses, if not all, a reporter decided which sources he or she would use for the story, then editors decided whether to use the story or not based on the newspaper's ethical and operational policies (Shoemaker, 1991).

Thus, as confirmed by both Editors of the two newspapers under this study, fundamentally, climate change coverage within the two media institutions was determined by the decisions of their structures which included the Board, Management, Editorial Policies and Reporters. This was inclusive of the board directives and policy guidance, decisions and choices of the reporters to what the editors eventually decided should be covered in the newspaper. This submission is in conformity with Shoemaker (1991)'s assertion that the idea of content selectivity of the newspaper within the context of gate-keeping takes into account many variables including how, which and how many news items were presented in all the newspapers all the time. He further states that after considering these variables, a decision to choose what to finally publish was

determined by the structures in the media institution influenced chiefly by its forces and characteristics which may include individuals, ethics, policies and the nature of the media institution. Thus, it can be concluded, based on the findings that the Gate-keeping theory forms an integral principle conceptual basis for decision making on whether climate change is to be covered or not in the two media institutions. The findings indicated that the two newspapers under the study used their structures in line with their policies and ethics to pass judgments or make decisions about what information should be gathered, evaluated and eventually shared as asserted within the theory.

Furthermore, the study findings established that both the *Zambia Daily Mail* and the *Daily Nation* had structural challenges because they both had no deliberate systems and mechanisms that were purely intended to promote coverage of climate change within their institutional framework. For instance, both the *Zambia Daily Mail* and the *Daily Nation* interviewees confirmed that they did not have a deliberate training programme for their staff structured within their institutions on aspects such as climate change. The Editor from the *Daily Nation* also indicated that there were no specialised journalists to report on climate change within the institution.

The Editor of the *Zambia Daily Mail* stated that:

“We have no structured approach for any specific in-house training for our journalists on climate change issues. This is because we face various structural issues that entail a bureaucratic process just to get approval from government in order to carry out certain programmes such as this one. Moreover, getting budget approvals and allocations would take quite some time.”

The Editor from the *Daily Nation* said:

“Our newspaper does not have specialised climate change reporters and we have to assign those reporters that write on agriculture to also cover climate change. This is unlike sports which has specifically assigned sports journalists who specialise in that area. So we face structural challenges in having appropriate reporters, especially, on climate change. In any case, you would probably not find reporters specialised and skilled in reporting climate change.”

Both interviewees identified structural factors that affected the reporting of climate change within their media institutions. Due to these structural factors, climate change is not given any specific attention in the two newspapers as other topics such as politics, sports or business limiting the extent to which they can report on climate change. Reese and Ballinger (2001) submits that the success of a story is subject to the decisions of its many gatekeepers who operate at different levels in the process. He goes on to argue that the hierarchy of influences determines how news gets constructed and in concise terms the Gate keeping concept therefore plays an important part in the final stories covered. Thus when there are institutional and structural pitfalls, the decisions are inevitably affected. For instance, without a reporter who has a technical understanding of climate change, a newspaper cannot make a confident decision to constantly cover climate change issues. Both Mbozi (2008) and Katongo (2014) noted the structural challenges in reporting climate changes and argue that reporters and editors lack the much needed knowledge on climate change which tends to negative impact on the quality and number of articles on climate change in newspapers.

The study further noted that there were technical and capacity inadequacies by both newspapers in the area of climate change. Both the *Zambia Daily Mail* and the *Daily Nation* management and reporters stated that they had challenges associated with the lack of specialised training for journalists on climate change issues and admitted to having technical inadequacies in that area. According to the Editor of the *Zambia Daily Mail*:

“Reporters have inadequate technical capacity to articulate climate change issues in order to simplify and contextualise it for easy understanding by the public as an audience. This is because they have not had the opportunity to get specialised training on specific subjects around climate change. However, external stakeholders such as ZCCN have been supportive and offering opportunities for seminars. The problem is that those are just short programmes that are adhoc in nature and do not necessarily focus on climate change reporting.”

Similar views were held by a reporter from the *Daily Nation* who stated that:

“As reporters we don’t have any training in issues of climate change ... uuuhm, remember that this is a science and needs some special knowledge so that even

as I report I am conversant with some of the technical aspects of the topic. Just imagine a situation where my source is giving misleading information and I am unable to detect that. It means that wrong information is likely to be reported to the public if my Editor does not detect it. So we need to be well knowledgeable.”

The foregoing was also substantiated by the board members of both newspapers who were not aware of any deliberate programmes or policies within their institutions to train staff in specialised climate change courses. The board member from the *Daily Nation* said:

“As far as I know, we generally train our reporters and staff on media related skills, but there are those who get external opportunities to go and enhance their skills in an area of interest. We have previously approved requests from our staff to attend events and workshops with institutions such as ZEMA and ZCCN. I am not aware of any specific programmes or policies that speak to aspects of training reporters specifically on climate change. It would be a good thing but I think we have not yet reached a level where we can develop such programmes.”

The *Zambia Daily Mail* Board member was succinct in his explanation and stated that:

“We are short of technical and financial capacity to enable our reporters and journalists have specialised training in reporting climate change, particularly, because we are constrained both in terms such as personnel and financial resources to organise such training. These inadequacies technically sometimes lead to poor quality information being disseminated.”

Both sets of interviewees were unanimous in conceding that their reporters were lacking specialised training in specific areas within the climate change science. They also noted that as a result, the journalists and reporters were not technically apt when it came to reporting climate change issues. However, despite acknowledging that the two newspapers did not offer any specialised training to support their reporters and journalists, the newspapers indicated that they benefited from trainings organised by external stakeholders such as ZEMA and ZCCN. For instance, a reporter at the *Zambia Daily Mail* indicated that she was involved in the ZCCN

training workshops on climate change reporting. This was corroborated by both ZEMA and ZCCN interviewees who stated that their institutions shared a good relation with various media houses, especially, the *Zambia Daily Mail* whom they involved in their activities and training. The ZEMA interviewee further stated that:

“Annually, we hold the environmental and climate change media awards aimed at incentivising reporters and media houses in general to cover climate change, and ultimately, promote environmental stewardship. We also hold targeted workshops for reporters and editors in order to bridge the gap that exists between the two groups in the newsrooms to encourage climate change reporting and ultimately, environmental journalism to flourish. Additionally, we organise field activities to showcase realities of climate change and provide an opportunity to reporters to get first-hand information from victims and/or champions of climate action in various communities.”

The above assertion demonstrates that stakeholders such as ZEMA had specific programmes within their institution that were intended to empower both the media institutions and members of the public with knowledge on climate change issues despite the fact that media institutions themselves did not have specific programmes to support training of their journalists. As the Editor from the *Zambia Daily Mail* indicated, trainings were usually done by external institutions such as ZEMA and ZCCN. As a result, the trainings were spontaneous and never planned by the media houses. This meant that the media institutions did not decide on the course content.

Moreover, the lack of specific training in climate change for media personnel affected the quality of reporting discharged by the journalists on climate change. This finding confirmed the contentions by Mbozi (2008) and Tagbo (2010) that there were widespread technical inadequacies pertaining to the aptitude of the journalists in reporting on climate change in Africa, because reporters and journalists did not have specialised training and an in-depth understanding of climate sciences. Such limitations consequently affected the reporters and journalists' confidence and eagerness to cover climate change. Boykoff and Boykoff (2004) buttress this view and posit that media coverage of climate change was more complex than thought because it was not just a simple gathering of news articles, clips and stories by journalists, but entails

understanding key frames derived through complex and non-linear interactions between scientists, policy actors and the public, often intermediated by news stories.

The Editor from the *Daily Nation* also indicated that because the reporters and journalists lacked specialised training in climate change reporting, it was difficult for them to break down the technical aspects of the subject in their coverage so that the readers on the streets could comprehend what they were writing about. She stated that:

“The challenges are always technical, in that climate change has remained an intangible topic. The explanations of news sources around this issue are always or almost technical. Considering that most of the people are not too educated especially the poor, the language is mostly not too user-friendly to an ordinary reader on the streets of Lusaka, Kitwe, Kabwe, Choma, Livingstone, Chipata and everywhere else in Zambia.”

The interviewee from ZCCN confirmed what the Editor from the *Daily Nation* stated and explained that reporters had inadequate technical capacity to translate climate change issues in order to give it a human face and put it into context to generate interest and understanding from the public as an audience. She also explained that the ZCCN had created a dedicated desk on climate change at the *Zambia Daily Mail* to mitigate the technical gaps in terms of reporting on climate change and that had helped in increasing coverage of climate by the newspaper. Therefore, specialised training for reporters had increased the ability of the reporters and editors to simplify technical climate change aspects and make it easier for the readers to understand when they read.

The study further established that both the *Zambia Daily Mail* and the *Daily Nation* newspapers faced challenges in finding easily accessible news sources that would competently articulate issues of climate change. The Editor at the *Daily Nation* submitted that there were very few people who were consistent news sources on climate change and that made it difficult to have informative news on climate change when the sources on the topic were not well versed. This view was backed by the *Zambia Daily Mail* reporter who alluded that usually the few competent sources on climate change were difficult to access because of the bureaucracy in government institutions. The foregoing, demonstrates that reporting on climate change did not entirely depend on the media houses, but there were external factors that should be considered such as

the news sources as viewed by both the *Daily Nation* Editor and *Zambia Daily Mail* reporters. As much as the media institutions might be willing to cover topics such as climate change, they were not in control of the quality and availability of the news sources. The *Zambia Daily Mail* reporter, further, acknowledged that climate change was a unique scientific area which required special and abstruse knowledge. Thus, both the sources and reporters needed to be well grounded in knowledge in order to breakdown the information for the readership. According to the Media Awareness Network (2005) where the story covered is coming from and the sources quoted in the media are very significant factors in shaping and determining the credibility of the story and the nature of the message conveyed. Therefore, the difficult in accessing the sources limits the possible providers of information or news on climate change.

According to both the Editors at the *Daily Nation* and the *Zambia Daily Mail*, other factors that influenced the coverage of the stories on climate change included the consideration of the news sources. For instance, if the President made any statement or pronouncements on climate change, then that inevitably became a story that received coverage in the newspapers. This finding corroborates the assertion made by McCright and Dunlap (2011) that climate change had increasingly become politicised because its importance was overshadowed by the sources such as politicians who spoke on climate change for political convenience. Mbozi (2008) makes a similar observation that media coverage of climate change in Africa was given prominence when it was associated with government leaders and politicians. The Editor interviewed from the *Zambia Daily Mail* confirmed the submission by Mbozi (2008) and explained that most, if not all times, when government officials talked about climate change, the issue received coverage in the Newspaper because government officials were deemed as credible sources who have authority from which they spoke from. He cited the example of a President or a Minister making a statement on climate change and indicated that it was inevitably covered.

The reporter from *Daily Nation* also highlighted the importance attached to a source before a story is covered when he said:

“The source of the story matters in getting coverage. We always try to get stories from credible sources such as experts and authorities on a subject. However, the common trend is that if a public official says something, it is most likely going to be covered because of their position.”

Based on the above mentioned, the findings indicated that the source quoted in a news story was a critical determining factor in choosing whether to cover climate change stories or not by both the *Zambia Daily Mail* and the *Daily Nation* newspapers. This was because a source gave credibility to the story, authority and expertise to the issue being covered as indicated by the interviewed reporter from the *Daily Nation* and the Editor from the *Zambia Daily Mail*. The findings that showed that political and government officials were given more coverage as sources on climate issues were identified with the aspect of policy agenda within the Agenda Setting theory.

Scholars Rogers and Dearing (1988) argue that the Agenda Setting theory, in terms of the media, had a nexus with three agendas which are (i) public agenda, (ii) media agenda and (iii) policy agenda. For instance, the policy agenda could be established based on the issues that the government officials and other policy makers formulated and wanted articulated further for the public to understand. Therefore, public officials used the media as a means of disseminating, engaging and communicating with the public on policy dimensions of the issues. Thus, given the importance of the policy agenda within the context of the agenda setting for the media, there was a mutually disposed inclination to cover the government and public officials as major sources in order to fulfill the policy agenda. In reference to the public agenda and media agenda, there was a clear interaction, especially, when the public determined the agenda for what the media should cover while the media also set the agenda by determining which stories were considered important based on the public response.

Furthermore, factors such as the climate change dimensions played a determining role in what is eventually covered. The findings showed that both the *Zambia Daily Mail* and *Daily Nation* were mostly covering natural disasters such as floods. The findings indicated that coverage of climate change was dictated by a responsive or reactive approach as it was evident that most content was reporting on natural disasters that had already occurred such as floods in Mambwe district. Such stories mostly quoted public officials. The *Daily Nation* reporter interviewed explained that it was common for media houses to be reactive when it comes to coverage of climate change. For instance, if a disaster such as a flood occurred, that would be obvious news and most media houses would give coverage to such an occurrence. She, however, stated that if it was something



that had not yet occurred, but just made a general observation on climate change, it would not receive as much coverage as a disaster that had taken place.

From the context of Agenda Setting, when a natural disaster such as a flood or earthquake occurred, it brought new and unanticipated issues for the setting of the agenda within the media and this affected the three domains within agenda setting of public agenda, media agenda and policy agenda differently (Rogers & Dearing, 1988). Accordingly, when a disaster occurred, the media reacted and brought a dimension aligned with the way they wanted the public to perceive and receive the message and at the same time, the reaction of the public to the disaster was in itself an influential aspect in the manner in which the media shaped the message. The policy makers also defined the policy agenda, either to defend their policies or the lack of it and bring dimensions of how policy was linked to the disaster and what they did or did not do to prevent the disaster. Conversely, the three domains were all applicable when responding to a disaster.

Furthermore, climate change coverage was influenced by the nature of the stories that the newspapers decided to cover. The Editor from the *Daily Nation* stated that sometimes it depended on the public response on a particular issue. The Editor stated that if the topic was not appealing to the public, most likely it did not receive much coverage. Similar sentiments were echoed by a reporter from the *Zambia Daily Mail* who cited an example of stories on politics and how the public responded positively towards them. The reporter indicated that topics such as climate change did not get the same kind of appeal from the public, therefore, the newspaper limited its coverage on climate change.

According to the Editor of the *Zambia Daily Mail*, consequently, politics were given more prominence because they generate good readership, massive public response and influence. In addition, politics tended to widely appeal to the buyers of the newspapers. The Editor's assertion was corroborated by the interviewee from ZCCN who stated that stories published on climate change were also determined by what was trending at the time. The Editor stated that climate change coverage had not received the attention it required, as an emergency crisis facing humanity, from media houses and specifically, the Editors who preferred to assign reporters to cover stories of a political nature. The *Daily Nation* reporter also indicated similar sentiments that decisions were sometimes influenced by what was actively being discussed by the public in circles such as social media, radio stations and generally, trending topics and climate change was

not discussed that much compared to politics or entertainment. Mbozi (2008) reinforces the foregoing and observed that even journalists and editors did not treat climate change stories as saleable compared to political stories.

However, despite the above being the case, based on considerations of agenda setting, the mass media played a specific role in influencing their audience's perceptions, values, focus and priorities. Based on the information disseminated to the public, the media audiences were able to form their own opinion and subsequently focused on those issues that were considered important for inclusion on their agendas (Littlejohn & Foss, 2008). This also worked in reverse because the public response also ended up influencing the agenda setting of the media. As McCombs and Shaw (1977), observed, public agenda had an effect on the media agenda because to a large extent, the media followed and acquiesced to the demands of the public or the interests of the media audiences. The mass media were obliged to respond to what their audiences wanted and on what they knew would attract and sell to the media audiences (Littlejohn & Foss, 2008).

The Editor from the *Zambia Daily Mail* explained that before choosing what to cover, usually they took into account the public response, importance of the topic and how it was aligned to their editorial policy. Based on the foregoing, it was evident that what the Editor stated was in conformity with the Agenda Setting theory. Littlejohn (1999) argued that there were invariably two processes that media institutions applied when deciding what to cover and these were firstly to identify common subjects that were most important. Secondly, to decide which components were critical and important in order to be given the priority, for instance, a media institution decided among the common topics, such as climate change and made a decision to prioritise its coverage after which the media institution may decide to cover climate change components such as floods or drought. Therefore, the newspaper editors decided the common subjects that appealed to people and within those chosen subjects, shaped the messages according to how the editors wanted to form opinions and the agenda. One of the fundamental elements in the Agenda Setting theory was that the public agenda influenced the policy agenda and thus, impacted on what the media covered. On the evidence of the interviews, the newspapers actively applied and engaged with the different facets of the Agenda Setting theory in their everyday operations.

Therefore, it was clear that there are several intrinsic influences and forces that played an important role in determining the coverage of climate change. These include, specific aspects

such as the type of sources the reporters gather stories from, the public opinions and perceptions, structures within the media house and generally, the Agenda Setting theory facets such as how the media institutions wanted to shape opinion.

## **5.2 Role of Editorial Policy in Climate Change Coverage**

Firmstone (2008) describes the editorial policy as an expressed principle and philosophy of a media organisation which acts as a framework for its aim and objectives of such a media organisation and how activities should be conducted towards achieving defined goals. Essentially, it spells out the rationale for the establishment of any medium and how it should operate. It reveals whether the media was established for profitability or for public service.

According to Chinedu (2009), he states that, editorial policy may be general in a matter of desirable goals and principles or they may be specific and regulatory. He further holds that, editorial policy or house policy differs from one medium to the other, and that, what attracts a reporter in the electronic media may not attract those in the print media. Ndubuisi (2003:48), argues that editorial policy is very important in providing a clear direction and identity of a media house. It is the formulating basis for planning aesthetic and cohesiveness. Furthermore, Nyman-Metcalf *et al.* (2003) point out that, editorial policy spells out how a station can remain profitable and viable by outlining the nature of working relationship between reporters, editors with advertisers, and the general public.

From the findings of the study, it was observed that both the *Zambia Daily Mail* and the *Daily Nation* newspapers did not have any specific editorial policy for coverage of climate change. Interviews with both the managements and the boards of the two newspapers confirmed that there was no editorial policy specifically directed towards climate change coverage. However, what exists is the general editorial policy of the newspapers which guides coverage of all the contents published by the newspapers. Although this was a general policy which was applicable to all the content of the newspapers including climate change, nonetheless, this was not a specific policy on climate change coverage that was intended to specially encourage climate change coverage in the newspapers. The presence of this policy did not change the fact that while other subjects such as entertainment, sports and politics had further specific editorial policies to ensure sustained coverage, climate change does not have any such similar specific policies. Awolowo (2009) submits that, the editorial policy of a media is an important determinant of the content of

their reporting as it encompasses diverse principles that guide journalists on what to report and what not to, and also how to present.

The above assertion by both the Board Members and Management of the two newspapers was corroborated and reaffirmed by reporters interviewed from both the *Zambia Daily Mail* and *Daily Nation* who also highlighted that climate change coverage was considered under the general editorial policies of the newspapers rather than a specific editorial policy for the subject. The reporter from the *Zambia Daily Mail* stated that his newspaper had a specific policy on political and sports coverage, but he was not aware of a similar editorial policy pertaining to climate change coverage. For example, two reporters interviewed from the *Zambia Daily Mail* and the *Daily Nation* indicated that, ordinarily, their reporting was guided by the existing media ethics such as educational value and relevance of the stories covered on the communities and society at large.

The emphasis on the educational value and impact of the stories on society by the media institutions draw upon the Gate-Keeping theory which posits that information affects what happens in society and helps to shape the social reality (Shoemaker & Vos, 2009). The underlying principle is based on the view that because information shapes society, then the media institutions have to ensure that they report responsibly so that the society was not negatively affected by the information they disseminated. Editorial policy for media organisations helps to establish media outfits principally to propagate their image in the society. As such, it is expedient for them to formulate an editorial policy that would serve and prevent their interest.

Conversely, not having a specific clear policy on coverage of climate change within the media institutions demonstrates that despite its importance and impact on daily human life and the ecosystem, climate change was not perceived as a priority for the media in Zambia. The fact that topics such as business, politics and sports were assigned specific space, yet climate change was not, showed that as long as the media had no specific policy on coverage of climate change, vicissitudes in the global climate situation would remain unresolved. The foregoing is buttressed by the Gate-Keeping theory which asserts that media often deployed different approaches in selecting what information to report and what not to report regardless of the subject's importance. Given the magnitude of the adverse impact of climate change on humanity and the

ecosystem, it would expect that climate change would receive more attention from the media. However, from the findings, despite its importance, climate change was given less coverage compared to politics and sports that had a specific policy and ultimately guaranteed space in the two newspapers. The foregoing was also influenced by various institutional processes within the media structures that Barzilai-Nahon (2000) identified as the individual, routine, organisational characteristics, extra media and ideological positions. These characteristics impacted on the decisions of what was published by a media institution.

Ikpe and Oliseh (2010), postulate that media organisations formulate editorial policy for various reasons including protection of journalists from going astray as well as to protect the public from harm that may be caused by the activities of either ill-informed or overzealous reporters. Thompson (2007) submits that editorial policy provides a platform for the media institutions to ascertain the benchmark of job specifications for journalists and also impose self-scrutiny obligations on individual journalists and what they report on. An editorial policy can help to increase coverage of climate change issues and guarantee the application of sound judgment in information gathering, evaluation, analysis, and dissemination. The foregoing is reinforced within the notion of gatekeeping particularly in relation to judgment or decision making about what information should be gathered, evaluated and eventually disseminated. The underlying assertion is that gatekeeping provides the conceptual premises for gathering, evaluating and making decisions on what should be disseminated to the public on the primary assumption that information affects what happens in society and helps shape social reality (Shoemaker & Vos, 2009).

### **5.3 Level of Climate Change coverage between the *Zambia Daily Mail* and the *Daily Nation* Newspapers**

The findings show that both the *Zambia Daily Mail* and the *Daily Nation* newspapers devoted coverage to climate change, content analysis was conducted to establish the quantity, type, frequency and nature of stories as well as factors that influenced coverage of climate change stories in the two newspapers. The period examined was from 1 January to 31 March 2020. The following categories were analysed: Letters to the editor, Features, News Stories, Advertisement, Editorial and pictures. The majority of the stories published by both newspapers fell in the category of news stories. This shows that the two newspapers provided climate change coverage

mostly in the form of news stories. The *Zambia Daily Mail* had more coverage of climate change under news stories than the *Daily Nation*.

This difference is explained by the fact that the *Zambia Daily Mail* hosts a dedicated desk for a reporter on climate change supported by the ZCCN while the *Daily Nation* did not have any desk dedicated to climate change news reporting as indicated by the interviewee from ZCCN. Secondly, the *Zambia Daily Mail* covered many pronouncements or statements made by public officials including Ministers and the President of Zambia on climate change. This was confirmed by the Editor from the *Zambia Daily Mail* who said that whenever the public or government officials said something on climate change, it got coverage.

Furthermore, the study shows that the *Zambia Daily Mail* had more features than the *Daily Nation* only on climate change during the time under inquiry. Again the low number of features by both newspapers can be linked to the lack of a specific editorial policy on climate change by both newspapers as indicated by the interviewees. However, despite the lack of specific editorial policy on climate change coverage, it was observed that the *Zambia Daily Mail* had more features because the reporter at the newspaper was supported by the ZCCN and was tasked with the coverage of climate change stories in the newspaper. This was not the case with the *Daily Nation* that did not have an externally supported reporter nor a desk dedicated to climate change issues.

The findings also indicated that there was a total of three (3) climate change-related advertisements during the period under review and all of them were placed in the *Zambia Daily Mail*. The advertisements were from the Ministry of National Planning in conjunction with the ZCCN calling for applications to fill vacancies in the project implementation unit for the Strengthening of Climate Resilience in the Barotse sub-Basin Project. According to the ZCCN interviewee, they have a close working relationship with the *Zambia Daily Mail* which includes placement of adverts and supporting reporting of climate change issues in the newspaper, as well as, covering ZCCN events. This explains the reason why all the adverts were placed in the *Zambia Daily Mail* and none were in the *Daily Nation*.

The study further showed that there was only one (1) Letter to the Editor on climate change published during the period under review. This letter appeared in the *Daily Nation*. The fewer number of letters to the Editor resonate with the view that the newspapers do not prioritise

climate change and members of the public lack information on climate change which would form a strong basis on which they could actively engage and react to climate change issues. The Editor of the *Daily Nation* stated that generally they received very few letters to the Editor on climate change compared to topics such as sports, corruption, politics and business. She stated that, sometimes the newspaper would not get a single letter on climate change for a whole quarter and, if they ever did get letters, the quality of most of them would not be good enough for publishing. She cited that the technical nature of climate change was partly the reason why the public were not interacting on climate change issues in the same manner as they do with other matters such as, sports or entertainment. Similar views were echoed by the Editor of the *Zambia Daily Mail* who stated that more people would most likely write in if they had knowledge about climate change. These views are backed by the fact that the whole period under review of this research, only one (1) letter to the Editor was published.

The findings also show that the *Zambia Daily Mail* recorded more editorials than the *Daily Nation* on climate change. Significantly, most of the editorials in the *Zambia Daily Mail* were attached to stories that were published, especially, after the republican President or a high-ranking government official had said something on climate change. For instance, during the Zambia National Service (ZNS) annual ball, the then President of the Republic of Zambia, Edgar Chagwa Lungu, stated that, climate change had impacted negatively on agriculture. This pronouncement was not only among the front page headlines, but also became the topic of the editorial.

The aforementioned can be ostensibly linked to the Agenda Setting theory which postulates that the media directs themselves in shaping opinion using the influence of its sources. More so that the *Zambia Daily Mail* is a state-owned newspaper, it prioritises coverage of what public officials said and therefore, tries to shape the image of how these issues should be viewed or perceived in connection to their functions in society. This was stated by the Editor of the *Zambia Daily Mail* about the coverage of public officials. The Editor stated that the *Zambia Daily Mail* is a state-owned and funded institution and its priorities were towards the promotion of government policies on any matter of national and public interest. Thus, the media institutions shape their media agenda with a view to promote the policies of the government.

Climate change related content in terms of pictures showed that the *Daily Nation* didn't carry any picture and all of the only appeared in the *Zambia Daily Mail* representing. According to the ZCCN interviewee, whenever there is a natural disaster or major issue concerning climate change, the ZCCN offered support to the reporter at the *Zambia Daily Mail* desk to physically go to the site to cover the event. Although sending reporters to the site was not entirely the only reason, but it also greatly contributed to the availability of pictures for the *Zambia Daily Mail* newspaper. The *Daily Nation* Editor indicated in her interview that the *Daily Nation* rarely sent reporters outside of Lusaka to cover especially climate change issues because of the limitation of resources. However, in order for the newspaper to access certain stories or pictures, there was collaborations with other institutions, but this limited what they can cover because they depended on what they were provided with.

The study further showed that the *Zambia Daily Mail's* content on climate change was mainly on local issues. Similarly, findings showed that the *Daily Nation* content coverage of local climate change was more than the coverage on international content. In addition, the *Zambia Daily Mail* reporter suggested that the *Zambia Daily Mail* had more local content than international content because climate change information which had direct impact on the local communities was much easier for the readership to relate to compared to international climate change issues. Similar concerns were echoed by the *Daily Nation* Editor who also indicated that most stories that had to do with international support to Africa or Zambia on climate change might receive coverage compared to those that had no connection to the local or African dimensions.

An overall assessment of climate change coverage by both newspapers demonstrates that the *Zambia Daily Mail* covers more climate change content compared to the *Daily Nation*. Several inferences were drawn from this finding. Among them was that the *Zambia Daily Mail*, being a state owned newspaper, has a larger budget and human resource capacity to cover different events across the country, while the *Daily Nation* was limited as a privately owned newspaper. Secondly, the state had vested interest in climate change issues and, therefore, had established mutual working relationships with state owned media institutions such as the *Zambia Daily Mail*. A good example is the support of a reporter and a desk within the *Zambia Daily Mail* by the



ZCCN. This may be the major attributive indicator towards the *Zambia Daily Mail's* higher coverage of climate change in comparison to the *Daily Nation*.

In the study, Tagbo (2010), established that despite the adverse impact of climate change on the African continent, the quality and quantity of climate change coverage by the media was disproportionate to the extent of the problem. The study observed that, generally, climate change coverage is low and this is largely because it is not prioritised and it is still not an area that appeals to the readership particularly because it is technical in nature.

#### **5.4 Chapter Summary**

This Chapter established a number of factors that addressed the research questions, aim and objectives. Among the critical observations was that, the media faced challenges associated with the lack of technical skills in reporting climate sciences. Both the *Zambia Daily Mail* and the *Daily Nation* have an absence of a specific editorial policy on coverage of climate change. The findings also revealed that the *Zambia Daily Mail* covered more climate change content than the *Daily Nation* due to factors such as financial and technical constraints. These and other findings form the basis for further future engagement and investigation in the area of climate change reporting. The next Chapter concludes the study and discusses the opportunities for future research.

## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.0 Introduction

The previous Chapter presented the findings and analysis. This Chapter provides a summary of the dissertation and the major findings in line with the objectives of the research. It also outlines opportunities for future research and makes recommendations based on the findings.

#### 6.1 Overview

The study identified the poor coverage of climate change issues by the media in Zambia as a problem. Thus, its aim was to establish the institutional, structural and policy factors that influenced the media coverage of climate change issues and compare the levels of climate change coverage between the *Zambia Daily Mail* and the *Daily Nation* newspapers. The literature related to climate change revealed that many scholars and authors acknowledged that climate change coverage was important for policy formulation because it influenced information dissemination. It was also evident that there were not many works on climate change coverage in Zambia, thereby, creating a gap in scholarly work in that area. The study used both qualitative and quantitative research methods. The Explanatory Case Study was also applied. The study also used content analysis to determine the levels of coverage for climate change issues between the *Zambia Daily Mail* and the *Daily Nation*. Among the key findings of the study were the lack of editorial policies for coverage of climate change by both the *Zambia Daily Mail* and the *Daily Nation*, whereby, decisions on coverage of climate change-related matters were dependent on the institutional structures and the lack of specialised training for reporters and, in particular, reporters on climate change matters. All these factors contributed to the poor coverage of climate change by both the *Zambia Daily Mail* and the *Daily Nation* newspapers.

#### 6.2 Conclusions

In line with the main aim, objectives and research questions, the study makes the following conclusions based on the findings:

### **6.2.1 Determining Institutional, Structural and Other Factors Influencing Coverage of Climate Change in the *Zambia Daily Mail* and the *Daily Nation* Newspapers**

Climate change coverage in the media particularly in Zambia continues to be sparse despite the fact that this is an important area that affects our lives and the ecosystem. There are several factors that have been discussed in the study alluding to why climate change coverage is not given prominence in the media as other topics such as sports and politics.

The study established that both the *Zambia Daily Mail* and the *Daily Nation* newspapers have internal structures that are responsible for making decisions on issues pertaining to coverage of different topics, including climate change. These structures are the Board of Directors, Management, Editors and Reporters. These structures make their decisions based on their editorial policies, ethical values and the importance of the topic being covered towards society and the education value.

Another important determinant in the coverage of climate change is the news source, and depending on who the source is, a news story can be given coverage or not. It was noted that whenever public officials made statements on climate change, the story would be covered.

Other influential factors in the coverage of climate change include the nature of the climate change stories. It was established that stories on natural disaster received more coverage in both the *Zambia Daily Mail* and the *Daily Nation* and the reporters from the two newspapers were more reactive in their reporting as they focused more on stories capturing events of what had taken place already.

Furthermore, the public response on any particular issue was very influential in deciding whether the story can be covered or not. Once the topic was not appealing to the public, it would not be given much coverage and climate change is one of the technical topics that had low public appeal. Thus, receiving low coverage in both the *Zambia Daily Mail* and the *Daily Nation*.

The study established major challenges faced by the media in the coverage of climate change issues, particularly, in both the *Zambia Daily Mail* and the *Daily Nation*. These challenges are both structural and technical. For example, the findings showed that both the *Zambia Daily Mail* and the *Daily Nation* newspapers had challenges of inadequate technical knowledge and skills in their reporters and journalists to competently report on climate change issues. This is because

they lacked any form of specialised training for reporting climate change issues. Furthermore, both the *Zambia Daily Mail* and the *Daily Nation* newspapers faced challenges to easily find accessible news sources to competently articulate issues of climate change. This made it difficult for them to come up with stories on climate change, especially, from experts who could simplify climate change issues.

Furthermore, both media institutions under study faced structural challenges in covering climate change issues because they lacked structured systems and mechanisms that were purely intended to promote coverage of climate change. Also, this challenge was not given any specific attention like other topics such as politics, sports or business which had guaranteed and planned spaces for coverage in every edition.

### **6.2.2 Role of Editorial Policy in Climate Change Coverage**

There are several determinants and influencers in the coverage of climate change in the *Zambia Daily Mail* and the *Daily Nation* that were established by this study. Among the key factors is the absence of specific editorial policies for coverage of climate change for both newspapers. Although the study established that both the *Zambia Daily Mail* and the *Daily Nation* have a general editorial policy which guides coverage of all the contents published by the newspapers, neither newspaper has a specific policy on climate change as they do with sports and political issues. The key observation is that the reporting of climate change issues had no special focus, but it is merely guided by general existing media ethics, educational value and relevance as deemed by the newspapers.

### **6.2.3 Levels of Coverage of Climate Change between the *Zambia Daily Mail* and the *Daily Nation* Newspapers**

The study established that the *Zambia Daily Mail* covers more climate change content as compared to the *Daily Nation* and among the reasons for this were that, the *Zambia Daily Mail*, as a state-owned newspaper runs its programmes on a much bigger budget sponsored by the state and had more relevant personnel assigned to cover different news activities and stories compared to the *Daily Nation* that finances its day-to-day operations and activities from the proceeds it makes from daily newspapers sales as demonstrated in the study findings. Furthermore, the *Zambia Daily Mail*, being a state-owned newspaper, had a mutual working relationship with the

state because of the vested interest that the state has in advancing policies associated with climate change issues. This was observed by the support from ZCCN of a reporter and a desk specifically established for climate change issues at the *Zambia Daily Mail* and it was also acknowledged as part of the reason why coverage of climate change content in the *Zambia Daily Mail* was more in comparison to that in the *Daily Nation*.

In terms of specific content on climate change, Figure 6 shows that the *Zambia Daily Mail* had more features because the reporter at the newspaper was supported by the ZCCN and tasked with the role of ensuring that there is coverage of climate change issues in the newspaper and was responsible for producing features in the newspaper from time to time. Other findings showed that there were three (3) advertisements on climate change that were all placed in the *Zambia Daily Mail* and only one (1) letter to the Editor on climate change was published in the *Daily Nation*. There were a total of five (5) editorials published in both newspapers and four (4) of them appeared in the *Zambia Daily Mail*. The study also found out that a total of seven (7) pictures were captured as climate change content in the newspapers and all of them placed in the *Zambia Daily Mail*. Both newspapers covered more local issues compared to internationally-related climate change issues.

Based on the foregoing, the study makes recommendations.

### **6.3 Recommendations**

1. In order to ensure deliberate efforts to improve coverage of climate change issues in the two newspapers and the media in general, the media institutions under study need to adopt specific editorial policies intended to promote coverage of climate change. The policies should be supported with systems and mechanisms for compliance and enforcement. For instance, the media institutions could adopt a policy of, at least, covering and publishing two climate change stories in every edition they publish.
2. There is need to deliberately widen the scope of news sources for climate change. Other than targeting the experts and politicians most of the time, the media institutions could target the ordinary citizens, farmers and those whose daily life is affected by the interaction with the environment. They could also consider increasing coverage of mitigation and projects fostered on adaptation.

3. In order to ensure that challenges associated with coverage of climate change are addressed, especially, in areas such as skills development, there is need to improve the technical capacities of the different reporters within the media institutions. This could be by conducting training activities and directing more resources towards improving their knowledge and skills development in climate change reporting. Such interventions would help in dealing with technical inadequacies and capacity gaps associated with climate change coverage.
4. There is need to marshal institutional collaboration among other media institutions and all stakeholders who are actively involved in climate change issues. Through these collaborations, the stakeholders could work together and mutually complement each other's roles in increasing coverage of climate change. For instance, the media institutions and stakeholders such as ZEMA could draw lessons from the ZCCN collaboration with the *Zambia Daily Mail* and possibly scale up on similar approaches and learn some of the best practices to be replicated in other media institutions.

#### **6.4 Recommendations for Future Research**

The study findings offer entry points and opportunities for future research within the domain of climate change coverage in Zambia. The study generated findings that favour future research on coverage of climate change by the media. The study is cognisant of the various limitations associated with it, therefore, future studies could further build upon the identified limitations. The suggested recommendations for future studies are as follows:

1. To examine the policy structures and frameworks especially in understanding their impact and influence on what is given coverage in the media in Zambia.
2. To conduct a detailed study on existence of systems that trigger progressive editorial policy changes in both public and private media to incorporate non-traditional media topics such as climate change and others.
3. To conduct a comparative study between the public media and private media in Zambia, so as to establish the causal linkages for the factors that impact the extent of coverage of climate change.
4. To further examine the role that stakeholders such as ZEMA and ZCCN play in the promotion of increased coverage of climate change issues in the media.

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