

The Role of the Zambian Media in Public Environmental Awareness and Education.

By

Steriah Monica Simooya

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the degree of Master of Education in Environmental Education

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Declaration

I Steriah Monica Simooya hereby declare that this dissertation is my own work and that it has not been submitted before for a degree or any other qualification in this or any other university and that all the sources I have used or quoted have been indicated and acknowledged as such.

Signature:

Date:

Approval

This dissertation of Steriah Monica Simooya has been approved as partial fulfillment for the award of the degree of Master of Education in Environmental Education by the University of Zambia.

Examiner's Signature;

Signed: Date:

Signed: Date:

Signed: Date:

Dedication

This dissertation is dedicated to the following people;

Beenzu and Maluba Chilala Bili Mudenda; for the stress I put you through when you needed all the comfort I should have given you. I will always love you.

Steven Bili Mudenda, My mother - the woman who has loved and supported me through and through, my brothers Taylor, Winster and Owen; my two sisters Susan and Peggy; and, my two nephews Chabota and Chimuka.

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To God be the glory great things He has done.

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List of Acronyms

AIDS	-	Acquired Immuno Deficiency Syndrome
ANEJ	-	African Network of Environmental Journalists
CSO	-	Central Statistics Office
DMMU	-	Disaster Management and Mitigation Unit
ECZ	-	Environmental Council of Zambia
EE	-	Environmental Education
GRZ	-	Government of the Republic of Zambia
HIV	-	Human Immunodeficiency Virus
LCC	-	Lusaka City Council
MEWD	-	Ministry of Energy and Water Development
MDGs	-	Millennium Development Goals
MLGH	-	Ministry of Local Government and Housing
MMD	-	Movement for Multi-Party Democracy
MTENR	-	Ministry of Tourism, Environment and natural Resources
NGOs	-	Non Governmental Organizations
SPSS	-	Statistical Package for the Social Sciences
UNDP	-	United Nations development Programme
UNEP	-	United Nations Environmental Program
UNICEF	-	United Nations International Children's Emergency Fund
UNIP	-	United National Independence Party.
ZAWA	-	Zambia Wildlife Authority

Abstract

Successful environmental communication is achieved through a well informed public as it will be better equipped and positioned to tackle the environmental challenges of the 21st century. A well informed public is partly a result of the role the media plays in disseminating information. In view of this, the media plays a strategic role in raising public environmental awareness, disseminating environmental information and inspiring environmental action. This study looked at the role of the Zambian media in public environmental awareness and education.

The study aimed at finding out the role of the Zambian media in public environmental awareness and education. The study was guided by three objectives: to find out how many environmental journalists there were in selected media organizations; to determine the content of environmental information published by the selected media and; to find out the contribution of environmental journalism to the lives of ordinary people in the selected Zambian urban, rural and peri-urban areas.

The study used qualitative and quantitative research designs and also a survey research technique. The research analyzed environmental contents of three prominent daily newspapers in Zambia namely; *The Post*, *Zambia Daily Mail* and *Times of Zambia*. The study also captured views and experiences of respondents from which qualitative and quantitative data was obtained. Purposive and random sampling were used to select respondents from the three dailies and also from a cross section of the Zambian society. Statistical Package for Social Sciences and Microsoft Excel were used to process field data.

To collect primary data, daily publications for three selected months of May, June and July 2010 by the three newspapers were analyzed to determine the topics and frequency of environmental news coverage. Questionnaires were administered to editors and journalists from the three daily newspapers and also a cross section of the Zambian society.

The findings of the research indicated that people 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.

More space was dedicated to the printing of political and sports news compared to environmental information which was deemed unsellable and bad for business.

The study further found out that much of the space allocated to environmental coverage was dedicated to pollution and that most of the environmental events covered were seasonal, were based only in urban areas and that these events only saw the light of day when accompanied by a prominent person in society or the government of the day. The study also found that the public lacked sensitization in environmental matters resulting in their inability to be environmentally responsible either individually or at community level.

In view of the above research findings, the following recommendations arose: In-service media personnel need to be trained through refresher courses in environmental matters. Environmental programmes to be designed in all institutions of higher learning that train journalists in order to produce environmental journalists, as is the case in developed countries. The study further recommends that the media needs to place value on environmental coverage by carrying out in-depth analyses and research on the issues and events they publish and the media also need to reduce on too much technical terms in their environmental reporting.

The media of all types in the country need to come together and partner with other interested stakeholders such as Ministry of Tourism Environment and Natural Resources and the Environmental Council of Zambia.

Chapter 1: Introduction

1.1 Background to the study

Environmental sustainability is an increasingly urgent need for humankind as environmental issues are prevalent in much of the world today. In the last 40 years, the awareness of our impact on the earth has grown to the point where environmental issues are now at the centre of public discourse. Today, people exert themselves to care about environmental issues such as climate change, biodiversity and water scarcity, issues that were unheard of few decades ago.

Shortly after the famous Rio summit in Brazil in 1992, journalists that attended that important summit from Zambia came back with a passion and more energy to report on the environment and as a result, terms such as sustainable development became household terms. This created a new chapter in environmental journalism in the country as reporting on the environment was no longer looked at as something peripheral to media issues that needed coverage. This enthusiasm unfortunately faded as years passed and, today in the year 2011, most of the columns and air space that were dedicated to environmental reporting have since vanished from the mainstream media. Since then, the media in the aspect of environmental journalism has not done much or enough to facilitate public environmental awareness and the community's active participation in environmental matters. This is evident through negligible media coverage of environmental issues affecting the country.

Despite the minimal media coverage of environmental issues, the environment is becoming a bigger and bigger issue, with climate change, biodiversity loss, poverty, sustainable development, droughts, floods, water shortages and scarcity gaining the most publicity. With the dawn of the environmental era, there is need for informed decision-making on issues facing the environment such as climate change, biodiversity loss, floods and droughts just to mention a few.

In the 21st century, environmental information is cardinal for responsible actions by the community. In this regard, every organization and institution needs to employ and have an environmental journalist because Environmental journalism has to take an active role in public awareness of their environment by providing the public with timely, accurate and unbiased

information. This is very important as it will enable the public to understand the nexus between the environment, media and education for the environment. Unfortunately, this is not the case with Zambia as the existing media organizations have more journalists in other fields but not specifically environmental journalism.

1.2 Statement of the problem

Environmental Journalism has a critical role and responsibility of informing and educating the public about environmental problems and their adverse impacts on humans and the environment. However, Environmental journalism as a practice is more pronounced in developed countries than in developing countries. In Zambia, the media had in a small way after the famous Rio summit tried to report on the environment as a way of informing, entertaining and educating. However, there was no deliberate and sustained commitment from the media in pushing the agenda of public environmental awareness, education and action as compared to what must be done. This situation creates a problem in that the citizenry remains ill-informed and poorly informed about environmental issues relevant to their daily living and, in so doing, contributing unwittingly to environmental deterioration.

1.3 Purpose of the study

The purpose of the study was to find out the role that Environmental journalism could play in fostering public awareness and education about environmental issues in Zambian communities so as to enhance communities' active participation in sustaining the environment.

1.4 Objectives of the study

The objectives of the study were to:

- (a) Find out how many environmental journalists there were in selected Zambian media organisations.
- (b) Determine the content of environmental information published by the media.

- (c) Find out the contribution of environmental journalism to the lives of ordinary people in selected urban, rural and peri-urban areas of Zambia.

1.5 General Research Question

What is the role that Environmental Journalism could play in fostering public environmental awareness, education and ultimately enhancing communities' active participation in environmental matters?

1.6 Specific Research Questions

The study addressed the following specific questions;

- (a) How many environmental journalists do selected Zambian media organizations have?
- (b) What percentage of daily publications covers environmental issues?
- (c) What impact does environmental journalism have on the lives of Zambian communities?

1.7 Significance of the study

There is no better way of understanding the world that we live in than by being environmentally educated. According to Das et al (2009), the public has got the right to know the issues and the concerns on and about their environment, as well as what is expected of them since they are the centre of focus and key players in environmental sustainability. As the public becomes more and more aware of environmental issues affecting them, the demand for environmental journalism is also increasing. This study will help environmental journalists to know just how much they need to do in the area of Environmental journalism if the public has to not only be aware of the environmental challenges they face, but also to be actively involved in matters of the environment. Since Environmental problems call for interaction and collective action between Governments and the public, this study will, help highlight the crucial role that environmental

journalists and media have in mediating these interactions by providing critical information and analyses to the public representing public opinion and perspectives to government.

1.8 Newspapers in Zambia

Zambia has three major daily newspapers namely *The Post*, *Zambia Daily Mail* and *The Times of Zambia*. There are also some weekly newspapers in the country such as the Monitor and the Guardian Weekly. Currently, the three major dailies are in circulation on a daily basis to almost all parts of the country except those that are very remote and difficult to access. Of the three dailies, *The Post Newspaper* is privately owned while *The Times of Zambia* and *The Zambia Daily Mail* are state owned. All of the three newspapers have taken good use of technology in that despite their daily publications print outs, they also publish online editions on a daily basis.

1.8.1 The Times of Zambia Newspapers

The *Times of Zambia* was started by a South African named Hans Heinrich in 1962 on the Copperbelt in Kitwe, one of the mining towns of Zambia and was known as the *Zambian Times*. It was then privately owned by the same founder Hans Heinrich who later sold the paper to a British firm called London and Rhodesia Mining (Lonrho) which owned other newspapers in the region. At about this same time, another newspaper owned by the Argus Company of Southern and Central Africa called the *Northern News* was launched and was based in Ndola (Makungu, 2004). The newspaper contained news from Britain as its audience was the white community only.

The *Northern News* was later on sold to Lonrho when Argus left Zambia for South Africa in order to concentrate on his South African business interests. Upon the acquisition of the News, Lonrho then shut down the *Zambian Times* and renamed its new newspaper the *Daily Times of Zambia* with Richard Hall becoming the editor of the newspaper. Hall took the initiative and trained Africans as editors and reporters in order for them to take over from him. In 1975, the Zambian government under president Kaunda took over the *Times of Zambia* and relocated its

offices from Ndola on the Copperbelt to Lusaka where they have been ever since up to date (Makungu, 2004).

1.8.2 The Zambia Daily Mail Newspaper

The *Zambia Daily Mail* which was then known as the *African Mail* started its operations in 1960. Its name was changed to *Central African Mail* in 1962. The *Central African Mail* was co-owned by Richard Hall, David Astor (the then editor of the *Sunday Observer* in London), and Alexander Scott - a former Scottish doctor (Makungu, 2004). Unlike the *Zambian Times*, the *African Mail* which was a weekly publication was much more popular among the black people in the early 1960s as it was not afraid to publish stories that were critical to the federal government, the colonial government and authorities in both Northern and Southern Rhodesia (Makungu, 2004).

Zambia gained its Independence in 1964 and one year later in 1965, the government of Zambia under UNIP bought the *Central African Mail*. Two years later, the state owned *Central African Mail* had become a semi-weekly publication called the *Zambia Mail*. And in 1970, the *Zambia Mail* became known as the *Zambia Daily Mail*. By that time, its main rival was the *Times of Zambia* (Makungu, 2004). There were also other newspapers and magazines that came up but did not live long. Some of these newspapers and magazines were never published while some had started publications but were short-lived.

1.8.3 The Post Newspapers

During the second half of the year 1990, about four newspapers emerged in Zambia with the *Weekly Post* being the most notable. By October 1991, not less than 25 newspapers and three magazines had been registered in Zambia including the then *Weekly Post* which is now known as *The Post Newspapers*. However, *The Post Newspapers* with the motto, 'The paper that digs deeper' only became fully operational towards the end of the reign of Dr. Kenneth Kaunda in July 1991 (Kasoma 1997).

The *Post Newspaper* was critical of the new MMD government under President Fredrick Chiluba. This paper started doing to President Chiluba his new government what the preceding

President Kaunda had done to the MMD party before the introduction of multi-party politics in Zambia. As a result, most of *The Post newspaper's* reporters including the managing editor had been arrested on several occasions by the state for various charges including the very serious charge of espionage (Kasoma, 1997).

Over the years, *The Post Newspaper* still using their motto which they started with '*The paper that digs deeper*' has published tirelessly on a daily basis and, once in a while has been in serious trouble with their publications which have to do with the state. For instance in 2001, according to Makungu (2004), the paper was in serious trouble with the state when it wrote about the then incumbent President Fredrick Chiluba accusing him of being a thief. Almost all the cases however have been dropped without any successful prosecution.

Chapter 2: Conceptual and Theoretical Framework

2.0 Introduction

This chapter explains the theoretical and conceptual framework used in this study. It explores four mass communication theories that underpin the role of the media in public information dissemination and these are the: (1) Agenda Setting Theory, (2) Gate Keeping Theory, (3) Uses and gratifications Theory and (4) Knowledge-Gap Hypothesis. Other relevant concepts to the theories are; selective attention, perception and retention and, primacy and recency. Key concepts environmental education, media, environment, environmental journalist and journalism and awareness are also defined within the context which they have been used in the study.

2.1 Operational Definitions of Concepts

Conceptual frameworks are used to express the relationships between the various components of a study. It serves as a guide in evaluating the importance of the factors involved in examining the consequences of undermining the importance of each key factor involved in the study. In this study, the highlighted terms will be taken to mean the explanations provided.

Environmental Journalism in the context of this study is the collection, verification, distribution, and exhibition of information regarding current events, trends, issues and people that are associated with the non- human world with which humans necessarily interact (Chapman et al, 1997).

An **environmental journalist** in this study is one who must have an understanding of scientific language and practice, knowledge of historical environmental events, the ability to keep abreast of environmental policy decisions and the work of environmental organizations, a general understanding of current environmental concerns, and the ability to communicate all of that information to the public in such a way that it can easily be understood, despite its complexity (UNEP, 2006). For one to be an environmental journalist they must be able to translate the technical language of a natural science or related field into terms and ideas that people who

aren't scientists can readily understand. And, it involves doing it in such a way that it is interesting and entertaining to these people.

The Environment. Recently, the environment has been taken to mean four aspects of the holistic environment which are; the economic, the political, the cultural and finally the bio-physical environment. Although these aspects of the environment are seen as separate from each other, they are all linked to one another and, for comprehensive environmental sustainability; the four aspects of the environment must work in harmony. In this study however, the term environment refers to the *natural or bio-physical* environment only.

Environmental Education in the context of this study is the permanent process in which individuals gain awareness of their environment and acquire the knowledge, values, skills, experiences, and also determination which will enable them to act individually and collectively to solve present and future problems as well as to meet their needs without compromising the needs of the future generations (ECZ, 2001). EE also refers to organized efforts to teach about how natural environments function, and particularly, how human beings can manage their behaviors and ecosystems in order to live sustainably. Environmental awareness simply means having knowledge about the environment. In this study, EE and environmental awareness were used synonymously to mean environmental awareness and education.

The Media. Although there are many types of media in the country, for this study, media refers to print media only. The print media was used for the study and not the others due to a number of reasons. These include among others, the limited time and finances allocated for the study which were not enough to cover all the media types found in the country. And for the print media, the focus was on the three most prominent newspapers namely *The Post, Zambia Daily Mail and Times of Zambia*. Hence the media in this study was strictly restricted to the print media only.

Awareness in the context of this study 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 and Distrehoft, 1998). Awareness refers to having knowledge or cognizance of environmental issues and challenges surrounding the communities. More broadly, it is the state or quality of being aware of something and in this case, the natural or bio-physical environment.

In the context of this study, **priming** refers to enhancing the effects of the media by offering the audience a prior context; a context that will be used to interpret subsequent communication (Scheufele, 2001, 2007). That is, the media serves to provide the audience with standards and frames of reference. Priming tells us whether something is good or bad, whether it is communicated effectively and so on. For Example, the media have primed the audience about what a credible political person looks like. In simple terms, priming is the process by which an issue discussed in the media reminds the public of previous information that they have about that issue, causing more thought and discussion. In short, priming has to do with drawing audience attention to certain issues even in a neutral manner.

Framing is the importance and interpretation people attach to potential items on the public agenda which are strongly influenced by how the media present news stories. Framing refers to the modes of presentation journalists use to present information in a way that resonate with underlying schemas among their audience (LittleJohn, 1999). Framing actually utilizes priming to alter audience members' interpretations and preferences. The media focuses attention on certain events and then places them within a field of meaning. This field of meaning can have an effect on the audience's beliefs, attitudes, and behaviors through the ability to persuade them to accept one meaning of a concept over another by connecting a particular meaning or interpretation on an issue. As a result, people have, through their lifetimes, built series of mental emotional filters which they use to make sense of the world. The choices they then make are influenced by their frame or emotional filters (LittleJohn, 1999). A frame is a collection of anecdotes and stereotypes that individuals rely on to understand and respond to events (Scheufele, 2001). In essence, framing explains that the media has the ability to change the context within which an issue is viewed by emphasizing some aspects of it while ignoring others.

In the context of this study, **salience** means distinctiveness, prominence and obviousness. The term is widely used to refer to any aspect of a stimulus that, for any of many reasons, stands out from the rest. Salience may be the result of emotional, motivational or cognitive factors and is not necessarily associated with physical factors such as intensity, clarity or size. Hence

the salience of an item be it an object, a person or an event, is its state or quality of standing out relative to neighboring items (Scheufele, 2001). Salient transfer is used alongside salience and it refers to the capacity of the media to influence the relative importance individuals attach to policy or news issues. In simple terms, salience transfer is the ability of the mass media to transfer issues of importance from their agendas to public agendas.

2.2 Theoretical Framework

In social and behavioral sciences regardless of discipline, all research requires a rationale or base for conducting it. This base is what is referred to as theoretical framework.

A theoretical framework is a conceptual model of how one theorizes or makes logical sense of the relationships of several factors identified as important to the problem. In other words, a theoretical framework attempts to integrate key pieces of information and thereby conceptualize a problem that can be tested on the ground. A theoretical framework is a visual perception of the bigger picture of the study which is the research and it also directs the research objectives and literature review categories of the bigger picture.

2.2.1 Mass Communication Theories

Print Media reaches millions of people and communities around the world every day. This is due to the fact that every country has a local newspaper if not a number of them, as well as easy access to regional and international newspapers. These newspapers produce content that is selected by individuals to catch the eyes of the readers and influence their idea of relevant content. Thus newspapers play a major part in mass communication. They serve as a major source of information and have a large spectrum depending on the circulation. In this regard, communication scholars and analysts have developed a number of theories that apply to mass media and its effects on a society. Some of these mass communication theories will be discussed below.

2.2.2 Agenda Setting Theory

Agenda Setting Theory emerges from communication studies and focuses on the influence of the mass media in setting public agenda. The theory states that the media content sets the agenda for public discussion. Agenda Setting Theory argues that the media play a key role in defining the public agenda because public opinion tends to pay more attention to those issues and perspectives that are highlighted in news stories. And, Agenda Setting as defined in mass media and mass culture is the process whereby the mass media determine what we think and worry about. Agenda Setting Theory is based on the premise that we are given our agenda of daily information for discussion based on what media wants us to be talking about (Griffin, 1997).

Agenda Setting Theory was propounded by Maxwell McCombs and Donald Shaw in the 1960s. They argued that the mass media set the agenda for public opinion by highlighting certain issues. McCombs and Shaw introduced the Agenda Setting Theory in 1972 in their groundbreaking study of the role of the media in the 1968 presidential campaign in Chapel Hill, North Carolina (McCombs and Shall, 1972). Studying the way political campaigns were covered in the media, McCombs and Shaw found the main effect of news media to be agenda-setting, telling people not what to think, but what to think of.

The Agenda Setting Theory was propounded to deal with the vision popular at the time that media effects are immediate reflections of media consumption. The authors start from the premise that people are not indoctrinated by the media, but rather that their attention is directed at specific issues by mass communication channels. People pick and choose the issues they decide to explore and make their own, but they usually end up choosing that which media defined as being 'the issue'. Specifically, people found most important the issues that were covered most often (LittleJohn, 1999). This was largely as a result of exposure to a topic, which increases its salience, which further funnels attention to it.

Whereas early communication studies had shown a mixed picture about the ability of the media to influence opinions on a given issue, Agenda Setting Theory showed that the media had much greater capacity to influence which issues were perceived as important (McCombs and Shaw, 1972). McCombs and Shaw's theory attempts to explain the relationship between issues that are reported on in the media and those that are considered of high public importance. They theorize that, though mass media does not have the ability to tell the public what to think, the news

agenda frequently informs us of what to think about. This way, the media tells us which issues deserve our attention; these issues are then the focus of public consideration. Hence, the media may not be successful in telling us what to think, but they are stunningly successful in telling the public what to think about.

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. Furthermore, the media agenda affects the public agenda and the public agenda affects the policy agenda (LittleJohn, 1999).

From the mass communications perspective, there are a number of uses of the agenda setting theories. Agenda Setting is very useful to our selection of important issues around us as well as in our creation of pictures that make up the same in our heads. The media dominates over the creation of pictures in our heads and the public reacts not to actual events but to the pictures that form in our heads. The agenda setting theory is actually used to remodel all the events occurring around us into a simpler model before we actually deal with them (Littlejohn, 1999). Thus, an aspect of the agenda setting theory is the ability to effect cognitive change among individuals to structure their thinking. Hence, one of the most important effects of this theory is its ability to mentally order and organize our world for us.

The agenda setting theory is also useful to society as it gives the media power to establish what news the public reads and what part of the same news is important to read about. The theory is also used for many purposes such as to establish the media agenda and to retrieve the opinion of the public. Agenda setting theory is also important in the political realm because public agenda influences the policy agenda which means that candidates will try to focus on issues that the public wants to hear.

Agenda setting theory is positive for society because it puts the information out there. There are many important news items that are reported on a regular basis such as local information, weather, politics to mention but a few and, as members of these societies, we read these stories and then go about discussing them. Sometimes we talk about the same stories day after day not realizing that the reason the stories are still hot topics of conversation is because they were once again on the front pages of our papers. The media gives us information that is going on in our lives both in our local communities and across the globe because as a community, we need to feel we know what is going on around us.

Although agenda setting theory is positive for society, it also has a downside which is the fact that the information the public is getting is biased and does not allow the public to select what they feel is important. It seems to be harmless for the media to set the agenda of what is out there for public consumption. The media keeps the public informed and gives the public topics of their own interest without the public actually realizing that the media are giving topics. Thus the media gives information but sometimes it is too much. More often than not, politics play too big of a role in what is presented to the public. It seems too often that politicians generally share the background, worldview and financial status as the owners and managers of the dominant media outlets (McCombs and Shall, 1972).

All in all, the media does set the agenda of what is discussed. The media chooses the stories and the public reviews them on a regular basis. It does not seem that many people really are aware that there is someone picking out information for them, but that is exactly what goes on every single day. There are merits as well as demerits to someone selecting what stories the public receive for processing. However, the public receives the information and processes it but do not get a chance to have an opinion about the information they receive. Sometimes the public has chance to respond either through writing back or verbally. Regardless of everything, the public is allowed to receive information that is considered newsworthy by the media. Agenda setting allows the media to choose to only give the public what they want them to know instead of what is happening on the ground.

2.2.3 Gate-Keeping Theory

Gate-keeping is one of the most and widely used and studied theories of journalism and mass communication. Gate-keeping in mass communication can be seen as the overall process through which the social reality transmitted by the news media is constructed. 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 we are offered in our daily newspapers. Gate-keeping theory posits 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, organizational characteristics, extra media and finally ideological (Barzilai-Nahon, 2004). Thus the basic idea of 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 gate-keeping theory's chief value comes in summarizing the various forces that come into play as news people make decisions about what messages will be selected to present to their audiences.

Gate-keeping theory was first instituted by a social psychologist Kurt Lewin in 1947 as a means of understanding how to produce widespread social changes in communities. It was in theorizing about ways to change social norms that Kurt Lewin first coined the term gate-keeping. He used the concept gate-keeper to illustrate how widespread social changes could be achieved in community. His example dealt primarily with how one could change a population's food habits. Lewin showed how influencing the person who orders or shops for food could change the food habits of the entire family and 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 Lewin called gate-keepers and their choices gates.

A key to Lewin's theory was the understanding that positive and negative forces surround the gates (gate refers to the entrance to each channel or exit of a channel) and that movement from one channel section to another is determined by human gate-keepers or by a set of impartial

laws. And because the forces surrounding a gate may differ, whether or not an item passes through the gate depends on the direction – positive or negative as well as the intensity of the same forces (Shoemaker, 1991). This simply implies that gates are decision points. Since one channel may have multiple gates, there are many opportunities for an item to be rejected. Lewin then added that the gating process can include and it is the same for the travelling of a potential news item through certain communication channels in a group.

Although the term gate-keeping was coined by Kurt Lewin, it was first applied to journalism and mass communication by one of his study assistants, David Manning White in a 1950 study of a small city daily newspaper during a one week period where he examined the copy submitted to the editor. The editor of the small city newspaper provided information on why stories were rejected. In conclusion, White found the decision making programme to be highly subjective (Shumsky and Pinker, 2003). The editor's decisions were also based on the gate-keepers' own experiences, attitudes and expectations as to what constitutes the news.

It is worth noting that this and a number of other initial gate-keeping studies focused on the decisions of a lone gate-keeper. However, subsequent analyses found out that the work of these lone gate-keepers was influenced by other levels of gate-keeping forces such as the professional routines of journalists and the influence of the news organizations thus revealing that gate-keeping is actually more complex than previously thought (Shumsky and Pinker, 2003). Thus White brought into focus the intuitive notion that not all that happens in the world gets into the news and also introduced the notion of subjectivity among gate-keepers. These gate-keepers are passive and reactive, unable to do much to influence the copy they receive; they are also affected by organizational influences such as the work routines and the rush simply to meet deadlines (Shoemaker, 1991). This introduces the notion of multiple gate-keepers who control various functions along the news process.

Gate-keeping is such an essential part of the news gathering and dissemination process because every potential news item cannot be gathered and, from among these items gathered, they all cannot be disseminated hence gate-keeping is often taken as a base part of news production. The basic idea of gate-keeping is that some selection of news items is necessary, there must be a selection from among the many stories available of which further decisions must be made about which among the many stories available will be published. According to Shoemaker (1991),

gate-keeping is not analogous to writing since it occurs as an antecedent to writing and it feeds many decisions involved in writing. Gate-keeping also touches more of the news production and dissemination process than writing. This entails that gate-keeping begins when potential news items are first conceived, discovered and analyzed for news potential. From the news organization's standpoint, gate-keeping ends with the final selection and shaping of news items and their dissemination.

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, organizational routines, input structure and common sense. There are core assumptions which go with the gate-keeping theory. To begin with, the theory assumes that the gate-keeper decides which information will go forward and which will not (Barzilai-Nahon, 2004). This simply means that it is entirely the decision of a gate-keeper which certain information may enter the system. This implies that gate-keepers are able to control the public's knowledge of the actual events by letting some stories pass through the system whilst keeping others out. The gate-keepers' choices are a complex web of influences, preferences, motives and common values. Their choices hold the potential to colour mental pictures that are subsequently created in people's understanding of what is happening in the world around them.

Gate-keeping is inevitable as much as it is useful. It can be deduced that gate-keeping has three 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 gate-keepers' powers by deciding what information to discard and what to publish to the masses out there.

2.2.4 Uses and Gratifications Theory

Unlike the first two theories discussed earlier on which focus much attention on the media, the Uses and gratifications theory places more emphasis or rather focus on the consumer, or audience, instead of the actual message itself by asking what people do with the media rather than what media does to people. The theory suggests that media users play an active role in

choosing and using the media in their own lives. The theory also holds that users take an active part in the communication process and are goal oriented in their media use. The approach suggests that people seek out a media source to fulfil specific gratifications, that is, a media source that best fulfils the needs of the user. The theory has an assumption that people have alternative choices to satisfy their needs. This simply implies that the media competes against other information sources for viewers' gratification.

Although the uses and gratification originally arose in the 1940s, Elihu Katz was the first one to introduce the theory in the 1970s when he came up with the notion that people use the media to their own benefit. This perspective emerged in the early 1970s as Katz and his two colleagues, Jay Blummer and Michael Gurevitch continued to expand the idea (Katz et al, 1974). Katz introduced uses and gratifications theory when he came up with the notion that people use the media to their own benefit. In their study, Katz together with Gurevitch and Blummer (1974), viewed the mass media as a means by which individuals connect or disconnect themselves with others, and they also found out that people bend the media to their needs more readily than the media overpower them.

The uses and gratifications approach is suggested to originally be from a functionalist paradigm in the social sciences. This theory was however, different from the other theories of mass communication. To date, it differs from other theoretical perspectives in that it regards people as active media users as opposed to passive receivers of information. In contrast to the other media approaches which focuses on what media do to people and assume that people are homogenous, this approach as earlier on mentioned, is more concerned with what people do with media (Katz et al, 1974). It allows media users personal needs to use media and respond to the media, which is determined by their social and psychological background.

Katz, Blummer and Gurevitch (1974), also argued that audience needs have social and psychological origins which generate certain expectations about the mass media thereby leading to different patterns of media exposure which results in both gratification of needs and other unintended consequences. This argument assumes that the active media users make motivated choices. Personal social circumstances and psychological dispositions together influence both the general habits of media use and also the beliefs and expectations about the benefits offered by the media, which shape specific acts of media choice and consumption. This is followed by

assessments of the value of the experience and possibly, applications of benefits acquired in other areas of experience and social activity (Katz et al, 1974).

To some extent however, functional theory on communication agrees with media's effects towards people. For Instance, a model often used in the theory (the Hypodermic Syringe model) discusses that the mass media have a direct, immediate and influential effect upon audiences by injecting information into the consciousness of the masses (Rice, 1984). This was the more or so reason why dating back to the 1940s, researchers became interested in the reasons for listening to different radio programmes as well as reading daily newspapers. It was in these studies that researchers discovered a list of functions served by either by some specific content or by the medium itself. For example; rather than just offering information, newspapers were also discovered to be important to give readers a sense of security, shared topics of conversation and a structure to the daily routine (Katz et al, 1974).

Being an audience centered approach, the uses and gratification model follows a basic approach which provides a framework for understanding the exact correlation between the media and the users. It also provides a distinction as to how the media users are more or less active and the consequences of their involvement in the media as a whole. LittleJohn (2002), goes on to say that the theory is actually an explanation of the correlating relationship between the media content, the nature of society, and the behaviour of the media users. In an urban society, people have become dependent on mass communication to assist them in receiving information that they need in order to make a number of decisions concerning their everyday lives.

Depending on an individual's own needs, one will become dependent on one type of media that best meets their needs hence an inclination to that particular type of media. Social stability is another source of dependency on a particular type of media. For example; LittleJohn (2002), states that in times of conflicts, society as a whole tends to become more dependent on the media for a sense of stability. Usually, media dependency is observed when something of national or societal importance is coming up, such as presidential elections. Thus, special circumstances make media users more dependent on the media in their quest to find out what is taking place around them or in their societies.

Besides the basic approach, the uses and gratifications approach has five basic assumptions which too provide a framework for understanding the correlation between the media and the users. Katz et al (1974) discuss the five basic assumptions. The first assumption is that the media users or audience is perceived as active. This assumption focuses on the idea that the viewers are goal oriented and attempt to achieve their goals through media use. Patterns of media use are shaped by more or less definite expectations of what certain kinds of content have to offer the audience member.

The second basic assumption is that in the mass communication process much initiative in linking need gratification and media choice lies with the audience member (Katz et al, 1974). The idea behind this assumption is that people use the media to their own advantage more than the media uses them meaning that the individual opinion is more powerful than what the media is portraying. The individual and the public decide what is going to be absorbed and does not allow the media to influence them otherwise.

The third basic assumption is that media competes with other sources of need satisfaction (Katz et al, 1974). The idea behind this assumption is that each individual has several different needs to which they have created a wide range of choices that will meet these needs. As a result, the needs served by mass communication are but a segment of the wider range of human needs. Because of this, mass communication must compete strongly with non media sources and help create a need for itself as well as a proper balance between the two.

Katz, Blummer and Gurevitch (1974), furthermore point to the fourth basic assumption which is that many of the goals of mass media use can be derived from data supplied by the individual members of the audience themselves. The idea here is that people are very aware of their motives and choices and are able to explain their interests and motives verbally when necessary, that is, when confronted with them in an intelligible and familiar verbal formulation. The final basic assumption is that value judgments about cultural significance of mass communication should be suspended while audience operations are explored on their own terms (Katz et al, 1974). The theorists believe that the audience can only determine the value of the media content and that it is the individual audience members who make the decision to use the media hence place the value on it by their individual decision to view it.

Owing to the fact that the uses and gratifications theory is different from the other theories in the field of mass communications, many people have criticized the theory as they believe that the public has no control over the media and what it produces. The theory can also be said to be too kind to the media as they are being 'let off the hook' and do not therefore do not need to take responsibility for what they produce (McQuail, 1994). The theory has also been criticized as being vague in key concepts, non-theoretical and its being nothing more than a data-collecting strategy.

The uses and gratifications theory has also been criticized that it places so much emphasis on the individual and neglects the social structure and place of the media in that structure. And due to the individualistic nature of the theory, it is difficult to take the information that is collected in studies. As a result, most research relies on pure recollection of memory rather than data. This makes self-reports complicated and immeasurable (McQuail, 1994). Furthermore, the theory has been criticized that it goes too far in claiming that people are free to choose the media fare and the interpretations they want. Katz et al (1974), goes on to say that other motives that may drive people to consume media may not even be linked to their choices and interpretation of the same. Hence uniform effects are not the kind of factor the theory would predict.

All in all, the uses and gratifications theory attempts to explain the uses as well as functions of the media for individuals, groups and society as a whole. Three objectives underlie the development of the theory and these are; to explain how individuals use mass communication to gratify their needs, to discover the underlying motives for individual's media use and finally to identify the positive and negative consequences of individual media use. The whole theory finally rests on the assumption that audience members actively seek out the media to satisfy their individual needs.

2.2.5 Knowledge-Gap Hypothesis

As the infusion of mass media information into a social system increases, segments of the population with higher education and socioeconomic status tend to acquire this information at a much faster rate than the lower status segments so that the gap in knowledge between these segments tends to increase rather than decrease. There is always a variation in mass media

publicity or media use as well as the knowledge gap according to socioeconomic status. As a result of this, knowledge gap becomes the degree of the relationship between education and knowledge. This is because there is a difference in knowledge according to levels of education and, regardless of educational background, knowledge increases over the years hence when deprived of information, the gap between more and less educated persons lessens.

According to Weng (2000), the Knowledge-Gap hypothesis was first proposed by Tichenor, Donohue and Olien at the University of Minnesota in the 1970s. The knowledge-gap hypothesis was used in a research for presidential campaigns. This hypothesis holds that when new information enters a social system via a mass media campaign, it is likely to exacerbate underlying inequalities in previously held information. To be specific, while people from all strata may learn new information as a result of a mass media campaign, those with higher levels of education are more likely to learn more than those with low levels of education, and the information gap between the two groups will expand.

The knowledge-gap hypothesis suggests that each new medium increases the gap between the information rich and information poor because of differences in access to the medium, and control over its use among other factors (Tichenor et al, 1970). As the infusion of mass media information into a social system increases, segments of the population with higher socioeconomic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease.

The belief underlying the knowledge-gap hypothesis is that the increase of information in society is not evenly acquired by every member of society. People of higher socioeconomic status are more able to acquire information than their counterparts (Weng, 2000). This leads to a division of two groups; a group of better educated people who know more about most things and those with low education who know less. Lower socioeconomic status people, defined partly by their educational levels have little or no knowledge about public affairs and issues, are disconnected from news events and important new discoveries, and usually are not concerned with their lack of knowledge.

With the knowledge-gap hypothesis, the acquisition of knowledge over time of a heavily publicized topic will proceed at a faster rate among better educated than among those with less education (Weng, 2000). The hypothesis seems to be a fundamental explanation for the apparent failure of mass publicity to inform the public at large because there is a higher correlation between acquisition of knowledge and education for topics highly publicized in the media than for those less highly publicized. The people reached by the media campaigns tend to be the better educated, men and the younger ones while the less educated people are not reached by the same.

The core concerns underlying the knowledge-gap hypothesis are that it can result in an increased knowledge gap between people of lower and higher socioeconomic, and that the attempt to improve people's lives with information via the mass media might not always work the way this is planned. Finally, the mass media might have the effect of increasing the effect of increasing the knowledge gap difference between members of the social classes (Severin and Tankard, 2001). Furthermore, the scope of the hypothesis is that media presenting information should realize that people of higher socioeconomic status get their information in a different way than their counterpart.

The proponents of the knowledge-gap hypothesis justified their hypothesis and presented five reasons with the first one being that people of higher socioeconomic status have better communication skills, education, reading habits, comprehending and remembering information. Secondly, people of higher socioeconomic status can store information more easily or remember the topic from background knowledge. Thirdly, people of a higher socioeconomic status might have a more relevant social context. Fourthly, people of higher socioeconomic status are better in selective exposure, attention and retention and finally, the nature of the mass media itself is that it is geared towards persons of high socioeconomic status.

Ultimately, the whole idea behind the knowledge-gap hypothesis is that the educational level or socioeconomic status makes all the difference there is in knowledge. Thus the higher the socioeconomic status, the easier it becomes to access knowledge hence producing more knowledge networks and conversely, limited knowledge increases the difficulty levels of accessing new knowledge. The information have read more, engage more in higher level conversations and use information for fulfilling specific purposes and needs. Information have-nots on the other hand rely on others often avoiding reading newspapers and other knowledge

pursuits. Over time, differences in the speed of information acquisition and knowledge accelerate, creating a growing knowledge gap between people of high education/socioeconomic status and those of lower educational/socioeconomic levels.

2.2.6 Selective Attention, Perception and retention

These are not necessarily theories of mass communication but they are very cardinal to the understanding of how people at any given time and situation perceive information, how and why they pay attention to the available information as well as why they decide to retain some or part of the available information given a scenario that there is always too much information than what an individual can take in and process at any given time.

2.2.6.1 Selective Attention

Selective attention attempts to explain the process by which we attend to certain information, but not all the information available to us. At any moment in time, a vast amount of information impinges upon our senses and many studies have shown that we cannot fully process all this information hence some of it appears to be lost. This is one of the trademarks of a limited system hence its need for selection. And since not all the impinged information can be processed, it is mandatory to select which portion of the information will be preferred.

Attention is the cognitive process of selectively concentrating on one aspect while ignoring the others for example; listening to only one voice carefully in the same room whilst ignoring the other conversations in the same room. This is often referred to as the cocktail party phenomenon. *Selective attention* as defined by Wade and Travis (2005), is the ability to focus on some parts of the environment and block out others, preventing us from being overwhelmed by the countless messages that we receive. It implies withdraw from some things so as to deal with others. Selective attention is also the ability to maintain a behavioral or cognitive set in the face of distracting or competing stimuli. It is best described as the sustained focus of cognitive resources on information while filtering or ignoring extraneous information (LittleJohn, 1999).

As much as its good and helpful to people in a number of ways, *selective attention* by its very nature, causes us to miss so much that is going on around us. Many a times, people fail to figure

out which of the information in a newspaper for example; deserves more of their consideration, analysis and even action. *Selective attention* is actually a mixed blessing of some sort, it protects us from an overload and allows us to focus on what is more important (seemingly), while it also deprives us of much more important information that we may need.

2.2.6.2 Selective Perception

There is a lot that goes on around and about us every single day of our lives. As human beings, we do not all see or hear the same things at any given time even when in the same place at a particular time. This is because people are unique and everyone sees the world differently. Hence even as individuals, it is impossible for us to assimilate everything we see and hear, only certain stimuli can be taken in. And because we cannot observe or read everything around us, we engage in *selective perception*.

Selective perception is the personal filtering of what we see and hear so as to suit our own needs (Gagne and Driscoll, 1988). Selective perception is also a procedure by which people let in or screen out material they are able to see and hear. People usually do this because of their attitudes, beliefs, preferences, habits, and conditioning just to mention but a few. Selective perception may also refer to any number of cognitive biases in psychology related to the way expectations affect perception (Gagne and Driscoll, 1988). Much of the process of *selective perception* is psychological and often unconscious.

People only want to hear or read what they want to simply because they are bombarded with too much stimuli everyday to pay equal attention to everything so they pick and choose according to their own needs. In most situations, there are so many elements on which people could focus on and in most instances, only a few of them are usually important and some are likely to be destructive to an individual. This is where *selective perception* comes in as it is what makes people process stimuli that are most relevant to their needs and evaluation. *Selective perception* argues that people only watch out for what matters most to them. This simply means that people use *selective perception* continually as this helps them to see what they want to see – usually stimuli that relates to their own lives or that which reinforces their own beliefs.

Selective perception requires one to determine which elements are important and then focus attention on those important elements while extraneous information will have to be ignored or kept in their proper perspective. Where *selective perception* in media content is concerned, a perfect example would be the adverts placed in daily tabloids. People who like to buy, or are considering buying a brand are more likely to notice advertising than any other news in a paper than are those who are neutral in reading the same newspapers. Depending on their pre-existing beliefs, people may filter and only read what they consider to be beneficial to their own individual needs in the papers.

People's choices of what to concentrate on when reading the daily newspapers in the case of *selective perception* has been affected by what is called the halo effect. The halo effect has to do with judging or evaluating a person, event or place by a single trait or experience (Wade and Tavris, 2005). This one and overall experience can be either good or bad but will prejudice our further involvement with the same stimulus. Often, people try to perceive further interaction with the stimulus based on the first impression. If this perception is incorrect, it often takes considerable pressure to concede this fact and break the halo effect.

2.2.6.3 Selective Retention

The human mind is constantly bombarded by external stimuli all the time which pushes the mind to keep thinking about whatever the eyes perceive or what the ears hear. And, although we seem to have lost out on recognizing the power of the mind, the mind is the central processing unit in the brain that sifts through all the information that we see and or hear. It retains the required information in the subconscious to be able to retrieve when required and the rest it discards. Though the mind is capable of doing this function efficiently and keeps the clutter out, not many people are aware and use the will power to do so. They just tend to let the mind get crowded.

While storage of information is a very important function of the mind, there are other amazing functions of the same mind. We all make decisions in our everyday lives, some conscious and others unconsciously. Whenever one makes a decision on any matter, it is the mind which is going through all the information that is available and finally arriving at a conclusion which is based on objective reasoning and tells one what to do and how to get it done.

When one has set their mind on something, the mind power begins to act on that one thing. The mind discards all other works and focuses only on the set priority, assimilating all the information and directing the thoughts to that set goal. The power of concentration of the mind on the priority gives a mental clarity on the detailed action plan and tasks that need to be carried out to reach the goal. This is what is referred to as *selective retention*. The *selective retention* process of the mind is very powerful and is able to review all the stimuli and thoughts and retain only useful information in the subconscious mind which can be retrieved as and when required by the same mind (Gagne and Driscoll, 1988).

While perception refers to the process of categorizing and interpreting information that is attended to, *selective perception* refers to the process of categorizing and interpreting information in a way that favours one category or interpretation over another (LittleJohn, 1999). *Selective retention* in relation to the mind is the process by which people more accurately remember messages that are closer to their interests, values and beliefs than those that are in contrast with their values and beliefs, selecting what to keep in the memory hence narrowing the information flow (Gagne and Driscoll, 1988). *Selective retention* is also the perceptual process in which people subconsciously are most apt to remember information that confirms their previously held attitudes.

Thus, *selective perception* is generally considered to represent a bias in information processing. More specifically, information tends to be selectively perceived in ways that are in agreement with existing individual needs, goals, values, attitudes, and beliefs. Like selective perception, selective retention is biased in terms of what information gets retained, with information that is more in agreement with existing belief structures more likely to be retained in memory and thus more likely to be recalled at a later time than information that is less congruent with existing belief structures. This process generally occurs automatically, outside the conscious awareness of the perceiver. The process of *selective perception* can occur at various stages of perception, including the initial recognition and categorization of stimuli, attention to competing stimuli, and the interpretation of these stimuli (Gagne and Driscoll, 1988).

2.2.6.4 Primacy and Recency

In our lives, there are many situations in which we are required to remember lists of items. Often times we are presented with various situations some as simple as remembering what we were supposed to pick up or deliver at a friend's place and some as complicated as having to memorize and later remember a list of vocabulary words in our lives. It is thus important to know and understand how we remember such things so that we can effectively recall them whenever need arises.

When presented with a list of items to recall Reed (2004), along with other researchers have found that the likelihood of recalling items does in fact depend on the item's position in a list. This is what is referred to as the serial position effect. The serial position effect refers to the finding that recall accuracy varies as a function of an item's position within a list. The most common finding is that words at the beginning and end of the list are often easier and more accurately recalled than those words in the middle of the list. The improved recall at the beginning of the list is often referred to as the *primacy effect* while the improved recall at the end of the list is referred to as the *recency effect*.

Primacy refers to something which is most powerful and has dominion. *Recency* on the other hand refers to an event which has happened recently, it is the most recent event in a chronicle of events. According to Murdock (1962), the primacy effect in psychology and sociology is a cognitive bias that results from disproportionate salience of initial stimuli or observations while the recency effect is a cognitive bias that results from a disproportionate salience of recent stimuli or observation. People tend to remember items that were at the beginning and end of the list rather than in the middle of the list. When taken together, the primacy and recency effect predict that in a list of items, the ones most likely to be remembered are the items near the beginning and end of the list. *Primacy and recency* effects on acquired stimulus control of behaviour refer to the superior influence of first learned and last learned associations respectively (Murdock, 1962).

According to Reeds (2004), one suggested reason for the primacy effect is that the initial items presented are most effectively stored in long term memory because of greater amount of processing devoted to them. This is said to be due to the fact that the short term memory at the beginning of whatever sequence of events is being presented, is far less crowded and that since

there are far fewer items being processed in the brain at the time presented than later, there is more time for rehearsal of the stimuli which can cause them to be transferred to the long term memory for longer storage. This is the reason why a person who reads a sufficiently long list of words is more likely to remember words towards the beginning than in the middle.

Reeds (2004), goes on further to state that one suggested reason for the recency effect is that these items are still present in the working memory when recall is solicited. This is the reason why when asked to recall a list of items in any order, people tend to begin to recall items with the end of the list recalling those items best because the items at the end of the list are still in short term memory at the time of recall.

More recent research has suggested that contextual factors such as people's ability and motivation to process the persuasive communication are important determinants in whether primacy and recency will occur. Literature tends to agree that when presented with two conflicting persuasive messages, people who are highly motivated to think tend to be more influenced by the first than the second message whereas those low in motivation to think show reduced recency effects (Murdock, 1962). Thus when people are motivated and able to process information, they will demonstrate primacy effects. However, when motivation or ability are low, recency effects will tend to occur.

Studies have highlighted that both primacy and recency effects are possible depending on the context in which information is presented. The order in which information is learned or acquired determines how reliably it will be recalled. After a learning episode, we will remember best that which comes first, second that which comes last and least that which comes just past the middle. Contextual factors such as type of or topic of information, personal responsibility for outcomes, an individual's motivation to think about the topic have been found to moderate primacy and recency in human memory.

2.3 Functions of the Media

The world of the twenty-first century is changing at a rapid pace, and so is journalism. This is even more the case with international journalism which influences how we perceive the media that brings us news and opinions about peoples and countries far and wide. From today's

perspective, the media is multifaceted and has undergone vast changes that it even includes environmental journalism.

According to Lister (2002), the media in the established sense, usually refers to communication media and the institutions and organizations in which people work (the press, cinema, broadcasting, publishing, and so on) and the cultural and material products of those institutions. Hence, no matter how we choose to view the process of mass communication, it is impossible to deny that an enormous portion of our lives is spent in interaction with mass media. The media defines our realities and shapes the way we think, feel, and act. It is the world made meaningful; it resides all around us and offers us remarkable opportunities. The average person spends 3,700 hours a year-sixty five percent of their waking hours consuming media content (Lister, 2002).

Any discussion of the media always revolves around the topics of responsibility and freedom. In the twentieth century, great emphasis was given to press freedom, whereas responsibility and role of the press received little or no attention at all (De Beer and Merrill, 2004). Today however, a free, independent and responsible press is not only of great importance but essential to proper journalism and a progressive and vital society and, such a press entails the convergence of media, media related fields, and media technologies. Satellite broadcasting and the internet create global awareness in times of crises and are a major factor in the way crises are handled. The internet is both an information source and a communication tool, and as such, is a principle engine for change in environmental journalism.

The media are accepted as powerful forces through which we come to know ourselves and one another. They function both as a forum in which issues are debated and as storytellers that carry our beliefs across time and space (De Beer and Merrill, 2004). Through these roles, the media are central to the communication of environmental news and maintenance of environmental journalism. This in turn, places a responsibility on the communities as important agents of change in their creation and maintenance of a safe and sustainable environment in which they live in.

The media so fully saturate our everyday lives that we are often unconscious of their presence, not to mention their influence. Simply put, the media informs us, entertains us, educates us, delight us, and annoy us. They move our emotions, challenge our intellects, insult our

intelligence and often reduce us to mere commodities for sale to the highest bidder. Media help define us and they shape our realities (De Beer and Merrill, 2004).

The world's media systems are many and complex, and they are constantly changing. Some of the changes that have taken place in the world's journalism are development in the field of technology. This development really got underway with the advent of the internet in the 1990s which has changed the way people communicate forever (McLuhan, 2004). It is however, worthy noting that with the increase in technology has come the communication of people who share similar views concerning the environment hence the birth and subsequent growth of environmental reporting and journalism.

Although bureaus of major news media have not significantly increased in the new century, almost all nation states have a national news agency for the purpose of gathering news – including environmental news from around and about the nation and distributing such news to the media and non media clients. While journalism is about news and the way it flows within countries and internationally, research shows that environmental news is still far down the news scale, with local and domestic political news dominating. Global communication on the other hand, has largely become a giant miasma of violence, sporting activities, political and military propaganda (Lister, 2002).

Media coverage serves to transform discrete environmental issues into wider patterns and major issues for audiences. This entails that the media definitely helps set the public agenda on the environment making the role of the journalist as a watchdog. Media's role is to advance national interests and to resist imperialism and racist exploitation. Media role is that of business ventures that sells and thereby disseminates information which educates and acculturate those who are still developing (Hansen, 1991). Environmental journalism can be enriched by taking cognizance of these roles.

The media plays a pivotal role in the issues of the environment. It is the key platform for raising issues of the environment. By presenting the facts, figures and reality on the ground, citizens in each country are in a better position to make informed decisions, opinions and choices on the matter. The media also sets the agenda on the environment. It helps key the issues on the front burner through prominence given to pressing environmental issues and challenges. The approach

includes the news slant given to the stories, headlines, using different angles in the umbrella coverage format to give a comprehensive coverage of issues as well as reinforcing the message through editorials and opinion pieces (Hansen, 1991).

The media also uses exposes and investigative pieces to show the extent of the problem as well as flag up some of the factors impacting negatively on the environment. The media also delights and entertains by highlighting the breathtaking and picturesque of the world's environmental assets such as flora and fauna, waterfalls and game parks in different parts of the world, thereby presenting an opportunity for the public to appreciate the true value of the natural resource they possess, hence instilling in us a keen interest to preserve and protect such heritage. A brief discussion of the functional theory below further illustrates the major functions of the mass media.

The functional theory which is sometimes referred to as the functional approach to mass communication theory was propounded initially by Harold Laswell in 1948 and was later on adopted by Charles Wright in the 1960s (Wright, 1960). The theory explains that society has uses for the media and mass communication. According to Wright (1960), the media serves many functions for our society which in turn describe the audience's use for the media. The prediction is that people will use the media for their own specific functions since the audience has a need or needs which the mass media fulfils.

According to Littlejohn (1999), the functional theory works on assumptions that humans have a certain amount of free will. This implies that as much as humans can use mass communication for any number of reasons, they have to use it for something anyway. Thus humans can make a choice about what or not to watch for any reason even if it is for noise, entertainment, education or even cultural transmission. Griffin (1997) further mentions that the other assumption of the theory is that knowledge is universal hence; it is an indispensable truth that mass communication functions as a part of our society. Whether society realizes this or does not, the mass media is our main source of surveillance, correlation, transmission, and mobilization. The final assumption is that the theory is objective and value neutral as it does not matter who is going to use the media because everyone does it for a reason.

According to the functional theory of mass communication, there are five functional approaches the media serves users. These are; Surveillance, correlation, transmission, entertainment, and mobilization (Lazwell, 1948 and Wright, 1960). In the context of the functional approach to mass communication, surveillance means that the media provides news and information. Correlation means that the media presents information to the audience after they select, interpret, and also criticize it. The cultural transmission aspect of the theory or rather the cultural transmission function means that the media reflects our own beliefs, values, and norms. Mobilization refers to the media's function of promoting society's interest especially in times of crisis. The mass media also entertains us in our free time and provides an escape from everyday's life (Wood, 1997).

In the event of the media becoming dysfunctional, the theory could be fake. However, the theory makes sense in that there are several functions of the mass media which, despite being numerous are never in conflict with each other (Griffin, 1997). This is true as some people can and do use the media for a number of reasons. This is simply because human beings have needs of which some are fulfilled by the mass media.

So, just like anywhere else around the globe, the media in Zambia informs, educates and entertains. Where informing is concerned, the media is considered and looked upon as an important sector that is supposed to inform members of the public about issues and new challenges in environmental circles. These could be new developments that the media feels are of relevance to society. Education wise, there have been features and articles in the print media and television documentaries on the environment. All these have been done in trying to enhance and foster public environmental education and awareness. However, the situation still remains begging as not much has been done while there is still a lot more to be done by the media in Zambia especially.

Chapter 3: Literature Review

3.0 Introduction

Environmental information forms the crux of environmental action. For the prominent role that the mass media play in disseminating information, they can also ensure widespread distribution of information and thus catalyze environmental action (UNEP, 2006). Thus, in the area of environmental journalism, the media must and has to continue to play a strategic role in raising environmental awareness, channelling environmental information and inspiring environmental action all over the entire world.

3.1 Environmental Journalism around the Globe

As a specific issue of serious concern to both the public and politics, the environment started gaining the Western news worker's attention in the 1960s. By the 1980s, environmental news was considered worthy of spasmodic media attention (Lester and Hutchins, 2009). Since then, the media has played a key role in shaping meaning of environmental news. Alongside the development of environmental news is the research attention of environmental scholars whose focus is on how the media covers environment and sustainability issues in their reporting.

However, most of this research into environmental journalism has been focused mainly on the Western Countries which are highly industrialized. Brossard and McComas (2004), states that there have been noted differences in environmental issues coverage between different western countries, for example, a cross cultural comparison of global warming coverage in the United States and France found that the United States placed more emphasis on conflicts between scientists and politicians whereas France's coverage was more event based, focused more on international relations, and offered a more restricted range of perspectives. This concentration of research in the west leaves many areas of the world out of the scholars' understanding of environmental issues thereby creating a gap in our understanding of the immediate environment surrounding us.

Lately however, despite the gaps in the understanding of environmental issues, the environment has been an indispensable and inevitable part of the news agenda and has become an important

aspect of our everyday's life that overlaps with those of politics and economics. This comes as a result of the realization that Environmental journalism not only needs to keep track of environmental issues within society, but also because it is necessary to think beyond just keeping people informed about events especially regarding Mankind's actions with respect to the environment and their effects. Environmental journalism is also an urgent need because we have to educate people so that, living in a democracy, it becomes possible to organize and mobilize the public to demand changes that bear in mind the future of our children, grandchildren, and all subsequent generations (McNeil, 2000). This can only mean that journalists must become active partners in the search for the solutions of community environmental problems.

Environmental Journalism is quite complex because it is not limited to a merely technical or scientific level, but combines many aspects of life such as the economic perspectives, a political will, a social cultural component, and other important aspects (Frome, 1998). There is less environmental coverage compared to the environmental problems and challenges the world is facing because of the mistake of not realizing that there exist intricate connections between the environment, economy, culture, politics, and inevitably, society in reducing the naivety or lack of knowledge. When viewed from a technical or mostly economic perspective, it means impoverishing the media or journalistic coverage of environmental problems, issues and challenges. This calls for a revolutionary character of environmental journalism at global level, and the need to exchange the fragmentary nature of traditional professional practices for a new attitude based on greater attention given to each issue. Instead of jumping from event to event, it would be desirable to deeper the relevant stories so as to focus community attention on them (Anderson, 1997). Only then, the world could deliberate with knowledge about the main issues of the environment.

In the pursuit to make this a reality which is visible and beneficial to the entire globe, environmentalists all over the world have emphasized on thinking globally and acting locally. This implies that, as much as most of the environmental problems are commonplace and experienced globally, education, training, and awareness generation have to be country driven; addressing the specific needs and conditions of developing countries and reflecting their national sustainability development goals, priorities and strategies (UNEP, 2006). This means that journalism must be committed to continuously addressing the challenges and responding to the

needs of the entire world by strengthening appropriate interactions among scientists and policy makers, and providing scientific input to policy-making and scientific knowledge to the public.

All in all, globally, media coverage of environmental issues is almost negligible as only less is done. The situation is much more worse when developing or third world countries are considered as compared to highly industrialized and developed countries which are more advanced in environmental reporting. They started much earlier than developing nations and this is evidenced by their infinite numbers of forums and organizations based on environmental journalism which are now spreading worldwide. The developed countries are doing a lot of things for the overall global environmental development although their impact has not yet been significantly registered in most parts of the world especially the developing countries (McNeil, 2000).

The condition of environmental journalism in third world countries is quite deplorable while in others it is almost non-existent and extinct in others as singular importance is not given to this subject. There is still much more that needs to be done in the area of environmental journalism at a global level if sustainable environmental management spearheaded by the media has to be achieved for a better today and tomorrow for an average citizen. The attitude that should have been shown by the media is not what it should be, there are more environmental problems, challenges, and issues which the media need to bring to the masses' attention through massive and committed environmental journalism.

3.2 Environmental Journalism in Africa

Environmental journalism has often been stressed as an important pursuit. While it is much more pronounced in developed countries, not very much has been done in Africa which is a developing continent. This is because in most of the countries, environmental journalism is either non-existent, or where it exists, the media has not done much. Despite this scenario, there are a few countries such as Kenya which have been, and are very much actively involved in environmental journalism. Others within the continent such as Zambia are still getting started although at a considerably slow pace.

Almost two decades ago at the United Nations Conference for Environment and Development (UNCED), some of the most important global environmental issues and a range of associated

responses were discussed. A number of resolutions and conventions were approved and adopted. Key responses included Agenda 21 and the NGO principles for equitable and sustainable societies (Hattingh, Lotz-Sisitka and O'Donogue, 2002). Both responses recognize the important role that the media plays in creating public awareness and enabling the development of critical thinking and problem solving skills. While these guideline documents presented some new ideas and approaches for environmental reporting, most of the recommendations for the media are aimed at targeting people with information to promote behaviour and attitude change. There is however, increased realization of the limitations of behaviour change orientations to education, awareness raising and social change especially in Africa.

UNEP (2006), identifies Africa as one of the five priority areas with the urgent need for environmental journalism. This stems from the realization of the need for accurate and balanced environmental journalism which requires the firm grasp of local, regional, and international environmental issues to be widely incorporated into mainstream reporting. This will ensure that accurate environmental information becomes fully and strategically integrated into the public domain sooner. Since environmental information is dynamic and differs from one country to another with few exceptions, there is a call for concerted, consistent and informed environmental journalism in Africa. This is where the media comes in because the media and media practitioners play a crucial role in information dissemination and awareness raising about sustainable development and in promoting action for social change.

The cause of environmental journalism in Africa has been and is being actively championed by the United Nations Environmental Programme which has been active in developing programmes and publications for African journalists in order to equip them with relevant skills and tools for raising the quality of environmental journalism (UNEP, 2006). Besides championing the cause of environmental journalism, UNEP has also been holding several workshops for African journalists, and, as a result of these meetings, the African Network of Environmental Journalists (ANEJ) was formed. This implies that, at continental level, something is being done in trying to promote environmental journalism hence, the ultimate responsibility of one country successfully implementing and conducting environmental journalism lies within its capacity and political will to do so. Environmental journalists have not only a role to play in environmental journalism, but

also a sacred duty of keeping the public informed. After all, the public have the right to know the problems, issues, and challenges facing them in their day to day life.

There are however a number of issues associated with environmental reporting in Africa and these issues are responsible for the slow development of the same. To begin with, environmental reporting is not seen as a priority. This influences the nature and amount of media coverage dedicated to environmental reporting ultimately leading to limited sensational environmental reporting and superficial interpretations of environmental issues. This could perhaps be attributed to the shallow understanding of environmental issues by journalists probably due to reasons such as access to sources of environmental education, the priority accorded to environmental reporting and the approaches taken to environmental news gathering and reporting.

It is worth noting that in some countries, the media is still influenced by authoritarian governments where reporters are forced to serve the government of the day either directly or indirectly (Hattingh, Lotz-Sisitka and O'Donogue, 2002). For instance south Africa, during the apartheid era it had a racially biased media which was heavily controlled by the media. Recently, Zimbabwe also had problems with press freedom as was the case also in Angola when it was ruled by a single party. In Kenya, the government attempts to control news, particularly when it affects the economy or has potential to contribute to national political instability (Hattingh, Lotz-Sisitka and O'Donogue, 2002).

More often than not, journalists find it difficult to fit environmental news and stories in a single frame hence the fusion into the existing and available media frames as environmental news does not easily fit into one frame. For example; if a newspaper is reporting on global warming, it will fall under the scientific frame, environmental education workshop in the society frame and tree planting under ecological framework (Hattingh, Lotz-Sisitka and O'Donogue, 2002). There is always a tendency on the part of journalists to report objectively on facts and events to do with environmental issues as compared to other issues such as politics. This is probably due to the lack of insight into the complexity and diversity of environmental issues hence the limited and biased environmental reporting across Africa.

3.3 Zambia's major Environmental Problems and Issues

The world has been faced with a number of environmental problems and issues. Almost every part of the globe has experienced or is experiencing environmental problems although they differ in magnitude and severity from country to country, region, and even continent to continent. And, just like any other country in any part of the world, Zambia has been experiencing a number of environmental problems, challenges and issues and is still affected by a number of environmental problems, issues, and challenges. For example, Zambia's weather is tropical with three distinct seasons namely; summer, winter and the rainy season. Recently however, there have been distortions in the way in which these weather patterns are occurring as compared to some years before. Environmentalists have largely attributed this to climate change.

One of the greatest challenges facing humanity is climate change and global warming and, Zambia has not been spared. Climate change is one of the main challenges humankind will have to face for many years to come. According to Jepma and Munasinghe (1998), Climate change is described as the change of climate which is attributed directly or indirectly to human activities that alter the composition of the global atmosphere and which are in addition to natural climate variability observed over comparable time periods. The potential threat of global climate change is a very serious problem collectively faced by humanity as a result of its own activities.

Climate change is affecting our lives and the places we live in Zambia. It has the potential to dramatically impact the lives of future generations. It could become a major threat to world food security, as it has a strong impact on food production, access, and distribution. It is expected to increase the number and strength of these natural hazards in the coming years, leading to an incremental rise in the vulnerability of natural and social systems. This is evident in the earthquakes that just hit the people of Haiti and Chile (Sky News, 2010). In Zambia however, many parts of the country have been experiencing floods and droughts year in and year out as can be observed from the capital city, Lusaka. There is little doubt that the increase in the occurrence of disasters is impacting more on the poor who inevitably are the most vulnerable and suffer the impacts of changing environmental conditions.

Least Developed countries are more vulnerable to climate related disasters and those countries unable to cope with current climate related disasters will be the most poorly equipped to deal with the adverse impacts of climate change (Allen, 2006). It is hard for the people to adjust,

because they do not have the required resources to change their circumstances. As a result, climate change may increase poverty and affect sustainable development, making it harder for Zambia to achieve the Millennium Development Goals.

Even though possible impacts of climate change on the environment and the society in Zambia have already been well documented, this information has hardly reached the public out there. As a result, vulnerability of the society to climate change remains unchanged despite significant technological advances. To different people in different parts of the world, it is important that they have an understanding of what climate change means in the different parts of the world as they are affected differently (LaMay and Everette, 1991). This calls for effective communication, public outreach, and education to increase support for policy, collective action, and behaviour change across all societies. In Zambia the scale of changes required, however, and the vast number of people and interests that must be influenced, call for massive environmental journalism of a greater magnitude.

It is difficult to avoid the feeling of being overwhelmed by facts and figures about population. They are thrust in front of us daily by our government, the media, and other institutions such as the Central Statistical Office. Globally, there is visible evidence of the enormous increase in human population. Populations all over the world have been increasing at unprecedented rates and as a result, have placed enormous strain on the planet's natural resources in that, the more the population of a given country, the more poor people there are (Newman and Matzke, 1984).

According to the Central Statistics Office (2005), the population of Zambia in 2003 was estimated at 10,812,000 with an annual population growth rate of 2.6 percent which placed it as number 73 in population among the 193 nations of the world. The annual population growth for 2000 – 2005 was at 1.16 percent with the projected population for the year 2015 at 12,670,000. However, this figure seems to have been reached by the year 2007. CSO went on to state that 40 percent of the population lived in urban areas in 2001, with the capital city, Lusaka's population at 1,577,000 in that year. The main urban population concentrations were on the Copperbelt mining complex. The increase in the population of a country brings along some excess environmental baggage.

Related to the rapid population growth in the country is the mushrooming of unplanned settlements in the major cities and urban centers which has been caused mostly by rural urban drift. In Zambia, the increasing population entails more environmental problems in that more and more people move to the urban areas in search of employment and better livelihoods. Most of them do not get the expected employment hence end up in mushrooming unplanned squatter settlements.

The effects of this rural urban drift manifest itself through the critical shortage of social amenities which are very important to every human being. Unplanned squatter settlements usually have no proper roads, drainages, clean drinking water, sanitation and health facilities just to mention but a few (Ministry of Finance and National Planning, 2006). Lack of these social amenities in turn causes water borne diseases such as cholera and dysentery. Such is the plight of compounds such as Misisi and Kanyama in the country's capital city, Lusaka. Moreover, there is exploitation of the already strained environment's resources as the poor strive to make a living for themselves. This type of development is a stumbling block to the achievement of sustainable development and the MDGs.

The pollution which the country is experiencing cannot go unnoticed especially in urban areas and mining towns. In Lusaka the capital city, and other big cities, sight pollution is very evident by billboards and overhead power lines crisscrossing. Quarrying and mining activities is another source of air pollution in the country (ECZ, 2001). Air Pollution is the human introduction of chemicals, particulates or biological materials that cause damage to the environment into the atmosphere. Mining pollutes the air through the emission of dust particles into the atmosphere which change behaviour and becomes particulate matter (Carl, 1998). Polluted air results into acidic rain which is damaging and potentially harmful to our fragile ecosystems. This pollution of air by mining activities is more on the Copperbelt part of the country which houses almost all the country's mining activities as well as the increased number of automobiles and other industrial activities.

Other prominent forms of pollution are water pollution especially groundwater which is as a result of surface runoff from agricultural fields and also discharge of industrial effluents into the major water bodies in the country. With the increase in industrial activities has come the increase in industrial effluents being discharged into the water bodies (ECZ, 2001). It is unfortunate that

most communities do not have access to clean and piped drinking water but continue using the polluted water at the expense of their health and ultimately, lives.

Deforestation is another serious environmental problem that Zambia has been experiencing in the recent past and it continues to challenge the country. Vast tracts of land have been cleared for charcoal production. Many households if not most of the households in the country rely on charcoal as a source of energy. This could be partly due to the high cost of electricity. Moreover, most parts of the country especially rural areas are still not electrified hence the rising demand for charcoal as an alternative source of energy. Moreover, more land is cleared for agricultural and illegal settlement purposes. Certain types of farming systems that are practiced such as slash and burn and chitemene system also accelerate deforestation. Uncontrolled logging has to a large extent accelerated deforestation in the country. To make matters worse, desertification has also crept into the country starting with the southern part of the country.

The Environmental Council of Zambia (2001), mentions water and sanitation as one of the major environmental challenges facing the country. Water supply is a problem in that most people in the country do not have access to safe drinking water. Only a few have clean piped drinking water in the urban areas. In peri-urban areas of the country, water is accessed on a communal basis with an erratic supply and not individual as is the case in urban affluent population. The rural areas on the other hand, still get their water from a point source such as wells and boreholes and in some cases, from open untreated streams or through riverbank filtration. Sanitation is usually the use of pit latrines and open bushes which in turn pollute the groundwater reserves.

Solid and liquid waste generation and management is another challenge which the country is experiencing. With the advent of industries in Zambia has come an enormous generation of waste. Industries much more often produce liquid waste as compared to domestic users who generate solid waste. Whereas garbage generation does not seem to be a problem, ECZ (2001), states that garbage collection and solid waste disposal a problem and is more pronounced in urban areas due to lack of capacity by the municipalities to handle the solid waste generated. In most cases, residents dig small pits in their backyards to throw in the garbage which in turn sinks down to the groundwater reserves and contaminates them. In Lusaka, the story is the same as the LCC has not done much in this area.

Poaching is another activity that has posed serious environmental problems to the country's animal species. Some of the animals that are seriously affected and some have even faced extinction include the big five which are; the elephant, rhinoceros, lions, big cats such as the Leopard and which have been deemed as the endangered species (UNEP, 2006). Endangered species refers to species that are threatened with extinction through either by direct hunting or habitat destruction (ECZ, 2001). Species are being lost through illegal hunting by unscrupulous and unlicensed people or people encroaching into animal habitats such as game parks. Efforts have been made by ZAWA to stop and minimize poaching and also other human activities which deplete our animals as well as to use our resources sustainably.

Poverty is one of the main environmental challenges which the country faces. One cannot talk about issues of sustainable development without addressing poverty. Poverty is one of the greatest challenges to the environment as the poor rely more on the environment for their livelihoods and survival. According to ECZ (2001), in 1998 73% of the country's total population was considered poor, out of which 58% were extremely poor and 15% moderately poor. There are more poor people in rural areas than urban areas. It has widely been accepted that the relationship between the environment and poverty is interlinked. However, the most reasonable way of describing this relationship is that it is a downward spiral or vicious circle. This is what makes the media a key player in the reporting of environmental issues. The more people will be aware of their environment, the more sustainable they will be in exploiting their environment.

Land use in the country is another environmental issue of major concern. Naturally, Zambia is endowed with vast levels of resources in the form of land, wildlife, flora and fauna, water and minerals. It is the overexploitation of these same resources that makes land an environmental issue of utmost concern. Apparently, the land that is used mainly for agricultural practices is the most vulnerable in that those who practice farming do not do so sustainably thereby degrading the land (ECZ, 2001). The use of heavy machinery tends to cause soil compaction together with the application of relatively huge amounts of chemical fertilizers as well as other agricultural chemicals on a regular basis continues to degrade the land by reducing soil pH thereby limiting the range of crops grown on such soils. Still, other unsustainable farming practices such as chitemene also degrade the land. This will ultimately lead the country to such a time when

farming for subsistence purposes will no longer be useful. Quarrying and mining activities equally contribute significantly to environmental degradation and disrupts people in so many ways such as relocating to other places as was the case with Albidon mines in Mazabuka.

The impact of HIV/AIDs on the environment cannot go unnoticed. Just like any other country in Sub-Saharan Africa, Zambia is affected by the scourge of HIV/AIDS in such a way that the pandemic tend to sweep away through death and incapacitation, the much needed human resource in the various fields required for sustainable environmental exploitation. There are so many key players in the environment both directly and indirectly although many do not realize this. Stakeholders in environmental sustainability include policy makers, journalists, ordinary members of the Zambian community, teachers, resource persons and students among others. A loss of each one member of such a stakeholder takes the country a step back as the country is denied of the much needed human resource in making a difference in the area of environmental sustainability. With less deaths and eventually no deaths as a result of HIV/AIDS, the country will have more players in the environmental sector making sustainability of the environment a dream achievable by each and every Zambian for a better livelihood.

3.4 Environmental Education and Awareness in Zambia

With the effects of climate change laid bare for all to see, Environmental Education has taken many shapes and forms. Before one can learn and understand something, they need to be aware of its existence. In Zambia, Environmental awareness has been one of the critical areas in as far as protection of the environment is concerned as only a few organizations have come up with initiatives in an effort to enhance environmental protection. Ariasingam et al (1999), defined environmental awareness as environmental knowledge for civil society, children, parents, village leaders, and government officials.

Environmental Education is defined as a permanent process in which individuals gain awareness of their environment and acquire the knowledge, values, skills, experiences, and also the determination which will enable them to act individually and collectively to solve present and future problems as well as to meet their needs without compromising those of future generations

(ECZ, 2001). From the two definitions although different, it is clear that EE and environmental awareness are closely interrelated that it is not practical to discuss one from the other.

Non-Governmental Organizations together with the government (though on a much lesser scale) have come up in the recent past to carry out environmental awareness campaigns especially in the seemingly more affected places such as the Copperbelt where mining has wreaked havoc in the lives of many ordinary citizens. The massive mining activities have caused a lot of mining effluents into the local water bodies hence causing serious environmental health hazards to the local communities that use the same water for drinking and other domestic uses. Environmental awareness campaigns are highly recommended by stakeholders interested in environmental awareness who feel that without such kind of initiatives, the environment would be at much more risk than it is now.

Much of this awareness however, seems to just be on paper. The situation on the ground right now cannot go unnoticed as it remains begging. Where the media are concerned in the awareness, there is only one television station that is broadcast nationwide with the second one trying to gain its ground right now. For the print media, there are three main tabloids which are circulated country wide on a daily basis (ECZ, 2001). Unfortunately, in these media including radio transmission, space dedicated to the environment is very minimal compared to other aspects of our everyday life that are taken care of. Environmental documentaries aimed at creating awareness come once in a while and usually at times when only few members of the public are able to watch. This means that the very roots and foundation of environmental education which is environmental awareness are still shaking as they continue to suffer setbacks. This is what makes environmental journalism inevitable in the awareness and environmental education of the Zambian community.

Besides NGOs, the government has got a policy, guiding principles, and strategies. The objective of the government on EE and environmental awareness is to enhance public and political awareness and understanding of the need for environmental protection, sustainable natural resource utilization, conservation, and management as essential partners in development (GRZ, 2007). This shows the passion and zeal that the policy makers have on environmental awareness and EE. The governing environmental body the ECZ releases a number of publications on the same topic in trying to achieve EE and environmental awareness. Whereas formal education

plays a significant part in EE and environmental awareness, those communities which are not formally educated are left out. Meanwhile, they are major players in environmental protection and sustainability. This is where the problem comes in, in that most stakeholders in environmental awareness and EE have no access to publications on the environment as well as formal education and even most of the campaigns are mostly carried out in urban areas. Most of the information they need and even the guidelines for the campaigns and implementation are lacking in their respective areas. This is what makes the situation begging because all the various stakeholders' participations is inevitable if maximum sustainability of the environment is to be achieved (UNEP, 2006). Where ECZ and other concerned stakeholders have not done much, it is the role of the media to reach out to the people and teach them.

3.5 Environmental Journalism in Zambia

Despite the deepening call for more environmental journalism, not much research has been done in this area of the environment in Africa and Zambia especially. The only study that has been done which concerns the media is its role (the media) in environmental management. This study in my own understanding as well as analysis of issues was done a bit too early for the country as many people were not even aware that they needed to use and exploit their environment in a sustainable way.

There is need for much more sensitization in terms of awareness as well as action to protect and exploit the environment sustainably. More studies in Environmental Journalism must be carried out in Zambia to ensure that the media is not neglecting its much needed duties to the public, as the public has got the right to know the issues affecting them in their daily lives so as to enable them make informed decisions. Well informed people are better placed people in society and they are responsible people both young and old.

3.6 Conclusion

There is still a lot of work which the media has to carry out in enhancing public environmental awareness. More and more natural resources are being depleted giving rise to more and more

environmental issues and challenges. In resolving these challenges and issues, the media plays the biggest role. Lately, public environmental awareness and education were seen as the work of NGOs, then, the responsibility of educating the public was shifted to government through the Ministry of Education (MoE). However, it is clear that the formal education sector cannot reach those people who are outside the formal education system but are major stakeholders in sustainable environmental management. As a result, the media becomes one of the major players in environmental journalism. It is worth mentioning however that, this will be the first ever study on the role of the media in public environmental awareness and education in Zambia.

Chapter 4: Research Methodology

4.0 Introduction

This chapter discusses the ways in which the study was conducted from the beginning up to the time the report was submitted. It involves; research design, target population, study sample and sampling procedure, research instruments that were employed in the collection of data, and finally data analysis and interpretation.

4.1 Research Design

This study used both qualitative and quantitative research designs. The study mainly used description (qualitative) as research questions were used in the place of hypotheses as some of the views from the respondents were subjective. However, quantitative evaluations were also used as some of the data that was collected needed quantification for easy analysis and interpretation. This was done using the Statistical Package for the Social Sciences (SPSS). Microsoft Excel was also used in the quantitative analysis of the newspapers' content and frequency analysis data.

Qualitative research design was used because it explores attitudes, behaviour, experiences and it attempts to get an in-depth opinion from respondents. Quantitative research design was used to generate statistical data which makes it easy to interpret and understand large amounts of data. It was in view of the above reasons that both qualitative and quantitative research designs were used in this study.

4.2 Methods of Research

Three research methods were employed namely; content analysis, qualitative and quantitative surveys. Content analysis was used in the case of the newspapers which were for a period of three selected months (May, June and July) in the year 2010. All the environmental contents published by the three newspapers in question were analysed in order to determine which aspects

of the environment were usually given more coverage in the three dailies as compared to others. Quantitative and qualitative surveys were carried out on a cross section of society (Urban – Lusaka, Peri-Urban – Mazabuka and Rural – Chongwe), editors as well as journalists of the three dailies under study.

4.3 Target population

There were two target populations for the study. The first target was three daily explicit newspapers – *The Post*, *Times of Zambia* and *the Zambia Daily Mail* (that is, three months by three daily publications). The second target population were a total of 250 respondents that were distributed as follows; 65 Journalists from the three selected daily newspapers, 150 people from the selected urban (Lusaka), Peri-Urban (Mazabuka) and rural (Chongwe) areas of Zambia, and 35 editors from the three daily newspapers in question (*The Post*, *Zambia Daily Mail* and *Times of Zambia newspapers*).

4.4 Study Sample and Sampling Procedure

The study employed mostly purposive sampling to all of its samples because description rather than generalisation was sought as well as the research methodology used and the area of study chosen. The study started with content analysis (of environmental articles publication) of three months by three daily publications of the selected newspapers (*The Post Newspaper*, *Zambia Daily Mail* and *Times of Zambia*) in the country's capital city, Lusaka. The three print media were purposively selected from the existing print media in the country because of the following reasons among others; the three daily publications had been in existence for quite some time now, all the three dailies were circulated to almost all parts of the country (including the research sites) except for those places that were really difficult to reach and, the three newspapers advantageous to the study compared to other newspapers in the country because they had publications on a daily basis.

The editors for the same newspapers were used as they are the ones who had the final say on the content of their publications, they were the ones that acted as final gate keepers of the information that reached the masses every day. The study also administered questionnaires to

ordinary members of the public i.e. a cross section of society (urban, rural and peri-urban areas). Journalists were also selected from the three selected daily publications as they were the first gatekeepers responsible for mainly the collection and preparation of news for publication every day. Ultimately, Lusaka was used as the main site of the study because of the ease of access to both primary and secondary sources of data while Chongwe and Mazabuka were used as they were selected for the study because of their being rural and Peri-Urban areas respectively, as well as their easy accessibility to the main area of study - Lusaka.

4.5 Data collection instruments

The study used three different research instruments as reflected in Appendices 2- 4. Appendix 2 was administered to journalists; Appendix 3 was administered to the Editors of the three daily newspapers in question, Appendix 4 to a cross section of members of society in the three selected urban, peri-urban and rural areas of Zambia.

4.6 Data Collection

Secondary data was collected from libraries and study centres as well as resource centres around Lusaka and also the internet while primary data was collected from the mentioned study areas. After secondary data collection, the study continued with a collection of all environmental news that was published by the three daily publications for the three selected months in the year 2010 (May, June and July). This was done for the purposes of determining environmental content coverage carried out by the three newspapers in question during the selected period of time. Questionnaires were then administered to the editors, journalists, and to a cross section of society in the three selected urban, peri-urban and rural areas.

Questionnaires were used in the collection of primary data because of the following reasons; they were suitable for the sample size which was large. The study was seeking for people's opinions, attitudes and experiences in a number of issues and for easy gathering of this data, analysis, interpretation and understanding of research findings, questionnaires were the most suitable data collection technique.

4.7 Data Analysis and Interpretation

The data collected was analyzed qualitatively and quantitatively (using SPSS and Microsoft Excel). The findings were interpreted and then written in a report form and handed in to the relevant authorities for examinations, collections and later on, publication.

4.8 Limitations

Limitations to the study were quite many. They included inadequate funding which comes in light of the fact that my sponsor only gave me a non-negotiable fee of K8 million which does not seem to be enough for a thorough study. Moreover, the money for research did not even come on time thereby reducing the time meant for research. So in order to carry out the research in good time, funds for research had to be solicited from other means as waiting for my sponsor meant more time spent in waiting and not doing the actual research works.

Respondents were also not very co-operative as they claimed to be busy all the time and that they were fed up of giving information to researchers when research findings were not interpreted to something beneficial to them. This was much truer in the case of journalists and also editors who seemed to be busy all the time hence took their time responding to the questionnaires. For instance, questionnaires had to be reprinted about thrice for all the three dailies as there were only a few collected the first time they had been distributed. This was costly in terms of time and monetary resources.

Moreover, people across the country irrespective of their educational attainment level still did not seem to value research. Others were honest to mention that they did not benefit anything in giving out information for whatever purposes. As indicated in the research findings, a number of respondents filled in the questionnaire partially and not in full. Some respondents (a deputy head and some teachers at a certain basic school in Chongwe) were demanding payment of at least fifty thousand kwacha each if they were to answer the questionnaires promptly and faithfully. This made it difficult to collect the needed information as it was not possible to pay the respondents especially the demanded amounts of money.

A cross section of society reviewed that as much as people that are literate were aware of environmental issues and challenges surrounding them, they hardly read the papers or find environmental coverage interesting enough for them to be concerned. After all, the people that printed the dailies paid more attention to other issues such as politics and sports which were always on the cover pages everyday and not environmental issues.

Another limitation were the daily publications from the two state owned newspapers namely the *Zambia Daily Mail* and the *Times of Zambia*. For the *Zambia Daily Mail*, the library had no hard copies of their daily publications for records keeping sake. What were readily available were soft copies on computers which were quite difficult to access without the help of the librarians who were not always available to offer this service. The *Times of Zambia* library on the other hand did not have all the publications as they had been sent to their headquarters (Ndola) for binding and had not been brought back during the research period. The data was collected at the *Post newspapers* library that had some copies missing as the two state newspapers did not deliver dailies on the missing dates.

Chapter 5: Presentation of Research Findings

5.1 Introduction

This chapter presents the findings of this study. A total number of 250 questionnaires were administered to journalists, editors, and a cross section of society while a number of daily publications for a period of three months from *The Post*, *Times of Zambia* and *Zambia Daily Mail* were reviewed to find out the content and frequency of environmental articles published.

5.2 Newspaper Content and Frequency Analysis Findings

As indicated in the data below, the analysis made use of three dailies and reviewed the number as well as the frequency of the environmental articles featured in the three dailies over a period of three months. During the three months period, a total number of 276 daily newspapers were supposed to be accessed instead, only a total number of 258 dailies were accessed which means a difference of 18 newspapers which were not analysed due to the difficulty of accessing them.

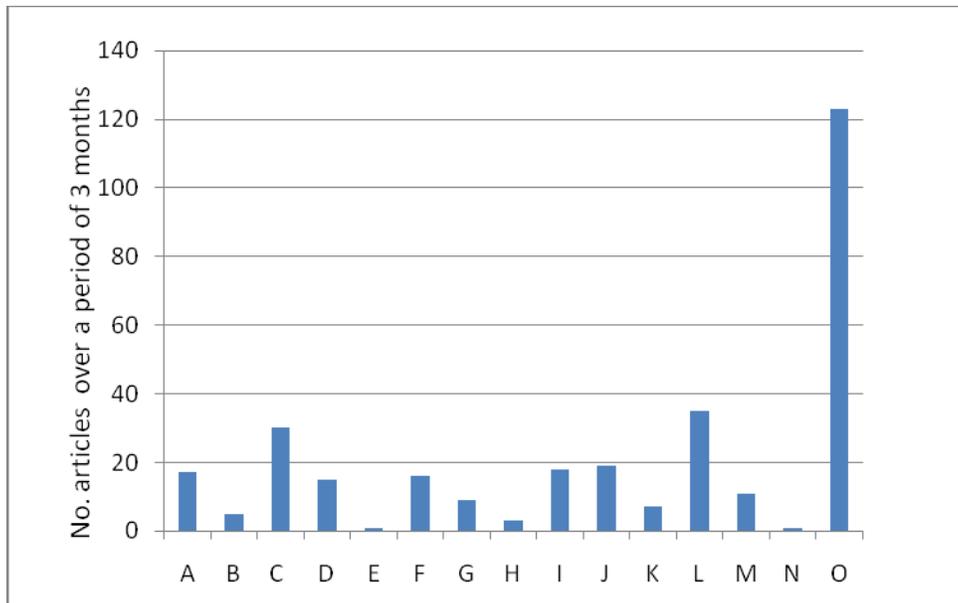
Table 1: Table showing codes used in Fig. 1

Theme	code	count
Food and agriculture	A	17
Water	B	5
Wildlife and or Deforestation	C	30
Floods/ Droughts	D	15
Air, water and land pollution	E	1
Land	F	16
Energy	G	9
Natural Resources	H	3
Cultural Heritage preservation	I	18
Climate Change	J	19
Human - Animal conflict	K	7
M, HEH, WS,WM,	L	35
Environmental sustainability	M	11
Cross Cutting	N	1
None	O	123

Source: Field Data (2010)

Out of the 258 articles reviewed, most of the daily publications did not carry any environmental article (O) in any of the three dailies as indicated in figure 1 above. From the list of environmental problems provided (refer to figure 2 for interpretation of the codes), there were more articles in the three dailies on mining, Human and environmental health, Waste management, and water and sanitation (L). These were followed by articles on wildlife and deforestation (C) followed by articles on Climate change (J) and then articles on cultural heritage preservation (I). Land issues articles (F) preceded food and agriculture (A) articles which were followed by articles on droughts and floods (D). Number nine on the frequency list were articles on environmental sustainability (M) followed by articles on energy (G) on number ten. Articles on energy were followed by articles on human – animal conflict (K) and then articles on water (B). On the thirteenth position were articles on natural resources in general (H) while least covered were articles on both air, water and land pollution (E), and also cross cutting environmental issues (N). Refer to figure 1 below and the table above.

Figure 1: Number of Environmental Articles covered over a Period of Three Months in the Three Zambian Dailies



Source: Field Data (2010)

From the presentation above, it is clear and evident that in all the three dailies in question, most of the daily publications did not carry any environmental article as was observed from the

number of days in which no environmental article was printed, that is, on a scale of 140, 123 days did not carry any environmental article at all. However, for those daily publications that carried environmental articles, the articles that were concentrated most on were those on mining, human and environmental health, water and sanitation and, waste management. However, it is worth noting that if they were presented individually, the scores would be much more less than they actually are. Tabulated and presented individually, the articles that carry more tallies are the articles on wildlife mostly from *The Post newspapers* due to weekly articles on wildlife. On the other hand, articles on air, water and land pollution together with articles on a number of cross cutting environmental issues were only covered once during the three months period of study.

For the articles on cultural heritage preservation, it is worth noting that they may have appeared more frequently than they would have for instance, if the study was carried out during the rainy season due to the reason that, the three months of study are among the months in which the county celebrates its cultural heritage through the various cultural ceremonies recognized and celebrated by the various ethnic groups across the country. This period usually lasts from somewhere around February to about early November when people get busy with farming activities due to the onset of the farming season usually with the onset of the rains.

For the *Times of Zambia* and the *Zambia Daily Mail*, most of the environmental articles covered were mostly associated with the people in the limelight such as politicians and the government of the day. The observation on this aspect was that most politicians especially talked and commented on environmental issues which they did not fully understand or were not very conversant with the same issues of discussion thereby giving the public sub-standard information. To the papers in question however, the story carried more weight simply because it had something to do with a politician or the ruling government. However, for accurate and beneficial environmental reporting, this was not supposed to be the case.

For *The Post newspaper*, an observation was that there was also space dedicated to a weekly environmental article of which most of the times, what was presented to the public were issues to do with wildlife – fauna while some issues were rarely paid attention to. This was somehow not supposed to be the case as there was need for a balance in the environmental issues covered by any daily as people needed to learn and know about the environmental issues surrounding them and their country at large.

One other observation from the review of the three newspapers in question was that the papers each somehow managed to carry an environmental article on a weekly basis although the numbers varied from one article per week to about five. In most instances, there would be a number of environmental articles in a given week in the papers if a significant environmental day was recognized and of course attended by prominent people or politicians. There were only a few environmental articles that were carried by the three dailies and were not associated with prominent people, politicians and the government of the day.

Most of the environmental articles that were carried by the three dailies lacked credible sources as mentioned earlier on that most articles were written as a follow-up to an event attended by politicians or statements made at an event by the same people in the limelight. This can only mean one thing; that the articles were shallow and did not give the public out there all the necessary and needed information for them to know and then act responsibly for their own as well as environmental health. Simply put, most environmental articles carried by the three dailies lacked an in-depth content presentation of the facts in question. Moreover, due to lack of proper understanding and credible sources of the environmental issues at hand, most articles were written using too technical language that is probably quite difficult for the public (an average literate person) out there to understand and grasp the whole sense behind an article.

Overall, the number of environmental articles in all the three dailies over the three months period of study ranged from 1 to 35 only. This implies that in any of the three given months of study, there was very minimal coverage of environmental issues in the daily publications. There is need for environmental reporters to carry out detailed research before presenting the information to the public and also a variety of environmental issues and problems more especially those affecting the country to come out in the three daily publications. This will ensure environmental awareness and ultimately education so as for the public to make informed environmental decisions in their daily use and exploitation of environmental resources.

5.3 Demographic Information of Respondents

This section presents the demographic information of the three groups of respondents that were used in the study. These were; journalists and editors from the three dailies under study as well as a cross section of the Zambian society.

To start with, a total number of 65 questionnaires were administered to journalists from the three newspapers under study, that is, *The Post newspapers*, *Zambia Daily Mail* and the *Times of Zambia*. Out of the 65 questionnaires that were administered, only 31 were collected back. Others either got lost or were never responded to by the respondents in question. A total number of 35 questionnaires were also administered to editors of the three dailies under study. Five were administered to *The Post Newspaper* editors, 15 to the *Times of Zambia* editors and 15 to the *Zambia Daily Mail* editors. *The Post newspapers* were given a less number of questionnaires as they did not have a number of editors.

To note however is the fact that only two questionnaires per daily newspaper were returned making a total of 6 collected questionnaires. Equally, a total number of 150 questionnaires were administered to a cross section of society in the urban, rural and peri-urban areas within the country, that is, Lusaka, Chongwe and Mazabuka respectively. However, only 100 questionnaires were returned. The quantitative as well as qualitative data presented in this chapter were from the 137 questionnaires that were returned.

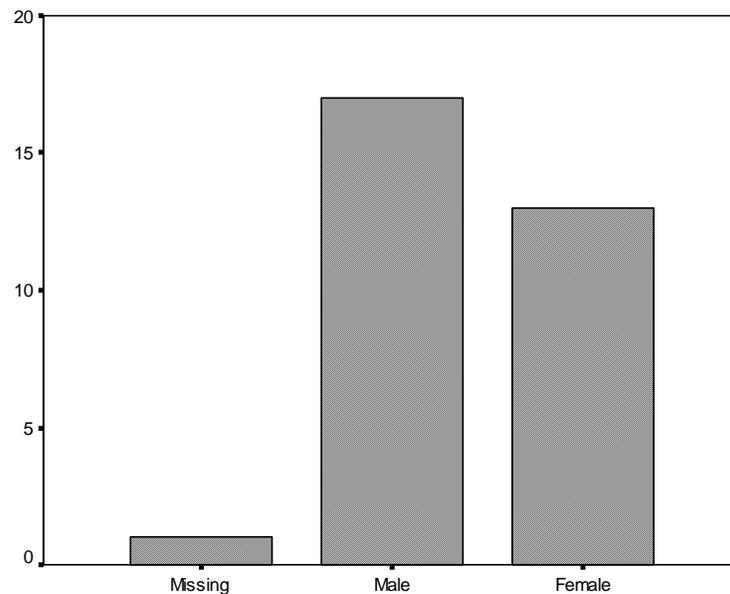
5.3.1 Age and Sex Distribution of Respondents

This section presents the findings on the demographic characteristics or information of all the respondents. For easy analysis and interpretation, graphical presentation of this information was used. The presentation starts with the gender and age distribution of the respondents namely; the journalists, editors and finally, a cross section of society.

As indicated in the data below (figure 2) for journalists, the study had more males than females. There were 18 males, 12 females while one journalist did not indicate their gender. This was a representation of the ratios of males to females in the media organizations in the country. This meant that despite the efforts for gender balance in all professions, there were still few females

compared to males in the media field. Gender was important in this study as it would indicate the disparities in gender distribution of respondents.

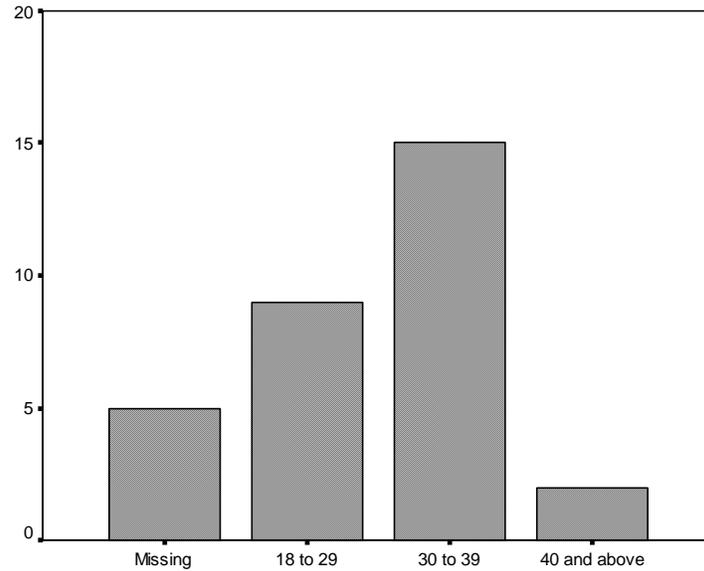
Figure 2: Gender distribution of the journalists



Source: Field Data (2010)

The Graph (Figure 3) below indicates that there were more journalists in the 30-39 age group while the least were in the 40 and above age group. Figuratively, there were 15 respondents in the 30-39 age group, 9 in the 18-29, 2 respondents were 40 and above while 5 were missing. This implies that most journalists were in the 30-39 age group. Age was important for purposes of dealing with respondents that understood the study that was being carried out.

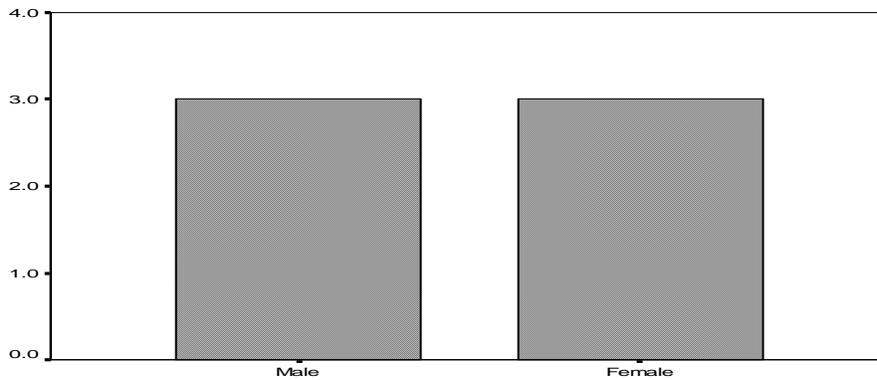
Figure 3: Age distribution of the journalists



Source: Field Data (2010)

As can be noted from the figure (4) below, three of the respondents were female while the other three were male indicating that respondents were equally distributed where gender is concerned. This was however not the true representation of editors by gender distribution in the three media organizations. Facts on the ground were that there were more male than female editors.

Figure 4: Gender Distribution of the editors

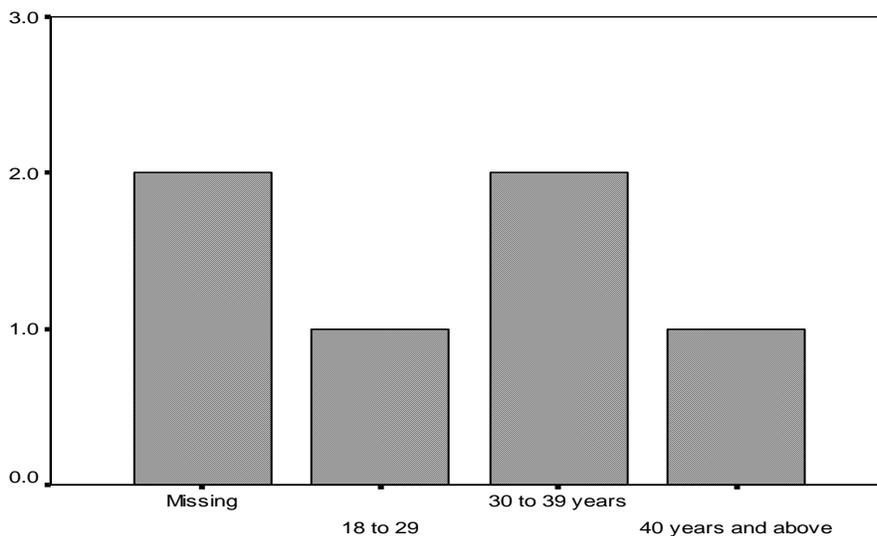


Source: Field Data (2010)

Out of the six respondents according to the figure below (Figure 5), 2 were aged between 30 and 39 years old, two were aged between 18 and 29 years old and 40 and above years respectively while 2 entries were missing. This implies that editors were spread within the most productive age groups meaning that they were still energetic and with a zeal to carry out their work as gatekeepers of all the information that reached the public ultimately.

Amazingly enough, none of the six respondents had a certificate or a professional qualification above a diploma. All of them had just achieved a professional qualification of a diploma. This was not a coincidence that many of the editors in the media in the country had only attained diplomas for their professional qualifications.

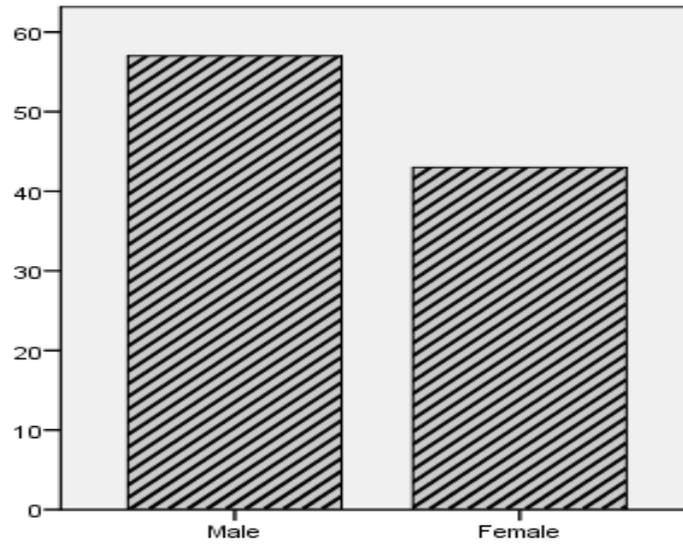
Figure 5: Age distribution of the Editors



Source: Field Data (2010)

According to the data in figure 6 below, out of the 100 respondents 57 were males while 43 were female. This implied that 57 percent of the respondents were males while 43 percent of the respondents were females. This is however not a true representation of the distribution of gender in the research areas and the country as a whole. This can only be true when it comes to literacy levels in the country.

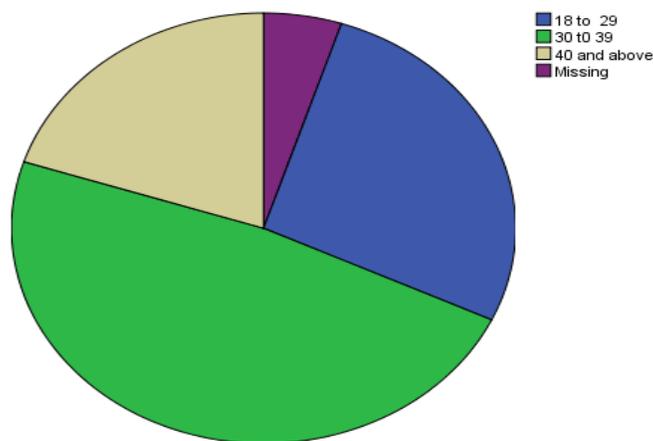
Figure 6: Respondents distribution by gender



Source: Field Data (2010)

Figure 7 below shows the age distribution of the respondents. The age distribution of the respondents was as follows; 18 – 29 age group 27 percent, 30 – 39 age group 48 percent, the 40 and above age group 20 percent and 5 percent was missing. The most prominent group was the 30 – 39 age group which is actually the most productive.

Figure 7: Age distribution of the respondents

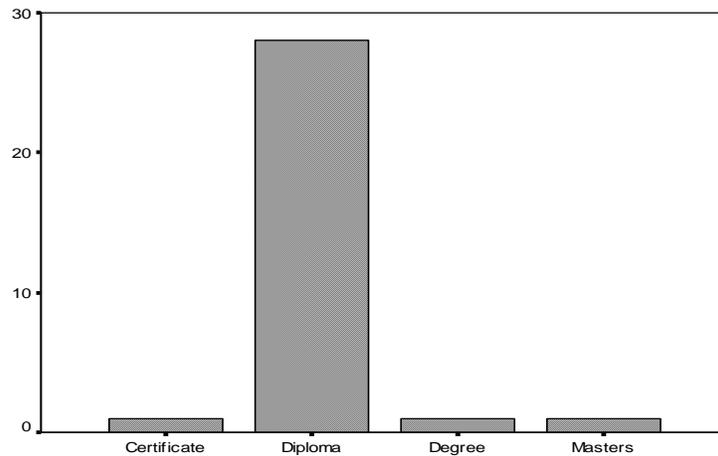


Source: Field Data (2010)

5.3.2 Educational and Employment Information of Respondents

This section also presents the findings of the study on the respondents' demographic information. Aspects covered in this section included education attainment level, major fields of study, name of media organization, departments in which respondents were and for how long they had worked in their respective organizations.

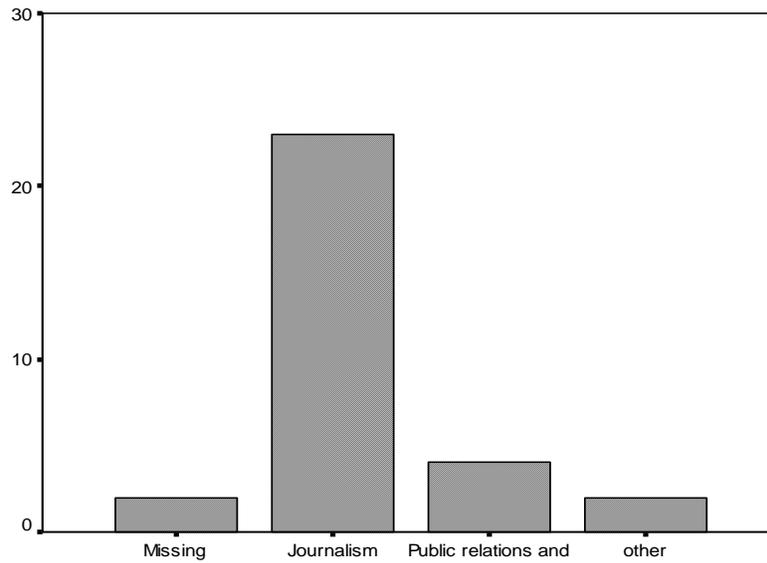
Figure 8: Educational attainment of the Journalists



Source: Field Data (2010)

From figure 8 above, it is clear and evident that most of the journalists in the three media under study held a maximum of Diploma qualifications. Out of the 31 respondents, only three had a certificate, degree and master's degree respectively. The other 28 representing 97 percent were diploma holders. This implied that most of the respondents were not academically motivated as they seemed to be comfortable with their diploma qualifications as could be observed from the graph. This is probably one of the reasons that could be attributed to the lack of further research in the environmental articles that were presented by the three dailies in question.

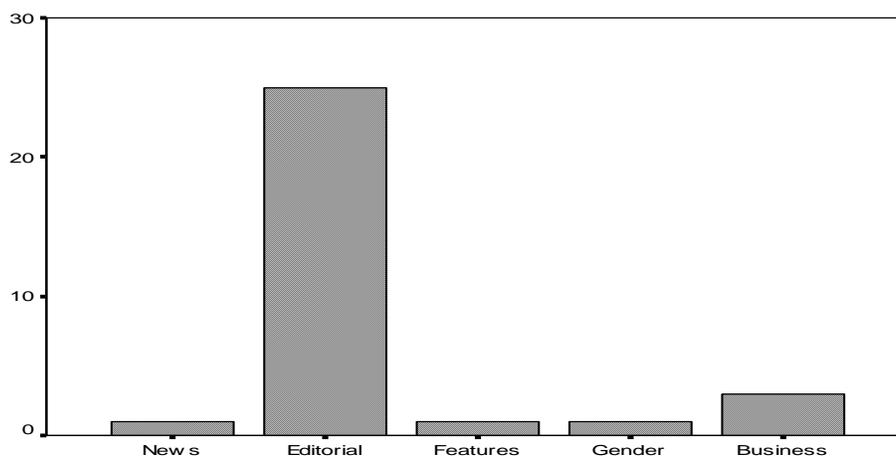
Figure 9: major field of study of journalists



Source: Field Data (2010)

Figure nine (9) above shows the major fields of study for the 31 respondents. Most of them had studied only journalism and these represented 74 percent of all the respondents. 13 percent of the respondents had studied public relations while the remaining 13 percent was divided between those that had qualifications in other fields of study and those that were missing respectively.

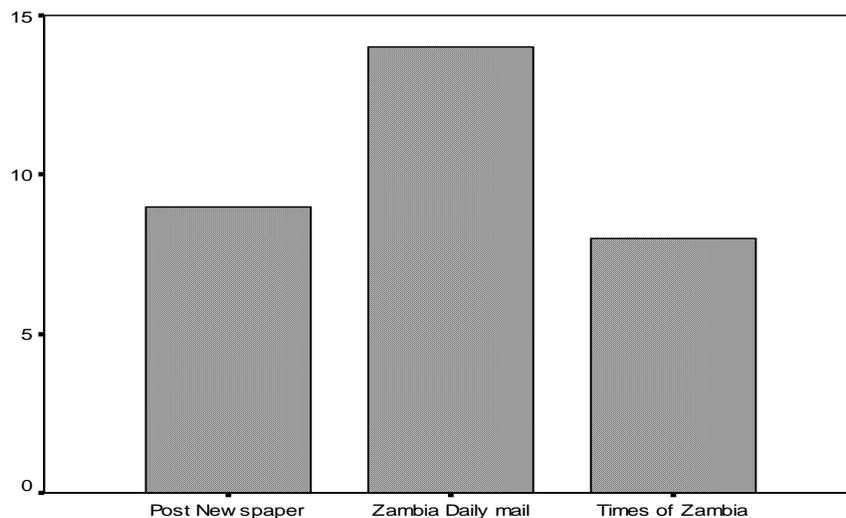
Figure 10: Department in which journalists are



Source: Field Data (2010)

According to the figure (10) above, most of the respondents were from the editorial department and these were 25 out of the total of 31. 3 respondents were from the business department while the other three were from the news, features and gender departments respectively. The implication of these findings was that none of the dailies in question had an environmental department and this could be attributed to the scanty articles in the three dailies owing to the fact that there seemed to be no department with the sole responsibility of reporting on the environment.

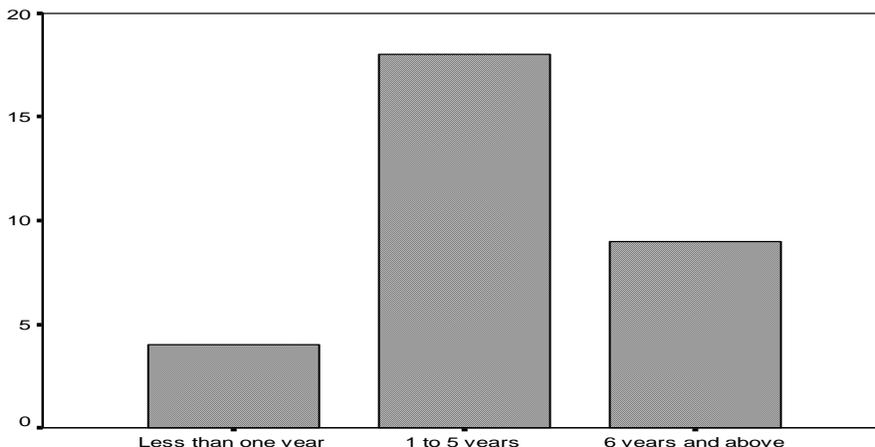
Figure 11: Name of media Organization



Source: Field data (2010)

Of the three dailies under study (refer to figure 11 above), the two state owned dailies were more represented as compared to the privately owned one. The most represented of the three though was the *Zambia Daily Mail* at 45 percent followed by the *Times of Zambia* at 29 percent and lastly *The Post newspapers* at 26 percent. This is however not a representation of the frequency of the environmental articles published by the three dailies under study.

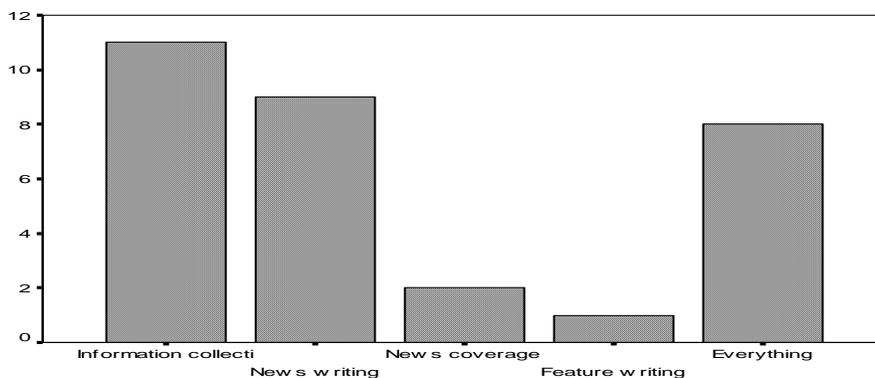
Figure 12: Duration journalists have served in the organization



Source: Field Data (2010)

The figure above (figure 12) shows that most of the respondents had been working in the three dailies under study for at least not less than one year. 18 (58 percent) out of the 31 respondents had been working for a duration of 1 – 5 years while 9 (29 percent) and 4 (13 percent) of the respondents had been working for 6 and above years and less than a year respectively. The implication is that the journalists would not claim to still be on the job on training as they are mostly well vested with what they were supposed to do. This meant that for those that were tasked with environmental reporting, they must have been in a better position to report qualitatively and quantitatively on the environment.

Figure 13: Journalists' overall responsibility in the organization



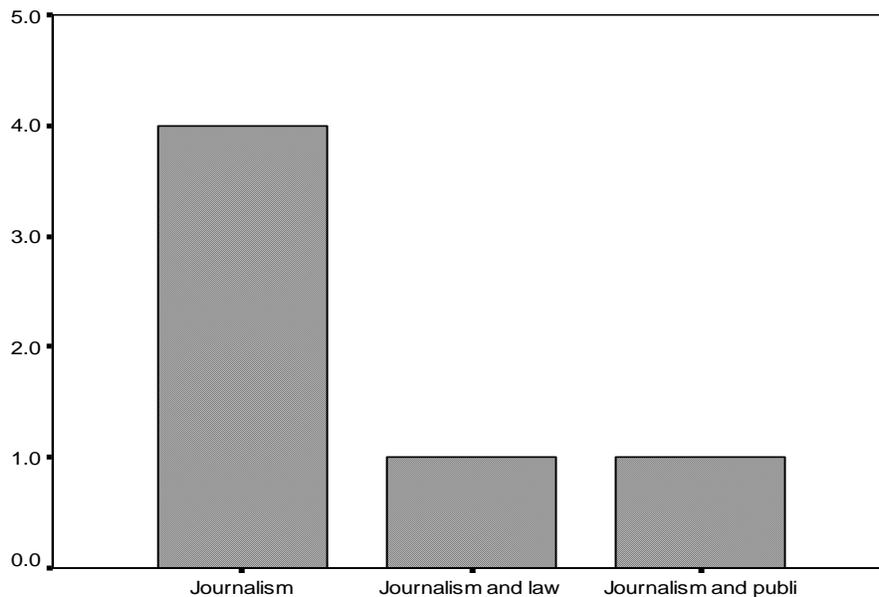
Source: Field Data (2010)

From the figure above (figure 13), it is clear that most of the journalists were tasked with the overall responsibility of collecting information. Out of the 31 respondents, 11 listed their overall responsibility as information collection, 9 as news writing, 8 as information collection, news writing, news coverage and feature writing all combined, 2 as news coverage while only 1 listed feature writing.

However, it was interesting when it came to editors to learn that all of the six editors who participated as respondents in this study only possessed diploma qualifications in their respective fields of study. This simply meant that 100 percent of the respondents when it came to editors had only achieved a Diploma in the aspect of educational qualifications. Their major fields of study were however different.

According to figure 14 below, four out of the six respondents had studied journalism only while the other two had studied journalism and law and, journalism and public relations respectively. This could also be one of the reasons for the respondent's lack of prioritization of environmental coverage as ultimate gatekeepers in the system. It is quite difficult for one to prioritize something they do not understand let alone interest them.

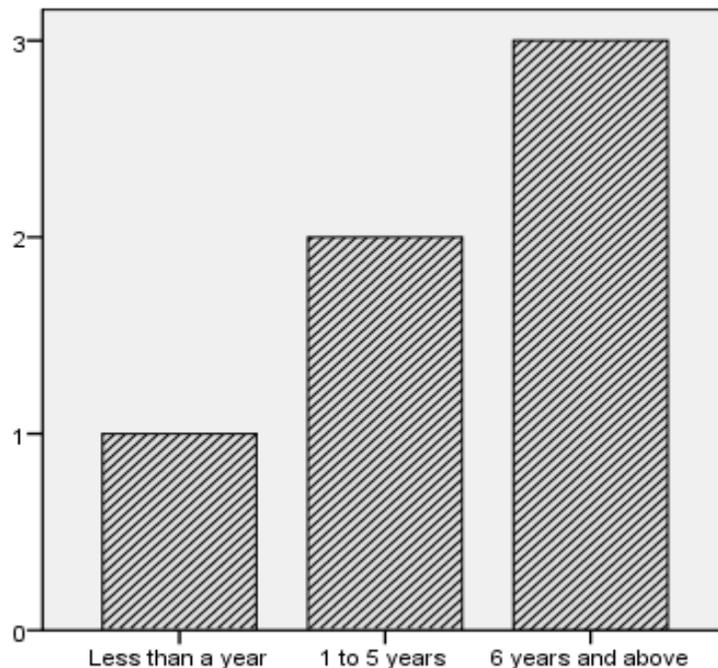
Figure 14: Editors' major field of study



Source: Field Data (2010)

According to the figure below (Figure 15), 50 percent of the respondents had worked in their position as editors for over a period of five years, 33 percent (two respondents) had been working in their position for over a year but not more than five years while 17 percent (one respondent) had worked in their position for less than a year. It is so unfortunate that after all those years working as gate keepers, the respondents would still not let environmental coverage take centre stage in the quest for much more public environmental awareness and education.

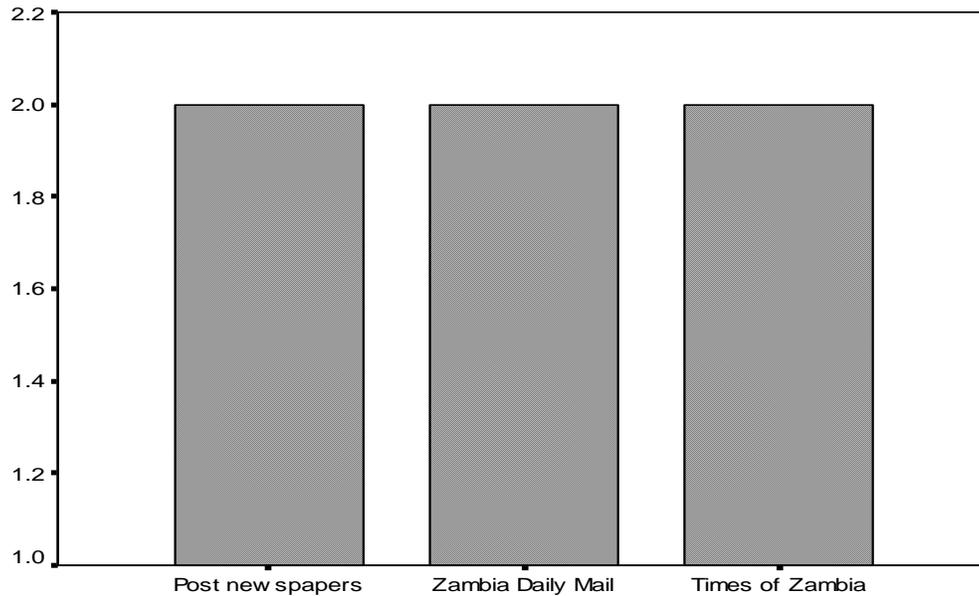
Figure 15: respondents' duration as an editor



Source: Field Data (2010)

It is interesting to note that out of all the questionnaires that were administered to the three dailies under study, only two were returned per each newspaper hence giving us an equal representation of respondents. This is however not the actual representation of the number of editors per daily newspaper (Refer to figure 16 below). There were more editors at the two state owned newspapers as each single department had an editor and sub editor in some instances. This was not true of the privately owned newspaper which had less than five editors in total.

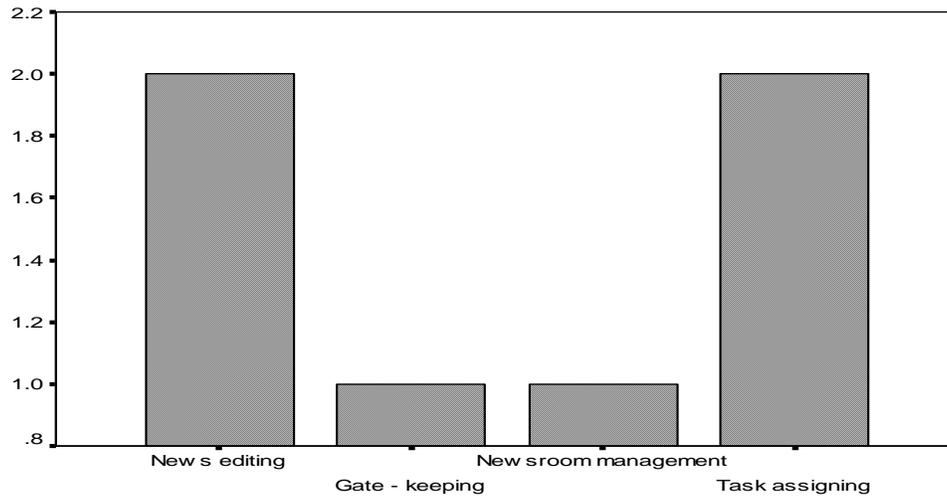
Figure 16: Name of Editors' media organization



Source: Field Data (2010)

Figure 17 below show that 50 percent of the editors performed the task of gate keeping, (news editing and gate keeping), 33 percent were responsible over task assigning to their juniors while 17 percent were responsible for the newsroom management. As mentioned earlier on in the study, editors were the ultimate gate keepers responsible for what or what should not reach the public. Some journalists actually mentioned that they collect environmental information which apparently according to the editors was not appealing and eye catching enough either for business or to the target audience. This probably could be because of misplaced priorities by the ultimate gate keepers, the editors.

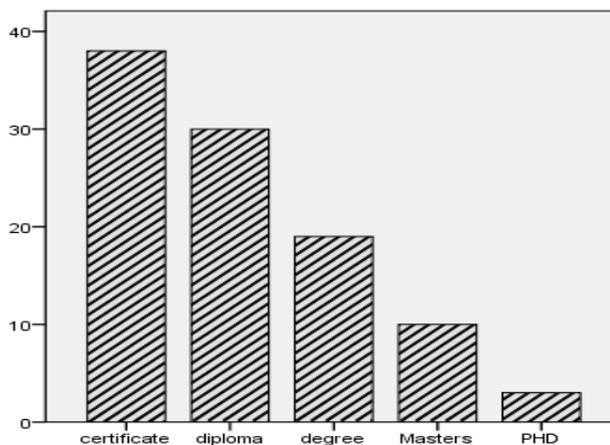
Figure 17: Respondent's overall responsibilities



Source: Field Data (2010)

According to the data in figure 18 below, respondents' educational levels ranged from certificate all the way up to PHD. The highest percentage was 38 for certificates, diplomas at 30 percent, degrees at 19 percent, masters at 10 percent and lastly PHDs at 3 percent. This meant that on average, all the respondents were in a very good position to read, understand and analyze the three newspapers' daily publications. The respondents were also in a position to know what was happening in their immediate environments as well as the country at large.

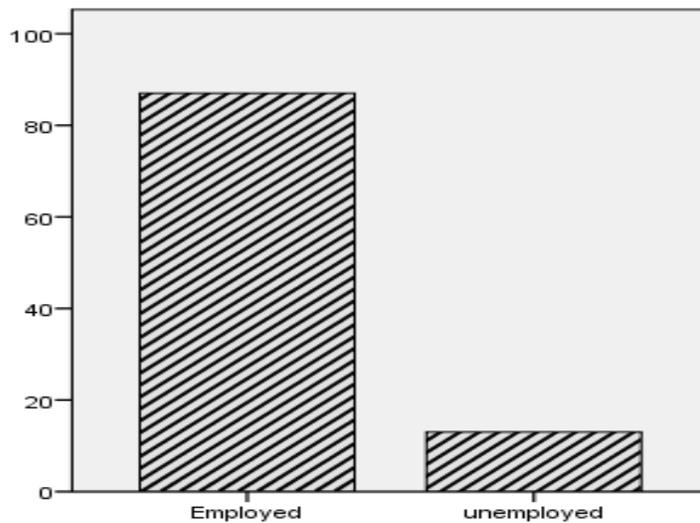
Figure 18: Educational attainment levels of a cross section of society



Source: Field Data (2010)

The data in figure 19 below indicated that most of the respondents were employed and in the formal sector. The findings revealed that about 87 percent of the respondents were employed while 13 percent were unemployed. Of those respondents that were employed, 83 percent were in the formal sector, 5 percent in the informal sector, 2 percent were self employed while 2 percent mentioned other types of employment. What this meant is that most of the respondents were in a position to buy and read newspapers maybe twice or so in a week hence were abreast with what was happening in the country be it environmental information or other general information.

Figure 19: Employment status of the respondents

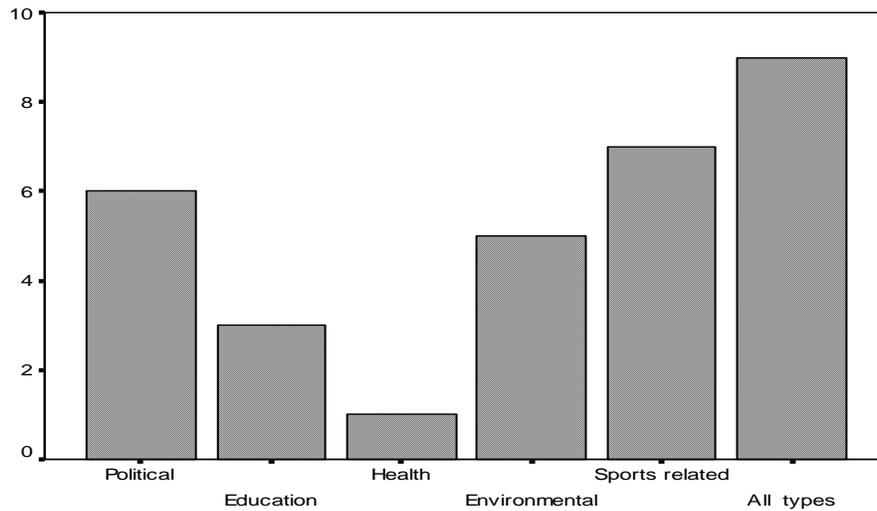


Source: Field Data (2010)

5.4 Environmental Awareness and Education of Respondents

This section presents the findings on the respondents' environmental awareness and education. Unlike the section on the respondents' demographic information, this section also contains qualitative information hence the report of the various experiences, opinions and also view points from the respective respondents.

Figure 20: Type of Information collected by the journalists

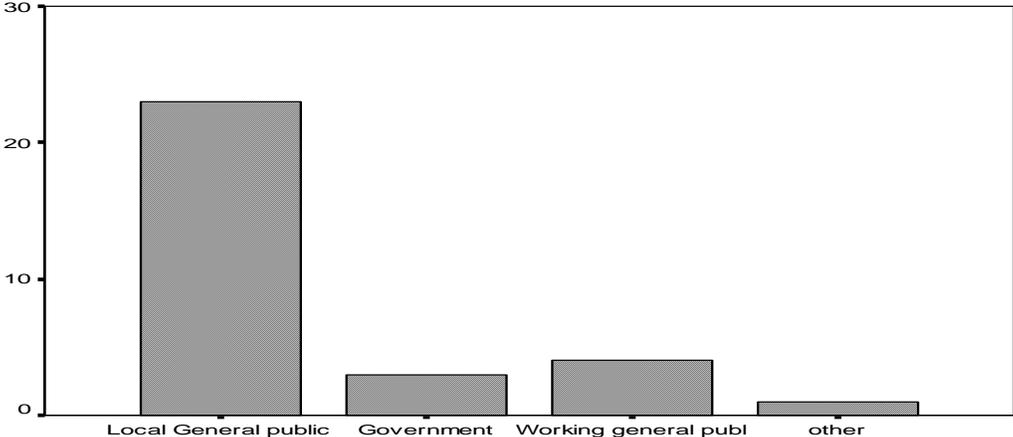


Source: Field Data (2010)

Figure 20 above indicates that 29 percent of the data collected (which is apparently the most) comprises of all the information types gathered by the journalists from the three dailies in question. This was followed by sports related news at 23 percent while 19 percent of the information collected was political news. Environmental information collected covered 16 percent of all the information collected, followed by education at 10 percent and lastly health information at 3 percent.

The data in figure 21 below indicated that the majority target audience (74 percent) was the local general public followed by the working general public at 13 percent, the government at 10 percent and finally others at 3 percent. Please note that the others included the international community. The three dailies were all accessible to these people through the use of modern technology - the internet. Considering the three dailies' target audience, they were a very good platform for environmental awareness and education especially in the country through daily publications of environmental news, events and articles. Refer to the figure below (figure 21).

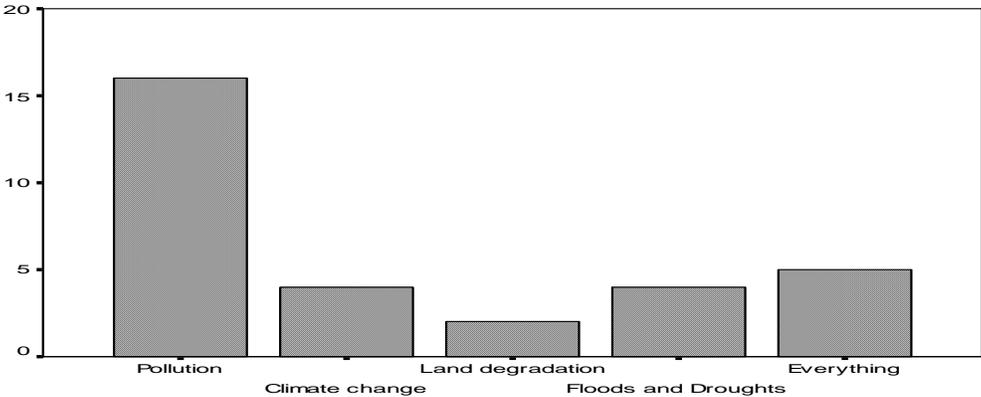
Figure 21: Target audience for the collected information by the journalists



Source: Field Data (2010)

The figure below (figure 22) shows that among all the environmental problems experienced and known in the country, respondents considered pollution to be the major environmental problem which the country faced. According to the respondents, 52 percent of all environmental problems had to do with pollution, 16 percent with all environmental problems combined, 13 percent with climate change, and floods and droughts respectively while 6 percent covered land degradation (refer to the figure 22 below).

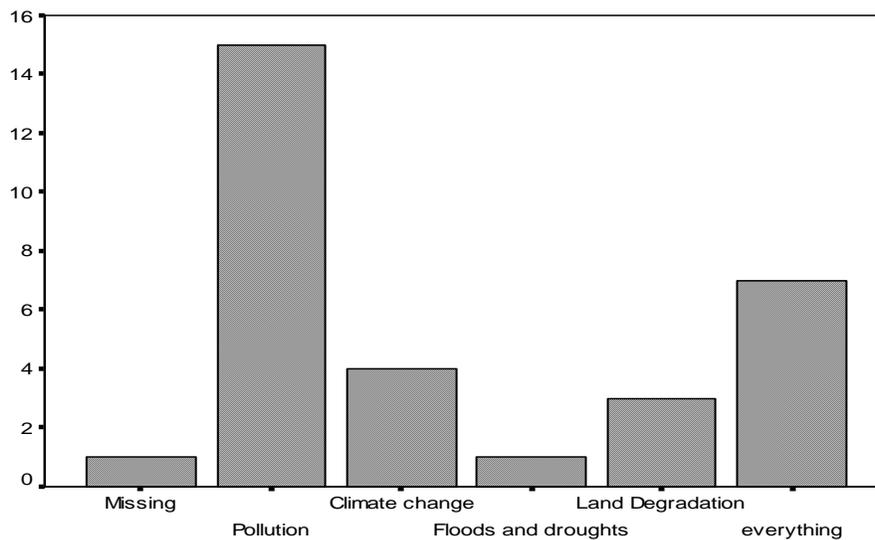
Figure 22: Major environmental problems experienced in the country according to journalists



Source: Field Data (2010)

The figures (figures 21 and 22) above could explain why there was minimal collection of environmental news and events by the journalists. One reason could have possibly been because of the three dailies' location which was Lusaka. Most of the pollution that the country experienced was found on the mining towns of the Copperbelt where there were only a few journalists in those towns as compared to Lusaka. The other reason could have been that floods and droughts are seasonal as compared to pollution which was a daily phenomenon. It still came to the issue of in-depth knowledge and the understanding of environmental issues by the media personnel if they were to value and report all environmental problems and issues equally and frequently.

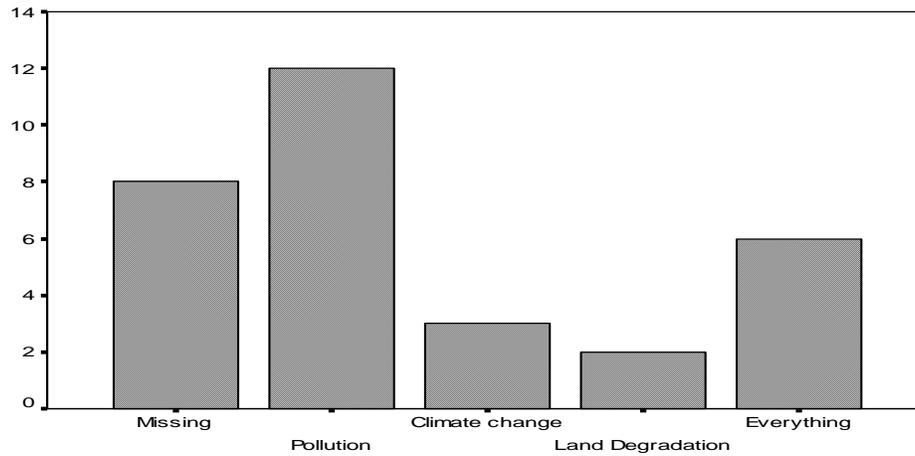
Figure 23: Coverage of environmental problems by the three daily newspapers



Source: Field Data (2010)

The figure (figure 23) above according to journalists indicated that 48 percent of environmental coverage was dedicated to pollution followed by 23 percent coverage of all stories. Climate change reporting was given 13 percent, land degradation 10 percent, floods and droughts were the least with only 3 percent while another three percent was missing. Interesting to note was the margin between pollution and climate change coverage. The reasons for these figures were the same ones advanced in the paragraph above. This simply pointed out the urgent need for journalists especially those that were tasked with environmental reporting to learn more about environmental issues and problems to enhance interest and understanding of the same.

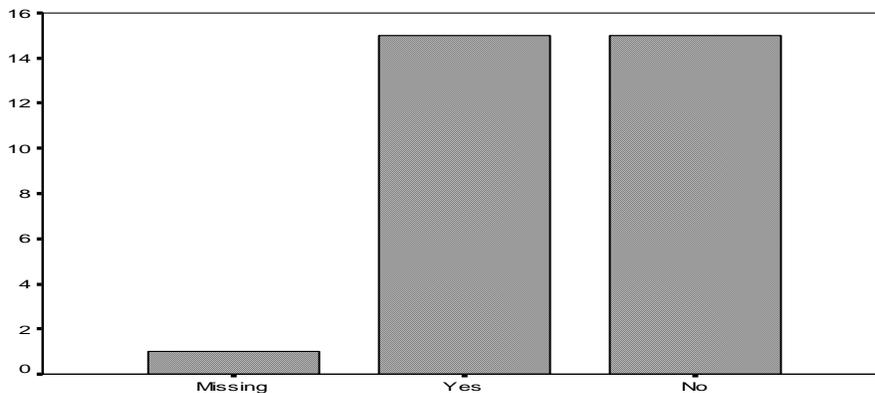
Figure 24: Space allocated to environmental coverage by the three newspapers



Source: Field Data (2010)

Just like the earlier two figures (22 and 23) and according to the journalists, figure 24 above shows that of all the space allocated to environmental coverage in the three dailies, 39 percent which was the largest space had been allocated to pollution while 26 percent was recorded missing. A combination of all environmental coverage combined was only 19 percent followed by climate change at 10 percent and finally 6 percent space for land degradation. This display of percentages clearly showed what was given more priority and what was simply not. This called for the need to prioritize all environmental issues, events and problems.

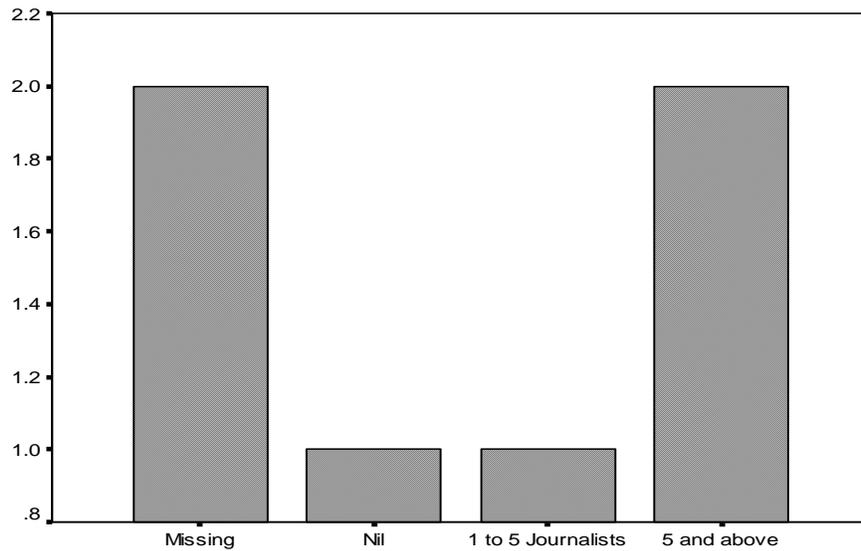
Figure 25: Adequacy of environmental problems coverage according to journalists



Source: Field Data (2010)

According to the 31 journalists, figure 25 above indicates that while 3 percent of the responses were missing, 48.5 of the respondents stated that environmental coverage by the three dailies was adequate while another 48.5 respondents stated that the three dailies' environmental coverage was not adequate. This meant that there was need for the three dailies to improve their environmental coverage in order for more adequate coverage to be carried out unlike a fifty-fifty scenario as observed in the graph above.

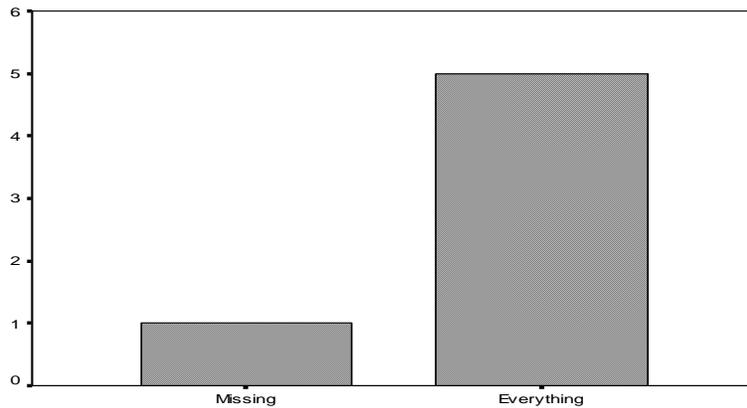
Figure 26: Number of environmental journalists in editors' department



Source: Field Data (2010)

The figure above (figure 26) indicates that in some of the respondent's department or print media organizations, there were some environmental journalists. One of the respondents was honest enough to indicate that there were actually no environmental journalists in their print media organization, one stated that they had between one and five, while two stated that they had five and above and two responses were missing.

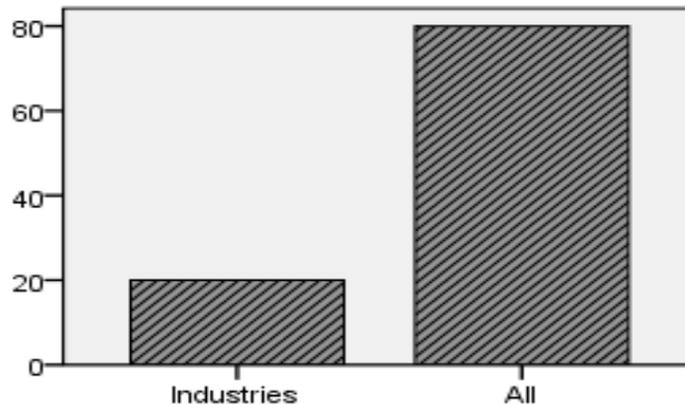
Figure 27: Type of information Editors receive for editing



Source: Field Data (2010)

According to the data in figure 27 above, 83 percent of the respondents admitted that they received all types of information for editing and sending to the printers while 17 percent was missing. Bearing in mind that these were the ultimate authority or gate keepers on what information did or did not reach the public, it was evident that even when journalists did their part of collecting environmental information, the decision of whether or not the information reached the masses lay entirely in the hands of the editors. This simply called for the urgent need to get editors to know and understand the magnitude of environmental issues as well as the importance of prioritizing environmental coverage.

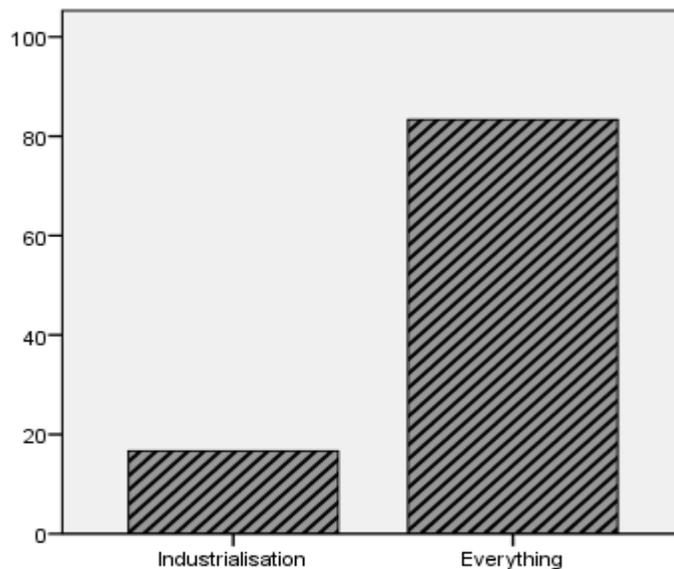
Figure 28: Target Audience for the information published



Source: Field Data (2010)

According to the data in figure 28 above, about 80 percent of the information edited by the editors was targeted at all members of the general public while only 20 percent was meant for the industries when it was sent for publishing. It was however not clear by what the respondents meant by stating that their target audience of the information which they published was industries. For the general public, the respondents illustrated that it included everyone who was able to read and understand what the three dailies under study published. It is worth mentioning that the target audience also included anyone outside the country as long as they had access to electronic media, the internet in this case as the three newspapers were available online every day.

Figure 29: Major environmental problems in Zambia according to the Editors

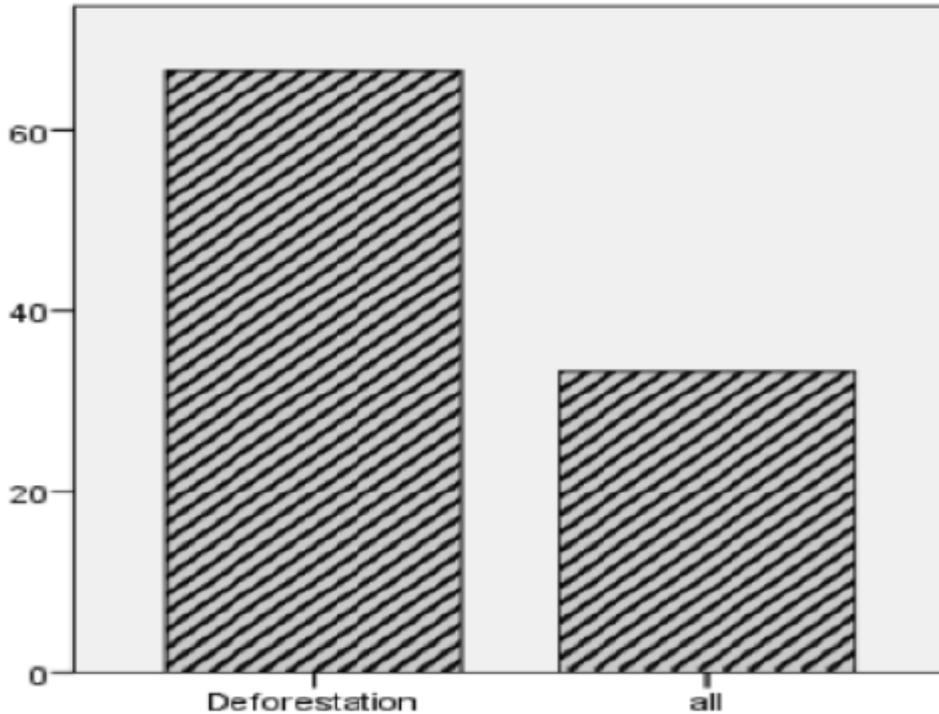


Source: Field Data (2010)

According to the editors, the data in the figure above (Figure 29) indicates that industrialization constituted 20 percent of the major environmental problems experienced in the country and this referred to pollution while all the other problems constituted 80 percent. Apparently, this was a bleak picture of the major environmental problems in that as much as pollution was evident especially in the mining towns, there were other major problems which should have been

perceived and treated as such. That did not mean that the other minor environmental problems were not important and should not have been paid attention to.

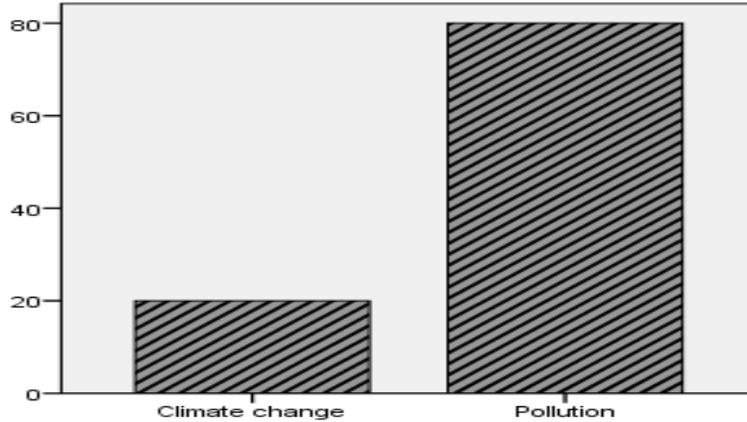
Figure 30: Editors' priority of environmental problems coverage



Source: Field Data (2010)

The data in figure 30 above indicated that the editors gave more priority to environmental news or stories to do with deforestation when it came to coverage or rather publication in their three dailies. About 65 percent was given to issues which had to do with deforestation while only 35 percent was shared amongst the remaining environmental problems. What this meant was that environmental coverage was just one of those things that did not really matter that much to deserve so much attention. The reason advanced for the concentration on deforestation was that the indiscriminate cutting of trees was too much evident if one checked the areas next to urban areas where there were only second growth trees or shrubs and, the number of charcoal bags in circulation or by the road sides as one travelled from one place to another.

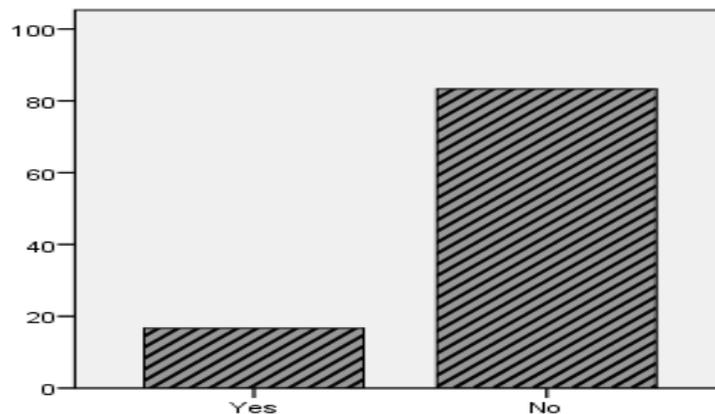
Figure 31: Frequently reported environmental problems according to the editors



Source: Field Data (2010)

Figure 31 above shows the two most frequently covered environmental problems according to the respondents. The data obtained indicated that pollution and climate change were the two most frequently covered environmental problems while the others were just pushed into the background as they were not considered to be very important compared to the two. Interesting to note however was that even between the two most covered environmental problems, pollution took up 80 percent frequency while climate change only took up 20 percent. This implied that while the respondents recognized a number of environmental problems as existing in the country, some of them were not as serious as the two frequently covered environmental problems hence did not attract coverage more often.

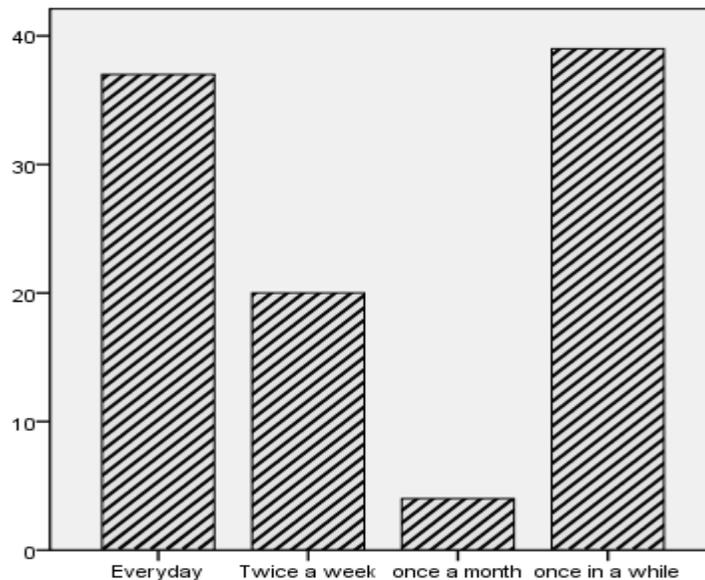
Figure 32: Adequacy of environmental reporting according to the editors



Source: Field Data (2010)

When asked whether or not environment problems experienced in the country were adequately covered by their three dailies, the editors according to the figure above (Figure 32) indicated that environmental problems were not adequately covered. About 80 percent of the editors indicated that environmental problems were not adequately covered by their respective newspapers while 20 percent indicated that environmental problems experienced in the country were adequately covered by the three dailies under study. These responses just confirmed what a cross section of society stated as will be presented below. This was one of the reasons why the public were not environmentally educated and lacked positive behavior change for the environment.

Figure 33: How often respondents read newspapers

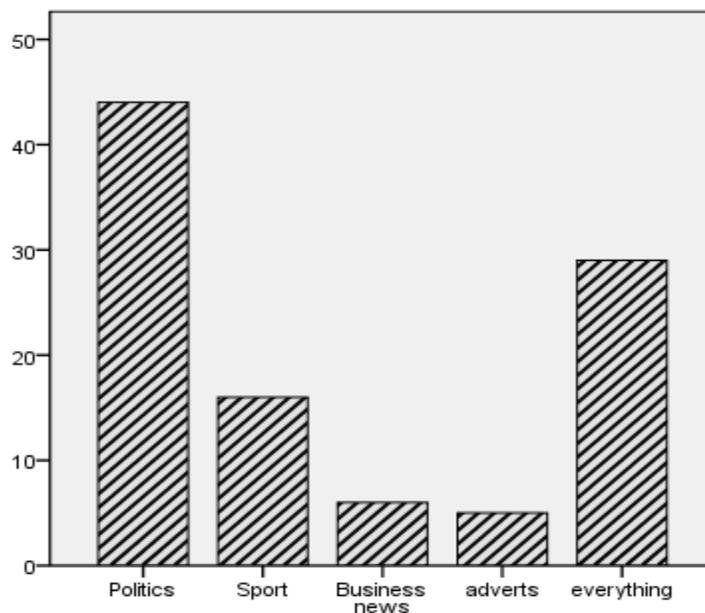


Source: Field Data (2010)

With the need to find out how often respondents read newspapers, the data in figure 33 above indicated that the reading culture in the country was very bad as there are more people that read newspapers only once in a while. According to the data obtained, 40 percent of the respondents read newspapers once in a while, 38 percent on a daily basis, 20 percent twice a week and 2 percent once a month. This meant that on average, people did actually read newspapers despite the poor reading culture. This showed that people were quite up to date with current affairs and even environmental news.

Amazingly enough, figure 34 below indicates that most people read politics unlike any other information. Of all the respondents, 44 percent only read politics or political news, 29 percent read everything, 16 percent read sports news, 6 percent read business news while 5 percent read adverts or commercials. This meant that people were not oriented towards environmental stories or information hence those that read everything just read even environmental information just for the sake of reading the newspapers.

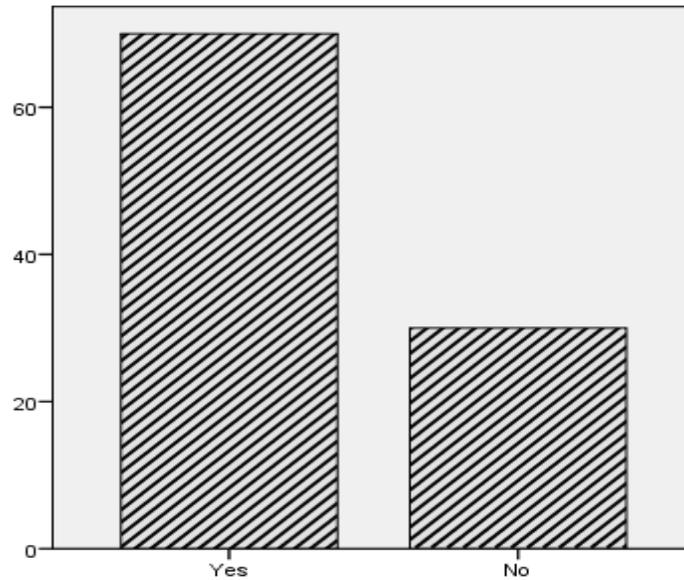
Figure 34: Type of information respondents read in the newspapers



Source: Field Data (2010)

The respondents were also asked if their respective communities were aware of the environmental problems they faced. 70 percent of the respondents stated that their respective communities were not aware of the environmental problems their communities were facing while only 30 percent stated that their communities were aware. This implied that as much as people read daily newspapers, they were still not sensitized about the environmental problems their communities were facing. Refer to figure 35 below.

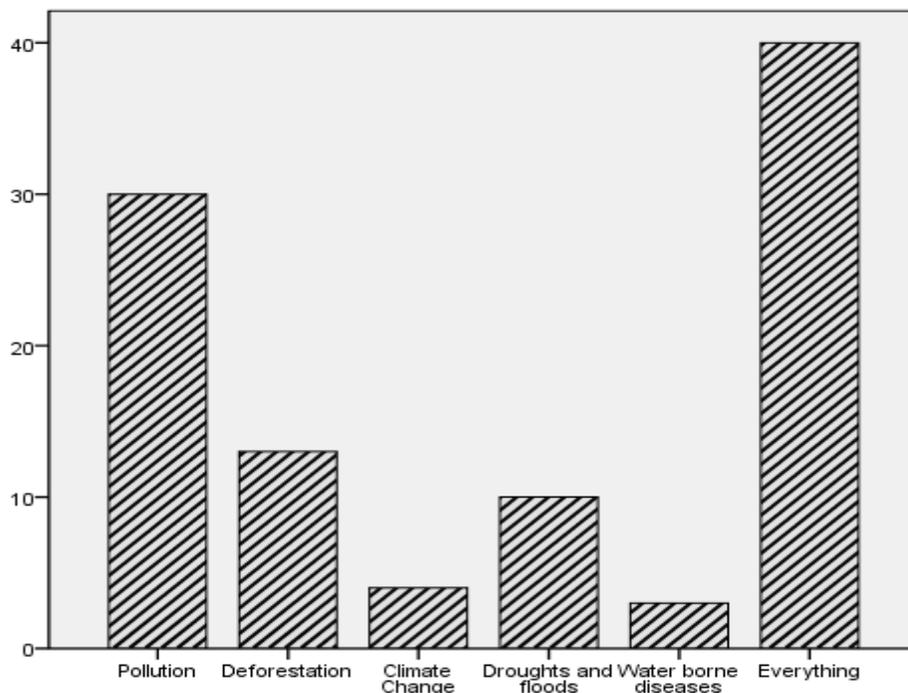
Figure 35: Community awareness of their environmental problems



Source: Field Data (2010)

According to the data in figure 36 below, the community considered all the environmental problems experienced in the country as major problems. However, when considered individually, it was amazing that 30 percent of the environmental problems had to do with pollution. According to a cross section of society, 40 percent considered all problems to be major, 30 percent singled out pollution, 13 percent deforestation, 10 percent droughts and floods, 4 percent climate change and 3 percent water borne diseases. This meant that the public had also been led to believe that pollution was the major problem in the country while other problems were not considered as important.

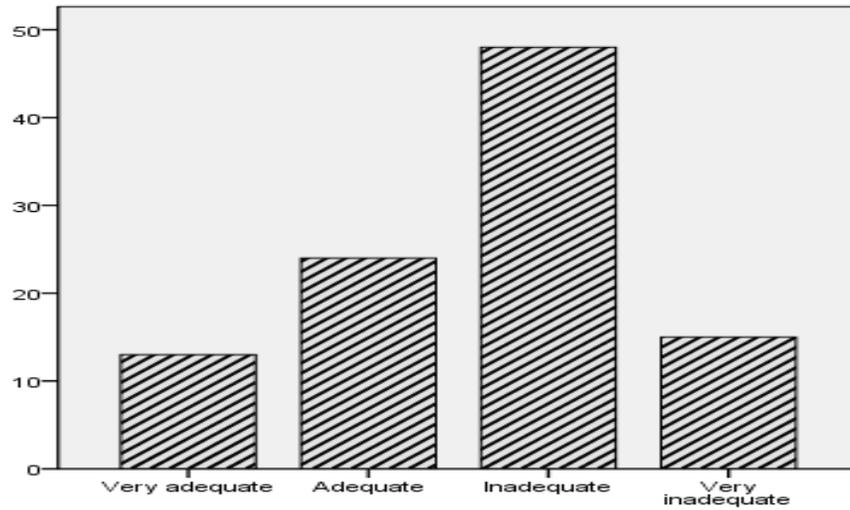
Figure 36: Major environmental issues in Zambia according to the community



Source: Field Data (2010)

The respondents were asked if the problems they experienced as well as all the environmental problems in the country were adequately covered by the three daily newspapers under study. According to the data provided in the graph below (Figure 37), 48 percent of the respondents stated that environmental coverage by the three dailies was inadequate, 24 percent adequate, 15 percent very inadequate and 13 percent very adequate. This simply meant that the coverage of environmental issues, events and news was inadequate and that people wanted to learn more hence the call on the three daily newspapers to improve on their coverage of environmental issues, events and problems.

Figure 37: Coverage of environmental issues by the three newspapers according to the community

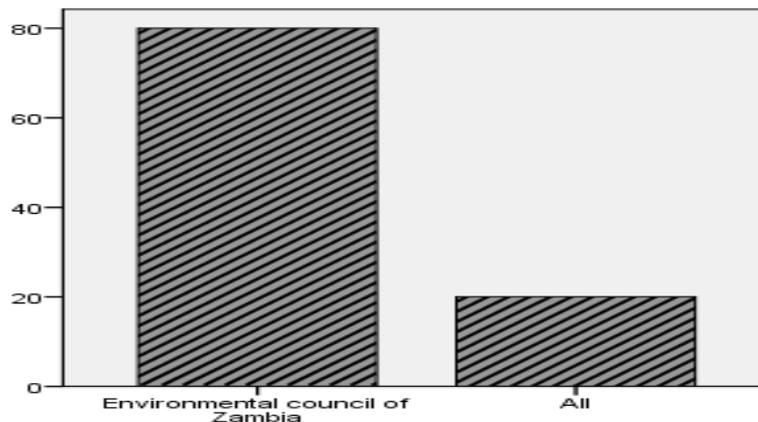


Source: Field Data (2010)

5.4.1 Media's Partners in Public Environmental Awareness and Education

Being the final gate keepers, the editors were also asked if they had partners and who these partners in public environmental awareness and education were. According to the data in the figure below (Figure 38), 80 percent of the respondents stated that the Environmental Council of Zambia was their major partner while the 20 percent constituted all other concerned parties including ANEJ, UNEP and, the electronic media.

Figure 38: Media's partners in public environmental awareness and education



Source: Field Data (2010)

Within the same questionnaires that were administered to all the respondents were qualitative questions that required the respondents to give some details of their understanding of certain environmental matters such as environmental reporting. Some of the questions actually required the respondents to give reasons for the responses they advanced since some of the responses required justification. The following sections of the chapter presents the descriptive findings of the respondent's views, experiences and concerns on environmental awareness and education.

5.4.2 Understanding of Environmental Reporting, Issues and Problems

This section presents the research findings on all the respondents' understanding of environmental reporting, environmental issues and problems surrounding the country. All the respondents were asked to state in their own words their understanding of environmental reporting, environmental issues and what they considered to be the country's major environmental problems. The presentation of the research findings starts with the views, experiences and understanding of journalists, followed by editors and finally those of a cross section of society.

To start with, journalists were required to state in their own words their understanding of environmental reporting. The journalists had different understandings of environmental reporting. This was evident in the number of different responses as presented in the following paragraph.

Most of the journalists only mentioned pollution and climate change, others stated that it was good and bad. Those respondents that understood something mentioned that environmental reporting had to do with the collection and reporting of environmental news since environmental problems affected everyone. Others stated that it had to do with reporting on or about the environment while other responses were that it was reporting on the effects of industrial activities and also poor drainages. The array of answers only showed that most of the respondents wrote about things they did not understand.

Journalists were also asked on what their personal understanding of environmental issues surrounding the country were. Just like the above question, this question also attracted an array of responses. The responses were as follows; government's regulation in terms of developmental projects with an impact on the environment, the impacts of environmental problems on the

environment, climate change, mining, and other environmental problems, the government's keep Zambia clean campaign while others only mentioned that they were quite knowledgeable on the question. Some were honest enough to mention that they actually did not know much although they did not mention what they knew.

The journalists were asked to talk about the environmental problems which they considered to be the country's major environmental problems as well as justify their responses. The responses were that all the problems they mentioned needed to be considered as major problems especially by the relevant authorities as they deeply affected everybody in the country. For instance; poor drainage systems affected everyone during the rainy season, pollution made people sick in a number of ways and that climate change was affecting the weather patterns.

When asked what their understanding of environmental reporting was, just like their journalists, editors also gave a variety of responses. Their responses were; average, reporting on issues to do with the environment, reporting which was restricted to the environment only, writing about events affecting the environment, exposing bad practices and raising awareness on environmental protocol and international agreements. Except for those that stated that their understanding of environmental reporting was average, most of the editors from their responses indicated some understanding of environmental reporting.

The editors were also asked what their understanding of environmental issues surrounding the country was. The editors did not say anything except one whose response was events and actions which contributed to the degradation of the environment. This clearly showed that the editors did not know or rather understand what the most pressing environmental issues in the country were. Being ignorant of these issues explained why editors would not let environmental issues and events cover most of the pages of their publications as it did not matter to them.

The editors were asked to give reasons for the environmental problems which they considered to be the country's major. Their responses included pollution whose reason was that it affected people so much, drainages and sanitation which caused blockages and diseases during the rain season, deforestation due to lack of electrification. According to the editors, most of the problems were considered major as they had contributed to the country's environmental crisis.

However, only a few editors gave reasons of why they considered some problems to be the country's major environmental problems.

Just like for the journalists and the editors, a cross section of society was also asked on what they understood by environmental reporting. Most of them understood environmental reporting to be the reporting by the newspapers which had to do with the environment or our surroundings both human beings and animals. It was the reporting that had to do with people and animals' inhabitants and the effects of human activities whether positive or negative, also making the public aware of environmental issues surrounding their environment and, also the publication or reporting of issues affecting the environment.

Respondents also understood environmental reporting to be; a way of making the public aware of the developments in the environment either positive or negative, the giving out of environmental findings to the public by the people who had done studies on the environment, reports in relation to our environment, communities and social interactions and how they affected our earth as a home.

On their understanding of environmental issues surrounding the country, a cross section of society gave the following responses: Issues affecting human beings and animals, problems that affected our surroundings, human activities that were affecting nature and how we should improve nature. The issues that affected the environment both living and non living, issues to do with environmental conservation, the problems faced in our homes and surroundings, issues to do with environmental degradation and, issues that played a role in either promoting or destroying our immediate surrounding such as the physical world.

There were some respondents that well understood environmental issues surrounding our country as was evident from their responses below which stated that environmental issues were problems which were taking place and had brought about debate and discussions because of their effects on society, issues that dealt with our earth and its atmosphere, how its changes affected us and other creatures, issues that affected the environment and the life that depended on it; such issues included sustainable management of our environment.

5.4.3 Media Coverage of Environmental Issues and Problems

This section presents the findings from all respondents on the media's coverage of environmental matters, which environmental matters or issues deserved more of the media's attention than other problems as well as if or not the media's coverage of environmental matters was up to what was expected of them.

As respondents, the journalists were asked why some environmental problems needed to be brought to the attention of the public. Most of the respondents only mentioned an array of environmental problems experienced in the country, others did not say anything while others stated that the public needed to be told about these problems as they affected them directly or indirectly in one way or another. Only a handful of the journalists seemed to understand that the public needed to know.

When asked why the major environmental problems mentioned were not given much priority by their respective dailies in question, the journalists stated that they had to give priority to stories or news that benefits their newspapers. In the case of *The Post newspapers*, priority was given to news that would sell considering the fact that they were a profit making media organization hence their priority of politics before anything else. Actually, anyone that read *the Post newspapers* would agree that the first page headlines carried by the paper had to do with politics most if not at all times while the back page always carried sports news or headlines. As one may agree, what catches the reader's eye is always what is on the front and back page of the paper and usually, readers fall in love with that news. They also argued that environmental news was bad for business hence editors gave it a thin view resulting in the news not being a priority.

For the state owned newspapers the *Zambia Daily Mail* and the *Times of Zambia*, reasons given were that other stories such as developmental and political news rather than environmental news were given more priority owing to the fact that they were government owned and controlled media hence they had to please the government of the day. Most of the news that had to do with politics was much in favor of the ruling party and more so negative on the opposition. Most of the space was also allocated to the coverage of developmental stories or news and the reason advanced was that people were entitled to knowing the kind of development going on in their areas.

The journalists were also asked whether or not the country's major environmental stories were being adequately reported to the community by their respective newspapers as well as justify their responses. There were an equal number of journalists that stated that their respective newspapers reported environmental news adequately as well as those that said their respective newspapers did not adequately cover environmental matters.

For those journalists that indicated that their respective newspapers covered environmental news adequately, most of them were from the state owned newspapers while a few were from the private newspaper. Reasons advanced for their reasoning were that their newspapers had a weekly column that covered environmental stories and news and also that the public had the right to know what was happening to their environment through the media. The respondents also mentioned that the environmental issues and problems were in most parts of the country hence it was inevitable to cover them adequately and that environmental responsibility required concerted efforts hence the role of the newspapers to let the people know.

For those journalists who stated that the coverage of environmental news and stories was not enough, reasons included the one above advanced by the private newspaper that environmental coverage was not good for business as it was not appealing to the readers and that political stories had taken centre stage as they were believed to sell. Others argued that there had not been adequate coverage considering the fact that environmental news was never on the front page and news was usually biased towards politics hence blocking other important issues such as those to do with the environment.

On the question or aspect of whether or not the three dailies under study adequately covered environmental matters, the editors all mentioned that their respective newspapers did not cover or report environmental news, problems and events adequately. Reasons advanced for the inadequate coverage of environmental news and problems were; because of few reporters, lack of interest in environmental issues, because of the costs involved in news gathering and production which gives the need for the newspapers to maximise profit and dedicate space to sellable topics such as politics and sports. Other reasons were logistical problems encountered whilst trying to cover environmental issues, problems and events and authorities which were not readily available to give information to journalists when they needed it.

Asked on which environmental problems were given more priority, the editors argued that all of the environmental problems were given priority in terms of coverage and that the problems that were given much more coverage priority in place of all other environmental problems that needed coverage, were because they affected human lives more than the others. Some respondents still pointed out that environmental problems such as deforestation were given more coverage as nothing was being done to replace the trees that were being cut on a daily basis indiscriminately, water pollution affected people's lives through various water borne diseases so the polluters had to somehow pay for their mess.

According to the editors of the three dailies in question, climate change was also given more space and priority when it came to coverage as compared to others because it had been raised at the international level and a small unit in the country had been set up to follow up on the same.

5.4.4 Community Awareness of Environmental Problems Surrounding them

This section presents the findings on the community's awareness of the environmental problems surrounding them, that is, the environmental problems that were so inherent in their respective communities. This question was asked to a cross section of society in the respective Zambian urban, peri-urban and rural areas of Lusaka, Mazabuka and Chongwe.

When asked if or not their communities were aware of their existing environmental problems, some mentioned that the people in their communities were aware while others were not aware. However, most of the respondents mentioned that most members of their communities were not aware. The respondents were then asked to give reasons for their respective communities' lack of awareness of the environmental problems they faced. Reasons advanced for the lack of awareness were low education levels and high illiteracy, lack of sensitisation especially by the media on the effects of bad environmental practices such as deforestation. Respondents also mentioned lack of civic education on environmental issues as well as ignorance on environmental issues and, lack of proper environmental information flow to the general public.

For those in the rural area, some of their reasons for their communities' non awareness of the environmental problems surrounding them included; their rural setup where most people did not have money to buy newspapers and other mediums of information, lack of electricity and, most environmental and even general news and information covered in the newspapers had to do with urban areas and not rural hence the lack of awareness and even interest.

5.4.5 Role the Media could Play in Fostering Public Environmental Awareness and Education

This section presents the findings in one paragraph from the editors of the respective newspapers in question on the role which they played in fostering public environmental awareness and education. There are also findings from a cross section of society on what role they felt and thought the media, besides what they were already doing, could play in fostering public environmental awareness and education.

According to the editors of the three newspapers, their role as the media in enhancing public environmental awareness and education was reporting on environmental issues, continuing environmental education of the public through covering environmental matters, alerting the authorities on environmental matters, exposing bad practices, and educating the masses. Other responses were; reaching out to everyone on the communities through networks such as ANEJ, contributing to the body of knowledge of environmental matters through participating in workshops, training and encouraging many journalists to take up environmental reporting and, through publication of environmental news and feature articles to inform the public about the importance of environmental conservation.

On the role that the media should play in fostering public environmental awareness and education, respondents gave a number of suggestions as indicated below; the media could play a role through publishing newspaper articles in local languages, reducing the price of newspapers so that everyone could afford to buy and read newspapers every day and, public places to have free newspapers for people to read. The media should also come up with deliberate programmes

for the sole purpose of environmental awareness and, the media was a key in the spread of information so it should disseminate as much information as possible on environmental matters.

There was need for permanent everyday environmental columns in the newspapers as was the case with for example agriculture on television and radio, the media should print posters on the environment such as the catalogues for game stores and enclose in the daily publications, the print media need to introduce incentives such as questions, quizzes, competitions and prizes on the environment through their daily publications, the media needs to concentrate more on reporting environmental issues since they had a great influence on people's minds and they were sure to get to both the public and all concerned parties such as government.

Respondents also mentioned that there was urgent need for qualified environmental journalists and also training of journalists on environmental matters and, environmental reporting to be done by trained people in both environment and journalism. The media could play a very significant role in all of this if only the reporters were trained in matters of the environment and environmental management and, the media could give clear pictures with in-depth analysis of the same so as to catch public attention and not just concentrating on politics.

Respondents also stated that the media could play a significant role in public environmental awareness and education by partnering with all concerned groups on the environment as they could fund some of their publications, the media to use non technical language which could be understood by a layman when writing on and about the environment, the media to print special editorial comments on the environment not just politics every day, environmental news needed to also make lead stories in the newspapers in order for the public to be aware, the media to prioritize environmental reporting while media NGOs must reach far rural areas which the newspapers were not able to and, the media needed to be aggressive in their reporting of environmental issues, events and news.

According to the respondents, there was also need for the media to work hand in hand with the law makers in trying to achieve public environmental awareness and education, the media to create a section for an environmental tip in all their daily publications, the media to publish all environmental news at all times not only when a prominent person had spoken, the media to set the agenda on the environment just like they did with politics as well as stimulate interest in the

same since they had the capacity to do just that, the media must publicize environmental news in an entertaining and educative manner, the media to carry out factual reporting without propaganda and finally, the media needed to set up offices in all districts in order to enhance environmental reporting of all areas equally.

Chapter 6: Discussion of Research Findings

6.1 Introduction

This chapter presents the interpretation or rather discussion of the research findings as presented in chapter 5 above. This discussion is based on the three objectives of the study which were to; find out how many environmental journalists there were in selected Zambian media organizations, determine the contents of environmental information published by the three media in question and, find out the contribution of environmental journalism to the lives of ordinary people in the selected urban, peri-urban and rural areas of Zambia.

6.2 Demographic information of respondents

This section discusses the demographic characteristics of all the respondents of the study. The demographic characteristics of the respondents discussed include; gender, age, educational attainment level, employment status and type of employment, name of media organizations for the editors and journalists, among others. Demographic information of the respondents is very important in ensuring that one is dealing with the right type of people for the kind of information being sought.

6.2.1 Age and gender distribution of respondents

All the respondents for the study were adults who were in a good position to understand the questions being asked and also provide the much needed information. All respondents were aged from 18 years all the way up to above 40 years. This meant that the respondents were well distributed among all the age groups that were in a position to understand what was going on around them hence suitable to be respondents for the study on the role of the Zambian media in public environmental awareness and education.

Environmental issues affect each and every member of the Zambian society irrespective of their gender inclination and concerted environmental action calls for both males and females' contribution. In this respect, the study selected both males and females as respondents be it journalists, editors or the cross section of society. However, as one may notice from the research findings presented in section 5.3.1, most of the respondents were males.

The findings on the gender distribution of the respondents indicate the scenario on the ground. Even after all the talk and sensitization on the crucial need for gender balance in all aspects of our everyday lives, women are still marginalized and left out in most developmental programmes. Even the editors whose gender distribution was balanced, the truth on the ground was not like that as there were more male editors than females. Meanwhile, the population of the country indicated that there were more females than males. This calls for more concerted efforts from all concerned parties in environmental awareness and education to involve more and more women. After all, women were more involved in activities that promote environmental degradation than men.

6.2.2 Education and employment information of respondents

From the study sample of journalists and editors and also findings of the study presented in 5.3.2, all the respondents were educated and their education attainment levels ranged from certificate qualifications all the way up to PHD. This simply implies that all the respondents had attained tertiary education. This array of respondents is exactly what the study needed as these respondents were in a position to read newspapers, understand issues and even analyze what the newspapers published. Most of the respondents were also in a position to buy newspapers as most of them were employed in one way or another.

Moreover, these were people whose voices could be heard when they should be louder to the media, the government and the lawmakers. And for these respondents, their ages indicated that they were neither young dependants nor the older folk who may have had problems with changing their behavior positively and acting for the good and benefit of the environment, this generation and the future generations. These were also the same people that made decisions hence were better placed to make decisions that would enhance public environmental awareness and education.

The problem however just like in any other developing country, people did not pride themselves in advancing their education levels. As soon as they had achieved some form of tertiary education and they were employed, they no longer thought of school. This was probably one of

the reasons why, despite the increasing number of schools and people getting into school, illiteracy levels were still very high and the reading culture still very bad.

People that were able to read still had a bad reading culture as indicated in section 5.4 (Refer to figure 33 above). Moreover, most of the respondents were employed and in the formal sector meaning that they could afford to buy a newspaper every day. The lack of interest in reading newspapers could only mean one thing; the bad reading culture which prevented people from reading daily newspapers.

Take for instance editors, considering their gender and age distribution; one would have expected the editors to have risen above most journalists in their professional qualifications seeing that their duty as ultimate gatekeepers in the system is much more demanding if what reached the public should be of quality standards. Their professional qualification level could perhaps be responsible and explain why most of them valued politics and sports more as compared to other issues such as environmental coverage. This was simply because the more one advanced academically, the better their understanding and comprehension of issues generally.

Considering the editors and journalists' duration in their respective positions or jobs, most of the journalists had been working for not less than a year in their current positions during the time of the study. The journalists' major responsibilities included news gathering or rather information collection and also news writing and most of them were in the editorial department and a few in departments such as features, gender and business departments.

This could only mean that most of the respondents were well placed in positions that enabled them to collect, write and cover environmental news and articles in an in-depth manner. Lack of interest and perhaps the roles of the gate-keepers could explain why there was still scanty and shallow environmental reporting in the three dailies. All the three daily newspapers did not have an environmental department with the sole responsibility of reporting on the environment and could be entirely responsible for collection and publications of all environmental matters. This was also one of the reasons for the scanty environmental information.

The journalists' major fields of study could also explain the reason why they lacked interest and motivation to cover environmental information despite the fact that they were educated enough. Most of them had just done journalism and public relations which were all void of environmental

matters and also management. The implication of these findings was that all journalists who collected and reported on environmental issues were not specifically environmental journalists.

This posed a danger of them reporting on things and issues they did not easily understand. This was one of the reasons why most environmental articles in the three dailies lacked an in-depth presentation and analysis. Environmental journalism had been successful in other parts of the world especially the developed nations simply because for one to be called an environmental journalist, they would have studied both environmental and journalism studies which is what we were lacking in Zambia.

Most of the editors had studied journalism, journalism and law or public relations. Moreover, most of them had been working as editors for six years and more meaning that they too did not need job on training experience in order for them to prioritize environmental news when editing and sending to the printers for publishing. Their main tasks revolved around news editing, newsroom management and gate keeping. The aspect of gate keeping could explain why the editors still did not value environmental news or information as some journalists actually mentioned that they collected environmental information which apparently according to the editors was not appealing and eye catching enough either for business or to the target audience hence the editor's choice not to publish the information. This probably could have been because of misplaced priorities by the ultimate gate keepers who were the editors in this case.

6.3 Environmental awareness and education of respondents

This and the following sections of the chapter discusses all the findings of the respondents' environmental awareness and education. This section looked at the type of information collected by the journalists, the information received by editors for editing, the media's audience for their daily publications as well as the numbers of environmental journalists in the three media organizations.

In order to complete this study, it was inevitable to find out how many environmental journalists there were in the nations' three prominent media organizations hence the question that was asked to the editors of the three daily newspapers. For the sake of the discussion, it is worthy mentioning again the response of the editors. The editors from the state owned newspapers stated

that all the journalists were environmental journalists as no one was specifically trained in environmental journalism while others gave the numbers of their environmental journalists (refer to figure 26).

The editors who stated that they had environmental journalists in their organizations actually meant the journalists that did report or were usually assigned from time to time the tasks of gathering information and reporting on environmental matters but were not environmental journalists by profession. This simply meant that it was all news and feature reporters that covered environmental news, that journalists were all rounders and that no one was specifically trained in environmental journalism. Whatever the justification, it did not make those reporters environmental journalists as they lacked training in environmental issues. Those supposedly environmental journalists were all from the state owned daily newspapers as the privately owned newspaper stated that they did not have even one environmental journalist. Perhaps one might understand why the quality of the environmental articles was so shallow and lacked more detailed and researched information.

Most of the information that journalists collected as well as the information that editors received for editing was biased towards politics and sports while environmental information was left out. Considering the fact that the target audience for the daily publications was the general public both inside the country and beyond its borders, it was surprising that environmental information was very minimal, scanty and without detail (refer to figures 20, 21, 23, 24, 27 and 28)

The implication of these figures above was that most of the information type collected was political and sports related meaning that most of the news that journalists found appealing when collecting information in the field was either political and or sports related. This pushed environmental information into the third place meaning it was not much of a priority. This could be attributed to either lack of interest or understanding by the journalists whenever they were out in the field collecting information.

6.4 Media partners in public environmental awareness and education

This section discusses the findings on the three media organizations' partners in public environmental awareness and education. This came in light of the fact that as much as the media

did play a significant role in making the public aware as well as educated environmentally, this task was huge and they could not do it single handed as it required concerted efforts from all concerned parties and organizations around the country.

Being the final gate keepers and probably having more powers than their journalists, the editors were asked if they had partners and who those partners in public environmental awareness and education were. This question was asked to try and establish whether the media were trying to educate the public on environmental issues on their own or they had partners. As one may expect, the three daily newspapers actually had partners who they stated that they worked hand in hand in making the public environmentally aware and also educated. Most of the editors mentioned the Environmental Council of Zambia as being their major partner (refer to figure 38). The other partners included UNEP, ANEJ, their sister media the electronic media and others.

However, from the scenario on the ground and the newspaper content and frequency analysis data, nothing suggested that the media were indeed working hand in hand with their purported partners. This somehow pointed out to a problem and the problem was that these partnerships seemed to just be on paper as they did not seem to be doing much where community environmental awareness and education were concerned. The media had a role to play in public environmental awareness and education hence, if their partners were not up to the pace, the media needed to take the first step and get not only the partners they mentioned but everyone that was interested and concerned including individuals to act.

6.5 Understanding of environmental issues, reporting and problems

This section discusses the research findings presented in section 5.4.2 above. All the respondents were asked to state in their own words their understanding of environmental reporting, environmental issues and problems surrounding their respective communities and the country at large. These questions were important and necessary in trying to find out if our journalists and editors, the people that were responsible in the media for environmental reporting actually understood what they were doing.

It was clear and evident from both the journalists and editors' responses which revealed that most of them had no idea of what environmental reporting was as well as what environmental

issues were or what environmental problems the country was experiencing while some had an idea but did not really know much. Most of the journalists' responses added up only came to the conclusion that most reporters dealt and wrote on things they did not fully understand.

As for the editors except for one, they all did not say anything on the issues under concern and one could only deduce from their non response that they, unlike their journalists did not understand the issues in question hence their lack or prioritization of environmental information dissemination to the public. Their non response clearly indicated why the editors would rather give more priority to political and sports news rather than environmental information. This clearly showed that the editors did not know or rather did not understand what the most pressing environmental issues in the country were. Being ignorant of these issues simply explained why editors would not let environmental issues and events cover most of the pages of their publications as it did not matter to them. In order for the editors to give more space in their dailies, there was need for them to prioritise environmental reporting just like sports and politics.

On which problems were considered major by the journalists, unlike the editors, the journalists with their vague understanding of the problems surrounding the country would prefer all the environmental problems to be treated as major hence the need to be published to the public. This meant that the journalists were actually more aware of what was happening around the country in the environmental circles as compared to their editors. The reason for the discrepancy in information between the editors and the journalists could be attributed to the fact that journalists spent more time in the field investigating and gathering information thereby getting more and more acquainted with issues and events outside the walls of their offices while editors just sat and worked within the confines of their offices.

A cross section of the community on the other hand revealed the mixed understanding of the issues under discussion. Some of the respondents literally understood nothing, others had an idea according to their responses while others had so much interest such that they followed environmental events in the country and were able to elaborate on the issues under discussion.

All the mixed responses as indicated in section 5.4.2 above could only mean one thing and that is the fact that most of the public had a vague understanding while only a few had a clear understanding of environmental reporting and the environmental issues surrounding them in their

immediate communities as well as the country and the entire planet earth as a whole. The vague understanding of issues implied that the media was not doing as much as they were supposed and expected to do in the quest for public environmental awareness and education.

6.6 Media coverage of environmental issues

This section discusses the findings presented above in section 5.4.3. This section was important to the study as it sought to find out how the media covered environmental information (refer to section 5.2 for a comprehensive analysis of media coverage of environmental news over a period of three selected months of May, June and July in the year 2010). It was also necessary for the study to find out how both the media personnel and the public considered media coverage of environmental information.

From the journalists' perspective, it was evident that the journalists were aware of the fact that the public had the right to know what was happening around them not just politically or sports wise but also in the environmental circles. The problem and the responsibility of making sure that this was done lay entirely with the superiors who were the editors of the three newspapers. Despite the lack of sources of information, motivation and interest in environmental information gathering, journalists tried and did their faithful part of gathering information which most times ended up on the tables of their editors and not the public as earlier on intended by the journalists.

Sometimes the journalists in the public media were not free to report on whatever was happening in the country. This was due to the fact that they had to write about things that would please the government of the day and this was no other than politics. They were simply not at liberty to do the right thing which was reporting objectively on all matters especially those that had a bearing on society. If they went against their superiors they risked being demoted or losing their jobs completely or even being retired if they were quite advanced in their years.

The lack of environmental training could probably also be responsible for the media's inadequate environmental information coverage. Trained as environmental journalists, it would be easy to take up any task that involved gathering environmental information despite the location and costs involved. Some reasons for not covering environmental news and events such as logistical costs and the location of some of the environmental events did not make much sense if journalists

really knew the value of an environmentally informed public which had a right to know. Journalists would no longer need to only be interested in reporting only on pollution issues as the findings indicated.

It is perhaps interesting to note that the editors who were the final gate keepers in the process of information gathering and processing were also aware that their three daily newspapers were not covering environmental news adequately to the public's satisfaction. They too, like their journalists lacked the necessary environmental training and for the two state owned daily newspapers, they had lost their essence as the media personnel had been turned into cadres of the government of the day. This came in light of the fact that much of their news coverage had to be politics in favour of the ruling party and against the major opposition parties. This had led to the negligible publication of environmental information which the public so much needed.

The story was however different for the privately owned daily newspaper. Whereas it was also supposed to report objectively on all issues affecting the country including environmental matters, the paper had deliberately turned to politics and sports in a bid to make more and more profit by the day although their coverage of politics did not really support the government of the day. Their loyalties no longer lay with their audience which was the general public but just a few people in the limelight and their obsession to sell daily publications and make as much profit as they could.

From the responses of a cross section of society, it was clear that people were hungry for quality environmental news and they were tired of what they termed as 'dirty politics' making front page headlines every day. Some respondents even accused the three daily newspapers when they mentioned that they did not read newspapers on a daily basis as they knew that only insults by opposing political parties were contained in the newspapers and made up stories of the day.

A cross section of society also revealed that people in the community longed for the media's provision of detailed and sensible information on the dangers of environmental destruction, how to take care and preserve the environment properly and, what was expected of them in the whole arrangement, that is, their roles and responsibility in the whole environmental sustainability thing. Those that knew only little about the environment longed to know much through media sensitization and more environmental education at community level. Everyday media

environmental coverage and provision of environmental news and information would over time reinforce positive behavior and change for the better if the media had taken this task as serious as it was. After all, it was the same dailies that set the public agenda of what they printed daily in their publications, meaning that they could still be major players in public environmental awareness and education.

6.6 Community awareness of environmental problems

This section discusses the findings on the community's awareness of the environmental problems surrounding them, that is, the environmental problems that were so inherent in their respective communities. This question was asked to a cross section of society in the respective Zambian urban, peri-urban and rural areas of Lusaka, Mazabuka and Chongwe. For the study to be complete, it was important to find out if or not the communities were aware of the environmental problems which were found in their communities.

From the findings presented in section 5.4.4 above, most of the people in the country were not aware of the environmental problems which their respective communities were going through. Reasons advanced for this lack of awareness were low education levels and high illiteracy, lack of sensitisation especially by the media on the effects of bad environmental practices such as deforestation. Respondents also mentioned lack of civic education on environmental issues as well as ignorance on environmental issues and, lack of proper environmental information flow to the general public.

Considering the reasons advanced by the respondents, it was not just the media that was at fault for the community's non-awareness of what was happening in terms of environmental matters. This could only be translated into the bigger picture which meant that most of the people in the country were not aware of the environmental problems which the country faced time and again. As much as it was also the role of the media to make the public aware as well as educate them in environmental matters, other factors were also at play.

Poverty was one of the reasons that were advanced for the community's non awareness and, as much as many of the people that were not aware of the environmental problems their respective

communities were facing were from the rural areas, one did not need to travel from an urban area to rural areas in order to comprehend the levels of poverty in the lives of ordinarily Zambians. Just like many other developing countries, Zambia had not been spared from the effects of poverty. This was the more reason why most people that were able to read newspapers and understand the issues contained therein would rather not spend their little money on newspapers but buy some food to eat. The implication was people missing out on vital information whose access seemed more of a luxury than a necessity.

Whereas the media was not responsible for issues such as poverty, the media was quite responsible for the lack of sensitisation of the public hence their non awareness of the environmental problems experienced by their respective communities. The media had not reached out enough to the public where environmental awareness and education was concerned. An average person was aware of what was happening in the political and sports areas but not in environmental matters. Meanwhile, it was the same three dailies that had set the public agenda on politics and sports meaning they could do the same for environmental matters which affected everyone irrespective of where they lived in the country or their socio-economic status.

6.7 Role media could play in fostering public environmental awareness and education

This section discusses the findings from the editors of the respective newspapers in question on the role which they played as media organizations in fostering public environmental awareness and education. The section also discusses the findings from a cross section of society (who were one of the major stakeholders in the fight against unsustainable environmental practices) on what role they felt and thought the media, besides what they were already doing, could play in fostering public environmental awareness and education.

The editors of the three newspapers were asked the roles which they played as the media in enhancing public environmental awareness and education. This question was asked in order to find out what exactly was being done by the prominent media organizations in the country when it came to issues of public environmental awareness and education knowing that the media played a very significant role in the same. A cross section of society was also asked what role the

media could play in enhancing public environmental awareness and education. This question was important as there was need to hear from the public since they were the centre of concern where public environmental awareness and education was concerned.

As expected, the respondents gave an array of answers as well as suggestions. The roles which the media played according to the editors were elaborated in the findings of the study and also the roles which the public felt and thought the media could play in fostering public environmental awareness and education (refer to section 5.4.5). Considering the findings that were presented in the above section (section 5.4.5), the media in the country would have achieved much more than they had actually done where environmental journalism was concerned. As much as the editors mentioned the roles presented in the findings as being their courses of action, the content and frequency analysis of the three newspapers' coverage of environmental information over a period of three months showed that this was not the case.

The content and frequency analysis of the three daily newspapers (refer to section 5.2) actually revealed that most of the roles brought out by the editors were much more theoretical than practical. This simply implied that the media had action plans which they were supposed to execute if they were to achieve sound public environmental awareness and education. Unfortunately, from the editors' responses and the newspaper content and frequency analysis, these action plans were just on paper. This made the media organizations much more theoretical and not practical when it came to issues of public environmental awareness and education.

As the centre of the concern and need for public environmental awareness and education, the public also articulated their suggestions of what they thought and felt the media organizations in the country needed to do in fostering public environmental awareness and education (refer to section 5.4.5 for a comprehensive presentation of these findings). As much as there was not much widespread sensitization and education of the public on matters to do with their environment, those people that were sensitized in one way or another still felt that there was more to what the three daily newspapers could do compared to what they were doing at that time. Much more needed to be done by the media especially considering the fact that unlike their electronic media counterparts in the country, the three daily newspapers in question covered and

reached further and remote places. Moreover, the lifespan of information contained in the newspapers was far much longer than that of the electronic media.

According to a cross section of society, the old adage ‘no man is an island’ still held as much even in the role that the media could play in fostering public environmental awareness and education. The media needed to wake up and realise that trying to educate the public on matters of the environment could not be done on their own hence the call to involve all stakeholders including the public themselves. After all, one never forgets what they see and do but can easily forget what they are told over time.

6.8 Reflections on the Extent to which the Research Questions were addressed

The whole study was based on three research objectives which generated three research questions. The purpose of this section is to briefly reflect on the extent to which the three research questions were addressed having done the secondary and primary data collection, analysis of data and finally the presentation of research findings.

The first of the three research questions was; “how many environmental journalists do the selected media organizations have?” This research question was addressed and well responded to by the editors of the three dailies under study. In this dissertation, this question is featured in the presentation of research findings under sections 5.3.2 and 5.4 which indicates the educational qualifications of the journalists and the number of environmental journalists there were in each editor’s department and media organization respectively.

The second research question was; “what percentage of your daily publications covers environmental issues/matters?” This question was partly addressed by section 5.2 but was not addressed by any of the respondents it was directed to as it was directed to the editors of the three daily newspapers in question. Section 5.2 gives an indication of what responses the respondents would have given had they answered the question. From section 5.2, it is very evident that all of the three dailies under study did not have everyday environmental publications.

The third question was; “what impact does environmental journalism have on the lives of Zambian communities?” This research question was addressed by sections 5.3.2 and 5.4. The impact of environmental journalism on the lives of Zambian communities was very minimal as the majority of the people were not sensitized let alone aware of, or understood environmental journalism. Environmental journalism had not done much to impact on people’s lives.

Chapter 7: Conclusions and Recommendations

7.1 Conclusion

From the findings of this study, it was clear that there were no environmental journalists in the country. There were only journalists in general who were just assigned tasks of reporting on environmental issues – issues they did not understand properly. Moreover, the same journalists that were entrusted with the responsibility of reporting on the environment besides just the lack of training in environmental issues also lacked interest and motivation to pursue such interests.

The study also revealed that even when the journalists assigned the task of reporting on the environment carried out the tasks and did their honest part out of duty, gate - keeping by the ultimate gate-keepers who were the editors of the respective dailies still kept the information from reaching the public as they found it uninteresting enough to make front page headlines and not good enough for business or profit making purposes.

The findings of the study point out to the fact that the more academically educated an individual was, the more their understanding and comprehension of not only environmental issues but of life as a whole. One was able and in a better position to give proper analysis and value to that which was a source of their livelihood. As a result, those respondents that had at least a first degree answered the questionnaires in such a way that it was easy to understand, analyze and make sense out of their responses. Those respondents that were more advanced in terms of academic achievements were also quick to respond to the questionnaires as they understood the value of research in any development process.

The study also revealed that most of the media personnel had not achieved much in terms of academics. Most of them had just gone as far as a diploma which was not good for their own understanding and in-depth analysis of everyday life and environmental issues surrounding them hence their lack of interest and prioritization of the same when it came to information gathering and publication.

The study also showed that there was a high rate of illiteracy as well as a very bad reading culture around the country. Most of the respondents had access to daily publications at their work

places but they did not take time to read and analyze the information that was given to them hence their ignorance and negligence of issues that were cardinal and important to their daily lives. Because of the poor reading culture around, most people just like the media personnel also found environmental news and information less interesting as compared to politics and sports.

In a country that is ravaged by poverty and hunger, an average person found newspapers to be a little bit on the expensive side. One would rather buy food than a newspaper in order to satisfy their urgent need for food instead of the quest for information. The same environment which they were supposed to protect and use sustainably was their very source of livelihood for example charcoal burners. This made it difficult for such groups of people to stop the indiscriminate cutting of trees. Moreover, people had an 'I don't care' attitude towards their own surroundings hence even those that knew the consequences of poor environmental management continued destroying and destructing their immediate environment for immediate needs.

The space given to environmental coverage was very minimal in all the three dailies. It was not on a daily basis as was the case in other developed countries where environmental coverage had taken centre stage. When covered, environmental stories were full of jargon and technical language that made it difficult for the layperson to understand let alone take interest in following up such developments in subsequent publications.

When space was allocated for environmental coverage, much of it was dedicated to issues to do with pollution by the mines and other urban areas. Moreover, most of the environmental stories were seasonal such as floods and droughts. And, most of the environmental stories were not covered independently; they only saw the light of the day when accompanied by a prominent member of society or the government of the day. There were also a lot of environmental issues in the rural areas that needed to be brought to the attention of the public but this was not done. This placed the people in the rural areas at a disadvantage hence their lack of interest in environmental issues taking place in their respective areas.

The study also revealed that lack of sensitization coupled with the low literacy levels and poverty had triggered more environmental damage and lack of care or concern for the environment. Where people had been sensitized, not much had been done to enforce positive thinking and behavioral change for the betterment of our environment.

7.2 Recommendations

From the findings and the conclusion of the study above, it was evident that there was need for some changes in the media coverage of environmental issues in Zambia if we were to achieve sound environmental journalism in the country. The recommendations included the following:

- a. Setting up of deliberate learning programmes or initiatives such as workshops and seminars on the environment, the importance of environmental management and coverage of environmental issues for all in service media personnel, that is, all the editors and journalists since they were not very knowledgeable on matters of the environment. This would also motivate and interest them to cover environmental issues as it would be easy to understand their assignments and also value environmental coverage for lead stories. This recommendation arose from the finding that non of the journalists and editors of the three dailies under study had any form of training in environmental matters.
- b. There was urgent need for all institutions of higher learning to include in their various curriculum aspects of the environment such as environmental management and journalism. If possible, there is need to introduce environmental journalism in the institutions that train journalists as an independent training Programme. If we, like our counterparts in the developed world are to achieve sound environmental reporting and journalism, people that take up this task must be trained in the two fields of concern which are environment and journalism as is usually the case with say health reporters in the developed countries. Usually, such reporters are trained in journalism and health. This recommendation follows the finding that institutions that train journalists did not offer environmental journalism and hence the lack of trained environmental journalists in media institutions of the country.
- c. There was need for the media to prioritize environmental coverage. This could start with the media's change in the perception of environmental journalism. This way the media will over time set the public agenda on the environment and people will adjust and find environmental coverage interesting just like they find politics and sports and will this way keep reading and following up events and environmental issues. This recommendation addresses the finding that environmental news did not make front or back page headlines as it was considered bad for business and profit making purposes.

- d. The media needed to up their coverage when it came to environmental coverage and make environmental coverage both interesting and educative for an average person in the country. This can be done through various initiatives such as weekly supplementally publications on environmental coverage as is the case with the post and game stores who have a weekly catalogue printed and circulated for a number of days in the newspaper as they circulate around the country. This way, the newspapers will reach a number of people and will go a long way in ensuring public environmental awareness and education. This recommendation arises from the finding that the media did not give the public as much environmental information but only concentrated on politics and sports.
- e. The media needs to place value on environmental coverage by carrying out in-depth analyses and research of the issues and events they publish before publication. Environmental news or stories should not only see the light of the day when accompanied by prominent people in society, politicians or the government of the day. Reporters and editors especially from the state owned newspapers need to be objective in their reporting and selection of which stories ultimately reach the public. This recommendation addresses the finding that environmental stories, news and events especially in the state owned dailies only saw the light of day if they were associated with a prominent member in society or the government of the day.
- f. The media also needed to reduce on too much technical terms and or language if they were to reach an average person in the country. This meant reporting using fewer technical details, that is, clarifying the issue without oversimplifying it. Environmental issues and problems affected everyone whether educated or not. It would help the public if the language could be as simple as possible when it came to environmental coverage. This way, more and more people would become interested in reading environmental information in the dailies hence their awareness and education of their immediate and surrounding environments. Only when people are aware of what is happening around them and also what is expected of them will they adopt positive behavioral changes and act in favor of the environment. This recommendation comes from the finding that due to lack of training in environmental matters, most journalists wrote environmental

information without carrying out in-depth analyses and research, hence the use of too many technical terms which made it difficult for an average person to get the message.

- g. The media and other interested parties such as ECZ, UNEP, ANEJ to mention but a few need to come together and partner in all public environmental awareness and education if we are to achieve sound results from all our efforts. Coming together unlike working in isolation will produce one big voice that will be heard all over the country and will ultimately foster public environmental awareness and education. All stakeholders to put their ideas and initiatives together and sensitize as well as educate the masses. The concerned parties could learn something for example from the mobile network providers who have managed to reach out even to the remotest areas in the country. This recommendation arises from the finding that despite the lack of public sensitisation, there were quite a number of organisations and concerned parties who needed to partner and make one big voice that would be heard in the whole country.
- h. In trying to foster public environmental awareness and education, the media needs to reach out to everyone through publications of environmental information in local languages, at least in the seven local languages commonly used in the country. People would learn no matter how lazy they are as long as they see the benefits of doing so. If people who cannot read and write have learnt how to use mobile phones, they too can learn to behave positively towards the environment. This recommendation emanates from the finding that illiteracy rates were still high in the country but some people were still in a position to read environmental news in local languages.
- i. The media needs to work hand in hand with the lawmakers as well as the law enforcement agencies where environmental awareness and education is concerned. Like mentioned earlier on, working in isolation will not help. The media, relevant government bodies and ECZ for example, could work together and ensure that the ‘polluter pays’ principle is adhered to by each and every polluter involved in environmental pollution. This recommendation stems from the finding that there were many environmentally concerned parties but these were still working in isolation and the consequences of this isolation were very clear.

- j. There is need for members of ANEJ to be professionally trained in both fields of concern, that is, journalism and the environment. This will ensure quality information dissemination to the public. This recommendation comes from the finding that members of ANEJ, which is a professional organisation for environmental journalists, were just ordinary journalists and not environmental journalists.
- k. Law makers and legislators to be trained in environmental issues and management and, country representatives of international environmental foras be it journalists, politicians or prominent people to be trained in environmental matters before representing the country. This could be done through seminars and workshops prior to travelling to the meetings. This recommendation arises from the finding that most people that occupied decision making positions or went out to represent the country on environmental matters did not fully understand their responsibility to themselves and to the country at large.
- l. The media needs to share good stories by supporting different community initiatives and getting close to the people affected by environmental problems. This can be with the aid of other forms of media such as electronic media that is readily available in the country. This recommendation emanates from the finding that people wanted to hear more of environmental matters and were eager to act positively if and only when they were involved as communities.

7.3 Further Research

This research was not exhaustive as there are gaps that still need to be filled in the role of the media in public environmental awareness and education. There is need for further research in environmental journalism to do with the role of community radio stations in public environmental awareness and education and the role of electronic media in public environmental awareness and education.

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Appendices

Appendix 1: Work plan for the Research study

Duration	Research Activity
June 2010 – July 2010	Desk research, finalizing research instruments and research proposal
August 2010 – September 2010	Field Data collection
October - November 2010	Data Analysis and Processing
December 2010	Discussion and interpretation of Research findings
January 2011	Submit draft thesis
February 2011	Making corrections
February 2011	Submit final thesis

Appendix 2: Questionnaire for Journalists

Dear Respondent,

I am a postgraduate student from the University of Zambia doing a Masters Programme in Environmental Education. I am carrying out a research on the role that the media could play in fostering public environmental awareness and education in Zambia.

You have been chosen to take part in this research. You are requested to take part through answering the questions below. This is an academic paper and all your responses will be used only for academic purposes and nothing else so please do not indicate your name. You are further requested to be free to provide the required responses to enhance this study. Where options are provided, please tick the right answer, and where options are not provided, fill in the blanks or give a brief explanation in the spaces provided.

Thanking you in advance.

Section A: Personal Information

1. Sex: Male [] Female []

2. Age -----

3. Educational level: Certificate[] Diploma [] degree []

 Masters [] PHD []

4. Major field of study -----

5. In which department are you? -----

6. Name of media organization -----

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

Section B: Environmental awareness and Education

8. What are your overall responsibilities in this organization? -----

9. What type of information do you collect as a department for daily publications? -----

10. Who can you say is the target audience for the information you collect? -----

11. What is your understanding of environmental reporting? -----

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

13. What do you consider to be the Country's major environmental problems, give a reason for your answer-----

14. Of the problems mentioned above, which ones do you think must be reported to the public, and why? -----

15. Of the environmental problems mentioned in (9), which ones are given more space in this paper's daily publications-----

16. Considering your response in the question above, why do you think this is so? -----

17. In your own view, do you think that the country's environmental problems are being reported by your organization to the community adequately? Yes [] No []

18. Give reasons for your answer to question 16 above -----

Thank you for your participation and cooperation

Section B: Environmental Awareness and Education

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

9. What type of environmental information do you collect for daily publications? -----

10. Approximately, what percentage of daily publications covers environmental issues? -----

11. Who can you say is the target audience for the daily publications information you collect? ---

12. What is your understanding of environmental reporting? -----

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

14. What do you consider to be the Country's major environmental problems? Give a reason for your answer-----

15. Of the problems mentioned above, which ones do you think must be reported to the public, and why? -----

16. Of the environmental problems mentioned in (9), which ones are reported more frequently in this paper's daily publications-----

17. Considering your response in the question above, why do you think this is so? -----

18. In your own view, do you think that the country's environmental problems are being reported by your organization to the community adequately? Yes [] No []

19. Support your answer to question 16 above -----

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

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

Thank you for your participation and cooperation.

Appendix 4: Questionnaire for Individual Respondents

Dear Respondent,

I am a postgraduate student from the University of Zambia doing a Master's Programme in Environmental Education. I am carrying out a research on the role that the media could play in fostering public environmental awareness and education in Zambia.

You have been chosen to take part in this research. You are requested to participate through answering the questions below. This is an academic paper and all your responses will be used only for academic purposes and nothing else so do not indicate your name. You are further requested to be free to provide the required responses to enhance this study. Where options are provided, please tick the right answer and where not, fill in the blanks or give a brief explanation in the spaces provided.

Thanking you in advance.

Section A: Personal information

1. Sex: Male [] Female []

2. Age -----

3. Educational level: Certificate [] Diploma [] degree []

 Masters [] PHD []

4. Employment status: employed [] unemployed []

5. Type of employment: formal sector [] informal sector [] self-employed []

Section B: Environmental Awareness and Education

6. How often do you read newspapers?

- a. On a daily basis
- b. Twice a week
- c. Once a month
- d. Once in a while

7. What type of information do you like reading in the newspapers? -----

8. What do you understand by environmental reporting? -----

9. What is your understanding of environmental issues? -----

10. What are the environmental problems/issues that are experienced by your community? -----

11. Is the community you live in aware of the environmental problems you face as community?
Yes [] No [] (If yes, go to question 13)

12. What do you think are the reasons for the community's non awareness of the environmental problems surrounding them? -----

13. What are the major environmental issues in Zambia? -----

14. How adequate are these environmental problems (in 10 & 13 above) covered by the prominent newspapers in the country? -----

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

Thank you for your participation and cooperation.

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