

NIGERIAN MASS MEDIA COVERAGE OF CLIMATE CHANGE AND ITS EFFECTS ON ABUJA RESIDENTS

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Abstract

Climate change has become a global crisis to the extent that it has become an emergency. And central to the sensitisation of the public and policy-makers are the mass media. The focus of this research therefore was on evaluation of Nigerian mass media coverage of climate change and its effects on Abuja residents. The research design was survey, while the population was 4, 025, 734. Further, the sample size was 300, while the sampling techniques were purposive and accidental sampling techniques. A key finding of the research was that the Nigerian mass media have been able to sensitise the public on the climate crisis to a large extent. One major recommendation is that the Nigerian media should continue to sustain the remarkable achievement recorded in the area of climate reporting in the country.

keywords: Mass media, climate change, perception, sensitisation, agenda setting

Introduction

Global warming and climate change are among the hot and prioritised issues in the global discourse today. Jamison (2010) noted that climate change first emerged as an issue of public concern in the 1970s and 1980s and grew into political significance and debates in the 1980s and 1990s. It became a topic on the international political agenda in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro where it was declared an environmental problem. Several local, regional and international conferences, workshops, seminars, conventions and symposia such as the Kyoto Protocol on Climate Change, and the Paris Agreement have been held, with many recommendations proffered. As expected, the mass media is to assist in sensitising and educating the people about these suggestions. Yadav and Rani (2011) contend that the mass media remains strategic in the business of providing the people and those who govern them with the

knowledge of protecting and preserving natural resources in the interests of future generations and the climatic chaos. Media are a central public arena through which we become aware of environmental issue (Maidunoma & Falmatami, 2018).

Climate change is an issue of public interest and given the effects of it, the media, which is a critical stakeholder in the mitigation of the impacts of climate change, has a crucial role to play (Guedegbe & Nfornggwa, 2023). Boykoff and Ravi (2007) equally point out that it is not surprising that the media performs such critical role because, for thousands of media audience, the mass media remains an important source of information. People get the majority of their news, ranging from political, economic, social, sports, health, scientific, agriculture, to mention but a few, from the mass media. Numerous studies have demonstrated that the media accounts for a large portion of the public's knowledge of science (Akpan, Anorue & Okonu, 2012; Wilson, 1995;

Ukonu, 2012). According to Yadav and Rani (2011), the media is essential in raising public consciousness about issues an encouraging them to adopt healthier habits that will help reduce the effects of human-caused climate change.

Furthermore, media views of climate change are important due to the fact that for the people to know or be aware of climate change and its devastating impacts, depends on the volume and time that the media dedicate to climate change issues (Lineman, Do, Kim, & Joo, 2016). Research by Afrobarometer discovered that there is a direct link between what the media report concerning climate change and the level of awareness of the public (Salormey, Dome, Osse, & Logan, 2019). Also, mass media coverage of climate change is imperative, not only because they are the means through which the public is informed and educate about climate change phenomenon but also as channels through which various people construct meanings and take a stand. Han and Lu (2017) agree that through framing the issues of climate change in a particular way and manner, the mass media can give a direction on how people perceive climate change and in reality, draw their attention to it with a view to promoting certain meanings of climate change in the people, thereby influencing how people think, talk and act concerning climate change. Bwala (2023), argues that most of the media reportage on climate change in Nigeria merely stops at information, without really addressing the policy issues on the crisis. Therefore, reportage of climate change by the mass media is capable of shaping people's responses and reactions to the climate change phenomenon (Boykoff & Roberts, 2007). Tagbo (2010) equally contends that worldwide, the media's role of setting the context and thereby shaping the way the public understands issues like those of climate change science, the politics of it, its

impact and the need for action, dates as far back as the 1930s when it was mentioned in an article published in New York Times that the earth must be inevitably changing its aspect and its climate. In other words, have the Nigerian mass media been educating the residents of FCT about climate change? What have the media has been reporting as the cause of climate change? How can media reportage lead to the mitigation lead to the mitigation of this global crisis? What is the extent of climate change sensitisation by the mass media? And in what specific ways have the media created impact on the respondents' views about climate change?

Review of Literature

Conceptual Clarifications

The Media

The indispensable role of media as lamp of enlightenment to the people was responsible for the third American president Thomas Jefferson's statement cited in Ndolo (2006, p.39), "were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter." The foregone statement obviously underscores the value universally placed on the media as melting pot for all sorts of beneficial messages. Media perform many important functions in the Nigerian society. Esimokha (2011, pp.10-11) states that "media serve the public by keeping them informed, entertained, informing authorities on the needs of the public, educating the public, helping them live more comfortable". Anaeto, Solo-Anaeto and Tejumaiye (2009) cited in Agbanu (2013, p. 79) contend that "media provide the news of the day...they bring to the readers, viewers and listeners recent information and provide them with what is happening around them", while Ochowdhury (2014) argues that the function of the media is to observe the society closely and continuously warn about threatening actions to the mass audiences that are likely

to happen in future in order to decrease possible loss.

Furthermore, according to Asemah (2011) and Auwal (2014) the mass media refer to a group of communication channels, broadly classified as print and electronic, that informs the public about events occurring on a daily basis in society. Stated differently, it refers to the entirety of information-dissemination structures and organisations that operate in a political, economic and social system. The public is informed about all facets and acts of the state and government by the media (Utor, 2000 as quoted in Abagen, 2009). Thus, it can be said that media in the modern society provide the people with the day's intelligence, act as the mirror and the guardian of the society.

Climate Change

Climate change simply refers to the change in the climatic condition of a place after a given period of time. These include the temperature, humidity, precipitation and wind. Natural events and human activities are believed to be contributing to an increase in average global temperature. Certainly, the reasons for climate change may be natural; however, it is mainly caused by human undertakings. Human activities often lead to the release of greenhouse gases into the air which has the ability to easily retain excessive heat in the earth space. Activities that involve burning of fossil fuels, including transportation and energy production, are increasing the concentrations of greenhouse gases (GHGs) in the atmosphere, trapping heat and causing global warming. Ogbo and Onyedima (2012) note that the extra-terrestrial factors include solar radiation quantity and quality among others while the anthropogenic factors involve human activities that either emits large amounts of greenhouse gases into the atmosphere that depletes the ozone layer or activities that reduces the amount of carbon absorbed from the atmosphere. Acid rain which could be

caused by the reaction of some greenhouse gases with rainwater during fossil fuel combustion also contributes to climate change. Onyenechere (2010) explain that greenhouse gases cause the greenhouse effect, which is the reduction of the amount of infrared radiation emitted by the earth surface which escapes to outer space by these gases.

Perception

This refers to the way an individual sees the world, an issue or phenomenon. According to McDonald (2021), perception means is a psychological process whereby an individual views an issue or phenomenon based on residual knowledge or environmental factors. Bhattacharjee (2022), supports the above by stating that perception involves the way individuals in society interpret issues and data and also draw inferences from them in order to make meaning in the world they live.

Empirical Review

Scholars have conducted researches in line with mass media and coverage of climate change. Therefore, this segment of the study reviews some of these works that have relevance to the focus of this study. To begin with, Tagbo (2010) conducted a study on "Media Coverage of Climate Change in Africa: A Case Study of Nigeria and South Africa". The study sourced for data from the internet version of *The Guardian* and *Vanguard* newspapers in Nigeria and *The Star* and *The Mail* newspapers in South Africa. Findings indicated that at the end of first quarter of 2009, *The Guardian* had a total of 28 articles on climate change and 21 articles within the same period in 2010. *Vanguard* had 13 and 17 articles during the two periods respectively. In six months (i.e. the two quarters combined), *The Guardian* published a total of 49 articles and *Vanguard* 30 articles. The months with the largest coverage in *The Guardian* were in March

2009 (15 articles) and January 2010 (9 articles). For *Vanguard*, the month of March marked the peak of its coverage during the two quarters (7 and 11 articles respectively). Both newspapers published an average of 64 pages per day, 3 articles per page (in *The Guardian*) and 58 pages per day, 5 articles per page (in *Vanguard*). So, out of 35,721 articles published by *The Guardian*, during the two 3-month period, only 0.14 per cent focused specifically on climate change and 0.05 per cent in *Vanguard* out of 50,220 articles. In six months, the two newspapers together published 79 climate change stories out of 86, 760 articles, and equivalent of 0.19 per cent.

The two newspapers from South Africa published 0.88 per cent of the 28,800 stories in the six months period analysed about climate change. In 2009, the quantity of climate change coverage in *The Star* newspaper stood at 7, 8, and 8 articles for January, February and March respectively. In 2010, during the same months, the coverage stood at 19, 18 and 27 articles. In all, this represents a near doubling in the number of articles compared to first quarter of 2009. As anticipated, the coverage in this period was dominated by stories from Copenhagen. *The Mail & Guardian* had only 2 articles (in March) in 2009. But in 2010, boosted by Cop15, the newspaper recorded a total of 19 articles on climate change which is a huge increase against 2009, though still a very low coverage overall.

The study concluded that climate change reportage in Nigeria and South Africa is not a front-page subject except when there is a strong local political and economic dimension to it, which is rarely the case. It was recommended that the media in these two countries can do more in shaping public understanding of climate change and public policies through increase coverage of climate change issues.

The study by Tagbo (2010) is relevant to this current study in that it centred on the contribution of media (*The Guardian, Vanguard, The Star* and *The Mail of Nigeria and South Africa*) to climate change mitigation efforts. This current study also seeks to assess the views of residents of Abuja, Nigeria on the role of media in the country regarding the issues of climate change. However, one of the limitations of the reviewed study is that it relied on secondary data. This, therefore, open up a gap for the current to study to fill.

In the same vein, Elia (2017) focused on “Farmers’ Awareness and Understanding of Climate Change and Variability in Central Semi-arid Tanzania”. Data for the study was collected through the deployment of the interview and focus group discussion methods. Results demonstrated that respondents have knowledge about coping and adaptation strategies and are aware of climate change variability. Although the respondents are aware of climate change and variability, they still lack a thorough understanding of it. Data further revealed that the farmers’ awareness and understanding are influenced by a number of factors, including the kinds of media used for communication, gaps in communication, inaccurate and delayed information, low income, and financial challenges. The study concluded that there has been progress in creating awareness among the farmers concerning climate science and predictions of rainfall rates, but in spite of this, the respondents still fail generally to adequately understand what climate change and variability entail. The study further concluded that farmers are currently adapting and have been adapting to changes in climate since then. In view of this, the research advocated the need for rigorous education and sensitisation through the various media of communication, timely access to

information and frequent contacts between researchers, extension officers and farmers.

The relationship between both studies is that both aim at evaluating how communication is influencing the debates on climate change. However, the reviewed study dwelled on climate change and communication on farmers in Tanzania, while the current study focused on the perception of residents of Abuja, Nigeria regarding the way and manner that the media is covering and reporting climate change. Also, both studies differ in methodologies, while Elia's study adopted interview and focus group discussion; this study employed the quantitative survey research technique.

Maidunoma and Falmatami (2018) investigated "Broadcast Media in Promoting Environmental Awareness: A Study of Yobe State Broadcasting Cooperation Damaturu (YBC), Nigeria". Interviews and survey were used as data collection instruments, and the study was situated within the agenda setting theory. The study discovered, among other things, that radio stations' environmental programming helps respondents adopt more positive attitudes, refrain from careless waste disposal, and have better attitudes about personal hygiene. The respondents acknowledged that the media's information serves as the primary source of knowledge about environmental issues, and they maintain a clean home and premises in an effort to be environmentally friendly. The study of Akpan, et al (2012) corroborate that several human activities are responsible for environmental issues the globe is currently facing.

The research suggested that grassroots producers, volunteers, and people with direction connections to environmental issues be included in Yobe State Broadcasting Corporation's environmental programmes. It went on to advocate that in order to tell stories that are more trustworthy

and impartial, the media should also use a variety of sources. For updates on environmental information, it was equally recommended that environmental programme producers and reporters communicate with pertinent agencies and organisations like Environmental Protection Agency (EPA), State Ministry of Environment, Non- Governmental Organizations (NGOs) for more updates on environmental information. Additionally, the media should establish channels for information sharing between themselves, such as between broadcast and print media, as well as between government, private and non-government media.

The connection between the reviewed study and the current one is that both studies talked about environmental issues and the role that the media is playing. The two studies equally anchored their arguments on the agenda setting theory. Nevertheless, the study of Maidunoma and Falmatami (2019) dwelled specifically on radio in Yobe State, adopted mixed research strategy, and made use of respondents in Yobe State. But the present study looked at the perception of the residents of Abuja, Nigeria regarding the role that the Nigerian mass media as a whole is playing on climate change issues. The current study also differs from the reviewed one in the area of methodology, as it adopted only quantitative survey.

Similarly, Guedegbe and Nforngwa (2023) carried out a study on "Media Perceptions of Climate Change in Sub-Saharan Africa". Interview and content analysis research approaches were adopted. Findings revealed that journalists demonstrated low understanding of climate issues in terms of knowledge of the subject matter. It was further discovered that due to the low levels of the understanding of climate change in the continent, the coverage of the issues lacked depth and breadth. For instance,

the 337 stories analysed indicated that 73% reported single events like droughts, storms, floods, conferences, seminars and meetings. 19% were stories on analyses and opinions, while investigative reports were least, representing 8%.

The study further found the factors influencing the coverage of climate change issues in the continent include interest from media organisations, scarcity of funds, and lack of time, access to sources and information, training and skills. It was concluded that climate change issues in African media is not given the needed investigation, as well as journalists in the continent struggle to explain or recognise essential facts and critical issues around climate change; demonstrate a grasp of international and regional climate change governance mechanisms, instruments and processes, as well as the major debates that shape international climate change negotiations. The study, thus recommended the need to strengthen the capacities of African media to cover climate change, improving journalists' access to credible and diverse sources of information, including scientific knowledge, and scaling up finance of covering climate change.

The link between Guedegbe and Nforngwa (2023) study and the present study are in the areas of media and climate change matters. However, while Guedegbe and Nforngwa's research focused on the continent as a whole, the present study is concerned about media coverage of climate change in Abuja, Nigeria. Another area of departure is that the reviewed study adopted the qualitative (interview and content analysis) research strategies, the current study made use of the quantitative survey design.

Theoretical Underpinning

The study is situated within the Meaning Theory and Agenda Setting Theory.

Meaning Theory

According to the meaning theory, the meanings people hold are strongly shaped by their experience of what they consume from the mass media. These meanings shape people's perception of, and behaviour in real-world situations (Defleur & Dennis, 1991). Meaning theory concerns with shaping, reshaping, and stabilisation of people's ability to communicate in consistent ways, particularly in social contexts. The media plays a crucial role in social communication processes. Individuals not only acquire information directly from the mass media, but they equally engage in discussions and share news an interpretation, leading to diffusion. Therefore, in a society heavily influenced by media, society, exposure to mass communication significantly shapes our perception and understanding of the world we live in (Defleur & Ball-Rokeach 1975). Consequently, the media's representation of reality can indirectly yet powerfully impact people's attitudes and behaviours. Thus, the meaning theory was considered relevant in this study.

Agenda Setting Theory

Bernard Cohen was credited to have popularized and articulated the agenda setting theory in 1963 (Chinedu, Nwamaka & Olarewaju, 2017). They state that the press is significantly more than a purveyor of information and opinion. It may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about. The elements involved in agenda setting according to Chinedu et al (2017) include, the quantity or frequency of reporting, prominence given to the reports through headline displays, pictures, and layout in

newspapers, magazines, films, graphics or timing on radio and television and the degree of conflicts generated in the reports as well as the cumulative media specific effects over time. Agenda setting theory is relevant to this study because if the media set the agenda of public discussion, it is assumed that sustained media coverage and reportage of climate change may influence the way the residents of FCT react and response to environmental issues caused by climate change.

Methodology

Survey research design was employed for this research. According to Babbie (2020), it is mostly employed to get responses concerning the perceptions of people on a phenomenon. Olaoye, Enyindah and Asemah (2022) assert that “survey is an empirical study that uses questionnaires to discover descriptive characteristics of a phenomenon” (p.302). The study population was 4, 025, 734, of the all six councils in Abuja namely: Gwagwalada, Kuje, Bwari, Kwali, Abaji and Abuja Municipal Area Council (AMAC). based on the 2024 estimate by the World

Population

Review (www.worldpopulationreview.com). The Sample size was 400, based on Singh & Masuku Sample Size Determination Table (2014), which says that at plus (+) or minus (-) 5% precision level, where the confidence level is 95%, when the population of a study is over 100,000, then the sample size should be at least 300. The adoption of purposive sampling method was used in the selection of adult population with the understanding that they would possess the requisite cognitive capacity to adopt to listen, read, and watch stories concerning climate change on the radio, in newspapers and magazines, on television and on the Internet In addition, the accidental sampling approach was used. The study adopted an availability sampling technique in the self-distribution of the questionnaire. Data was presented through the use of frequency and percentage charts, and mean deviation calculations and Likert Scale. Opinions were measured using the Strongly Agree (SA), Agree (A), Undecided (U), Strongly Disagree (SD), and Disagree (D) scale.

Data Presentation and Analysis

A total of 300 copies of questionnaire were distributed out of which 279 were retrieved and found valid for analysis. Graphical representation of the percentage is contained in Figure 1 below:

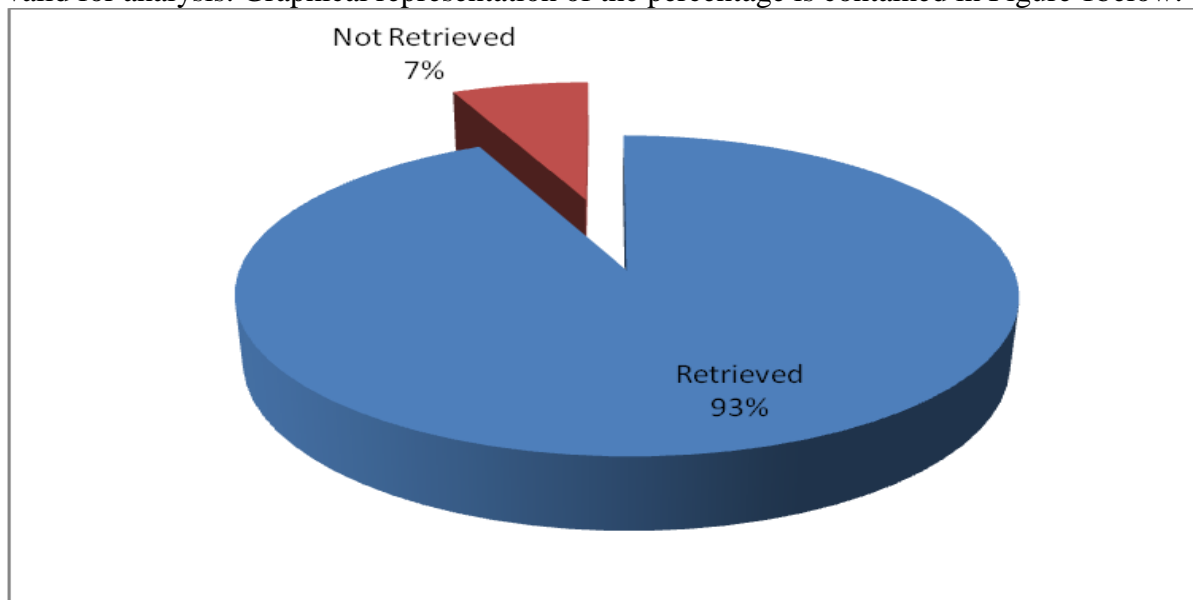


Figure 1: Response Rate

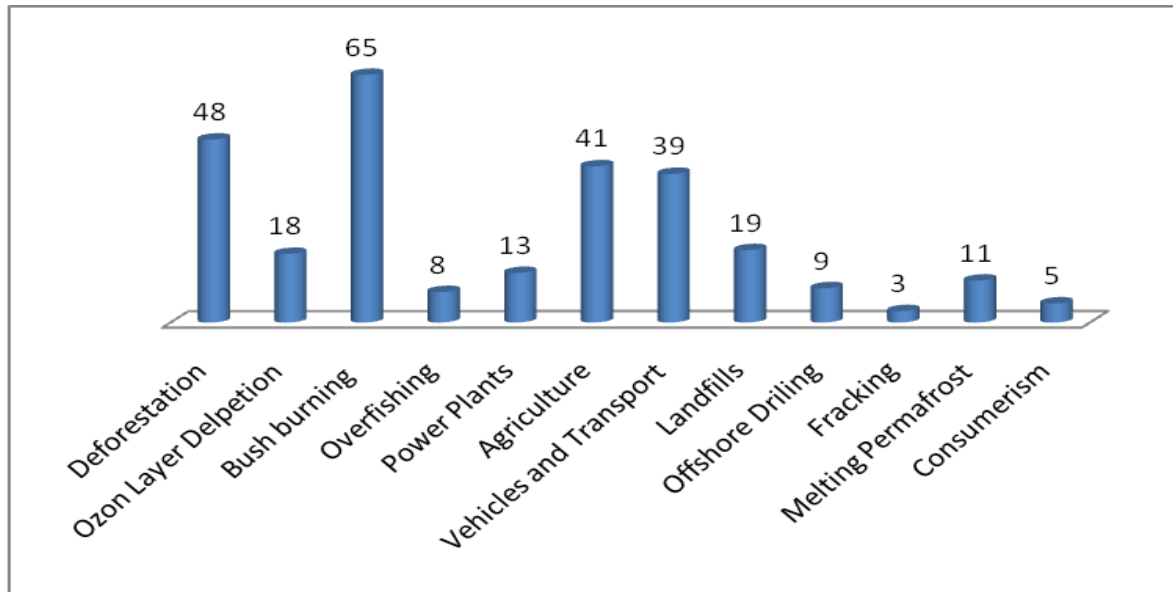


Figure 2: Causes of Climate Change Reported by the Nigerian Mass Media

It could be deduced from the finding in the above chart that causes of climate change and their impacts on the environment have become a critical area of discourse among stakeholders including the media.

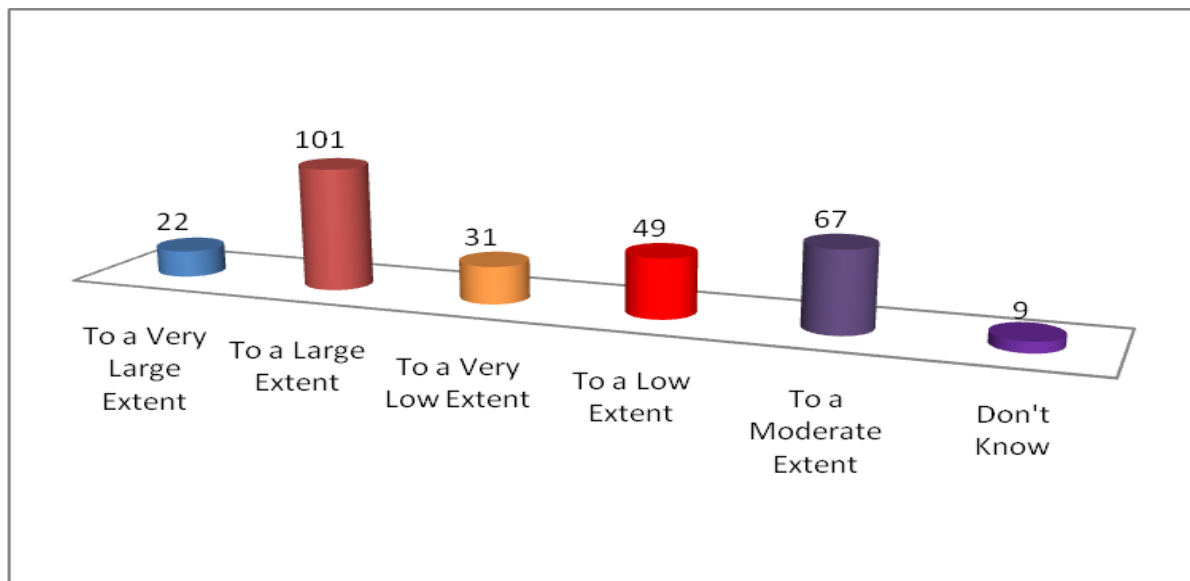


Figure 3: Extent of Climate Change Sensitisation by the Nigerian Mass Media

The implication of the finding in the Figure above that the Nigeria mass media has made climate change a topical issue of discussion, as the data indicates that the media has been educating and enlightening residents of Federal Capital Territory, Abuja about climate change.

Table 1: Specific Ways the Nigeria Media Has Impacted the Respondents' Views about Climate Change

Option	SA	A	U	D	SD	Mean Rating	Decision
Audience against bush burning	78	167	13	6	15	4.0	Accepted
Adoption and planting of trees in one's environment and also encouraging others to do same	101	162	3	9	4	4.2	Accepted
Reduce the rate at which we burn carbon-emitting substances	81	166	11	12	9	4.0	Rejected
The right dress to put on for a particular weather condition	67	190	0	9	11	4.0	Accepted
Reduction of consumption of fossil fuels, and encouragement on the use of clean energy sources	73	168	9	13	16	3.9	Accepted

Data in the above Figure implies that the Nigerian media has been discussing the impact of climate change and how to mitigate it.

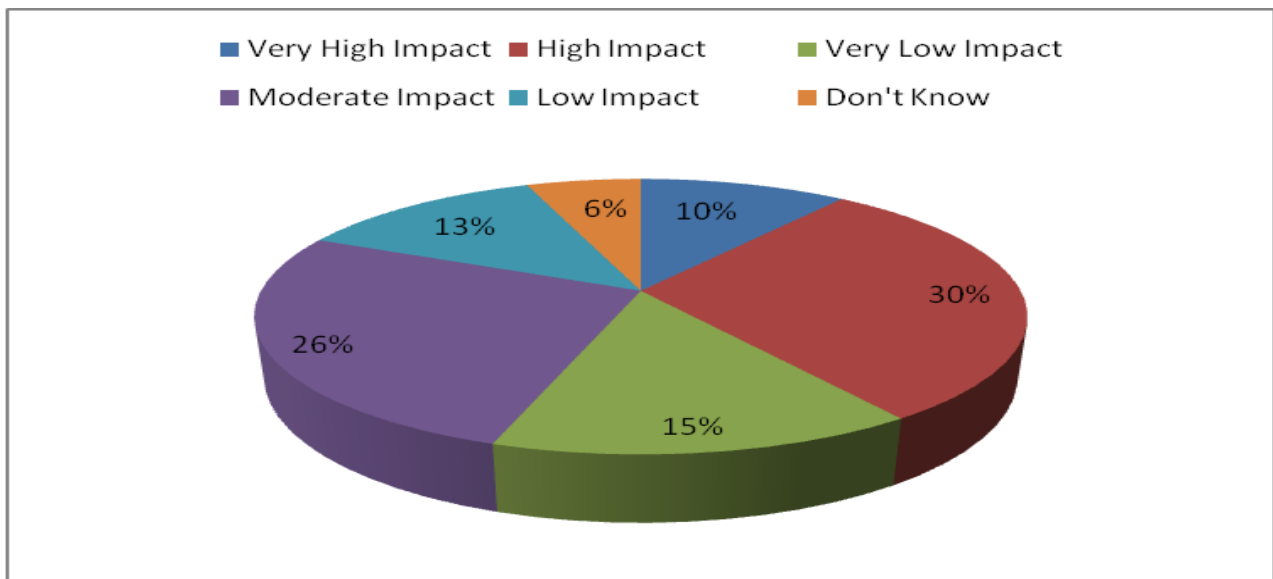


Figure 4: Extent of the Impact of Climate Change Sensitisation by the Nigerian Mass Media

It could be inferred from the finding in Figure 4 above that the mass media is a veritable tool for citizens' mobilisation, enlightenment and for them to take part in what the media is reporting as the causes of climate change and what could be done to address it.

Discussion of Findings

Research Question One: What have the media been reporting as the causes of climate change? Findings here revealed that the Nigerian mass media as obtained elsewhere has been reporting deforestation, ozone layer depletion, bush burning, overfishing, power plants, agricultural activities, vehicles and transportation as the causes of climate change. Others are landfills, offshore drilling, fracking, melting permafrost and consumerism. However, the data indicates that bush burning, deforestation, vehicles and transportation and agricultural activities are the main causes of climate change in Nigeria as reported by the mass media (see Figure 2 above). The finding of the study aligns with that of Ogbo and Onyedinma (2012), who note that the extra-terrestrial factors include solar radiation quantity and quality among others while the anthropogenic factors involve human activities that either emits large amounts of greenhouse gases into the atmosphere that depletes the ozone layer or activities that reduces the amount of carbon absorbed from the atmosphere.

Research Question Two: What specific ways have the media impacted the respondents' views about climate change? The study further found what the media has been reporting as remedies to the impacts of climate change include advising the people against engaging in bush burning, adoption and planting of trees in one's environment and also encouraging others to do same, reducing the rate at which carbon-emitting substances are burnt, the right dress to put on for a particular weather condition and reducing the level at which we make use of fossil fuels, and encouragement on the use of clean energy sources (see Table 1 above). This finding is consistent with earlier one made by Akpan *et al* (2012), who submitted that all activities that are

harmful to the environment should be done in line with global best practices.

Research Question Three: What is the extent of climate change sensitisation by the mass media? The study found here that the Nigeria mass media has made climate change a topical issue of discussion, as the data (in Figures 3 and 4 above) indicate that the media has sensitised and have positive impacts on the people above climate change to a large extent. This finding equally aligns with that Maidunoma and Falmatami (2018), who established that radio stations' environmental programming in Yobe State Nigeria helps the people to adopt more positive attitudes, refrain from careless waste disposal, and have better attitudes about personal hygiene. This result is also similar with that of Elia (2017), who concluded that farmers in Tanzania have knowledge about coping and adaptation strategies and issues surrounding climate change variability through the information they received from the media and other communication agents. This finding also justifies the adoption of the agenda setting theory, which states that the quantity of information that the media gives about a particular issue is capable of influencing the attitudes and perceptions of media consumers towards adopting what they media is saying about the matter. The results of the study, in addition, justify the use of the meaning theory applied in the research. This theory states that the media's representation of reality can indirectly have powerful influence on people's attitudes and behaviours.

Conclusion/Recommendations

The concern of this research has been on the perception of Nigerian mass media coverage of climate change. Based upon the data collected, the study concludes that the Nigerian mass media has to some extent been discussing the causes and other negative impacts of climate change. Conclusion is also

drawn that the residents of Abuja have been influenced by mass media reports of climate change. From this, the study recommends that the Nigerian mass media should sustain the giant strides it has achieved in the coverage and reportage of climate change. While the media is to do this, it should try to present climate change stories using infographics.

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