

Public Perception of Media Messages on Climate Change Issues among Residents of South-South, Nigeria

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Abstract

Background: Climate change is a global issue that has raised several concerns among world leaders, individuals and organisations. The media has been disseminating information to create awareness of climate change and how to mitigate its effects.

Objective: This study examined public perception of media messages on climate change issues among residents of South-South Nigeria.

Methodology: The study adopted a survey research design, and residents of South-South, Nigeria, formed the study's population, which is 29,812,989. From the population, a sample of 385 respondents was drawn, and a questionnaire was used as an instrument for data collection. Data generated in the study were analysed using descriptive and inferential statistics.

Results: The study revealed that residents of South-South, Nigeria, perceived that media messages on issues of climate change were inadequate. Another finding was that climate change has devastating effects on residents of South-South, Nigeria. Lastly, the study revealed that residents of South-South Nigeria are taking action to alleviate the effects of climate change on them.

Conclusion: Residents of South-South, Nigeria, perceived that media messages on climate change issues were inadequate and, therefore, ineffective.

Unique Contribution: The study has provided empirical evidence to help design policies on media messages on climate change issues.

Key Recommendations: The media should provide adequate messages on climate change issues in South-South Nigeria.

Keywords: Climate Change; Media Messages; Public Perception; South-South, Nigeria

Introduction

The issue of climate change is a universal occurrence that has raised various concerns among world leaders, individuals, and organisations. This is because it affects the environment, impacts people and human activities, and lowers the standard of living and value of life (Centre for Social Justice (CSJ), 2016; Ajaero et al., 2018). Climate change is an irregularity in climate observed over a comparable time caused by natural processes and mostly by human actions (Odjugo, 2010). The number of deaths attributed to natural hazards continues to rise, as over 1.6 million persons have lost their lives in globally reported disasters between 1990 and 2015 (Islam & Winkel, 2017). Having signed and ratified the Paris Agreement of 2015, the world, including every African country, has devoted itself to improving climate action by decreasing its greenhouse gas (GHG) emissions and building pliability. However, impacts of climate change in Africa can be felt, from prolonged droughts and melting glaciers to heavy flooding and unpredictable weather patterns (Tagbo, 2010). Intergovernmental Panel on Climate Change (IPCC) (2023) posit that climate change is a product of human actions. Human impact has heated the atmosphere, water and land. IPCC (2023) further observe that human-induced climate change is disturbing weather and climatic conditions in all regions of the world. Proof of extreme variations such as hot spell, heavy rainfall, famines, and sultry typhoons, as well as their attribution to human influence, has increased impacts of climate change globally. Man's continuous emission of carbon dioxide (CO₂), methane (CH₄) and nitrogen dioxide (N₂O) into the atmospheric Earth since the Industrial Revolution has led to catastrophic impacts of climate change all around the world. Despite improvements, there are still gaps in adaptation in all sectors and regions of the globe. Moreover, this will continue under the present level of operation, with the most significant gaps seen in low-income groups (IPCC, 2023). Climate change has attracted the attention of the United Nations (UN), which made climate change one of its sustainable development goals (SDGs) for 2030.

The media are responsible for keeping the public abreast of issues surrounding them. They (the media) inform, educate and entertain people daily by setting 'frames of reference' by which readers and viewers (audience) can interpret and discuss public issues. Hence, Ogwezi and Umukoro (2020) argue that efforts towards mitigating effects of climate change are significantly determined by how media portray climate change issues in Nigeria and globally. Media are tremendous actors that contribute to shape and affect science, technology, and the environment (Balarabe & Hamza, 2020). Media are actors in global discourse which create empathy, views and engagement on issues, including climate change. The way media present climate change issues, has impacted translations between climate science and climate policy as well as the perception of various environmental issues, technology and risk (Weingart et al., 2000). That is why McCombs (2002) admit that media have high potential to persuade public opinion and action. Thus, for successful policy implementation, the media have a robust role to play in educating the audience, creating consciousness on climate change issues and influencing government policy and efforts to reduce carbon emissions. Also, Schmidt et al. (2013) posit that media are critical for society's acceptance of climate change and its politics for the following two reasons: Firstly, media are cultural agents that create consciousness and provide information. Secondly, media constitute essential fora for discussing and legitimising climate governance.

Perception is a critical concept among psychologists and sociologists. It is an essential component of an individual because it is the angle from which such an individual sees his or her world (Umukoro & Ogwezi, 2021). Similarly, McLeod et al. (2017) argue that perception is a fundamental term in social research that recognises that realism is in the spectator's heart. They further contend that perceptive reality and view are predicated on past experiences and

dispositions, political ideology, social class and race. Other predictors according to McLeod et al. (2017) are gender and recent exposure. Audience perception creates audience characters towards the media. Audience's attitude towards the media affects their behaviours towards all areas of life (Tsfati & Cohen, 2013). No wonder, Tsfati and Cohen (2013) state that people are open to information about their universe through the media. This implies that the media, to an extent, shape audience's perception. This, in turn, shapes the audience's attitude towards all spheres of life, including climate change.

How audience perceive media messages on climate change has engrossed the attention of researchers (Boykoff & Roberts, 2007; Mertz et al., 2009; Nzeadibe et al., 2011; Fernandez-Llamazeres et al., 2015; Andi's, 2020). The above studies focused on perception of members of local communities (rural areas), and perception of media practitioners on climate change issues. However, there appear to be inadequate empirical studies focusing on public perception of media messages on climate change issues in South-South Nigeria. Also, there appear to be inadequate empirical studies on perception of media messages on climate change issues among members of the public from different professions in urban areas. The above knowledge gaps necessitated the present study on public perception of media messages on climate change issues among residents of South-South Nigeria with a focus on the public in urban areas of the region. Therefore, the study will examine how the public, people from different occupations in urban centres in South-South Nigeria, perceived media messages on climate change issues.

Objectives of the Study

The study has the following specific objectives which are to:

1. Find out how residents of South-South, Nigeria perceive media messages on climate change issues.
2. Examine effects of climate change on residents of South-South, Nigeria.
3. Ascertain the mitigation measures adopted by residents of South-South, Nigeria, towards the effects of climate change.

Literature Review

An Overview of the Media

The media are vital players in the development of any society. Their contributions can positively change society, just as their lack of contributions can negatively change society. They are significant influence on society. That is why Wahab et al. (2017) argue that the media (mass media) are communication tools for disseminating information to the world directly or indirectly. Similarly, Balarabe and Hamza (2020) posit that the media (mass media) are actors in discourse, understanding, perceptions, opinions and actions on issues of public interest. Carvalho (2010), on his part, assert that mass media influence public perceptions, opinions, awareness and knowledge about issues such as climate change and pave way for creation of fresh perspectives on issues such as climate change. Even Ogwezi and Umukoro (2020) argue that the way efforts will be towards mitigating impacts of climate change is determined by how the media portray climate change issues in Nigeria and globally. The media, therefore, provide information to their audience, which help them to make informed decisions that will, in turn, better their lives.

The above assertions indicate that the media are necessary tools of modern communication which provide relevant information, ideas, and symbols to their audience on climate change issues. The information, ideas, and symbols provided by the media assist audience in making informed decisions about climate change issues. The information audience receive influences their

perceptions, opinions, awareness and knowledge about climate change issues. This information also paves way for new viewpoints on climate change issues. This new outlook on climate change will galvanise the right attitude towards alleviating the impacts of climate change.

Understanding Climate Change

It is no news that the environment is sick. Our climate is changing and changing negatively. Every part of the world is suffering from climate change. There is a reduction in yearly precipitation in much of Africa and the Sahara. There is increasing frequency and high levels of famines and floods. Extreme rainfall and winds lead to tropical cyclones in Eastern, South-Eastern and Southern Asia. More heat waves or hot spells exist in longer Summer, especially in Eastern Asia. That is not all. There is intense rainfall causing landslides and floods in South America. Also, there are dry spells and droughts in North-East Brazil. The Caribbean basin is not spared as it suffers tropical cyclones (Intergovernmental Panel on Climate Change, 2023). All of the above are the devastating impacts of climate change. Cubasch et al. (2013) argue that climate change is a weather variation seen and identified by statistical tests. These fluctuations are observed in the mean and (or changeability) of the weather characteristics that persisted for a long period, usually a decade or longer. The main features of climate change, according to United Nations Framework Convention on Climate Change (UNFCCC) (2020) are an increased average of global temperature (global warming); change in haze cover and rainfall, particularly over land; de-freezing of ice caps and glaciers, as well as reduction in snowflake cover; rise in ocean hotness and ocean tartness because of seawater riveting heat and carbon dioxide from the sky. Humans are facing climate change. Climate change and global warming are caused mainly by human discharges of greenhouse gases, especially carbon dioxide. Over the last 100 years, atmospheric absorptions of carbon dioxide rose from before the industrial value of 278 parts per million to 379 parts per million in 2005, and the usual international temperature increased by 0.74oc. Scientists contend that this is the biggest and wildest warming in the planet's history (IPCC, 2023). Another area of climate change is an increase in ocean temperatures. This rise is causing warm air expansion in the oceans. Combined with melting water from land-based snow, this has resulted in an upsurge in sea level. The increase in sappy sea ice and freshwater influx from melting glaciers and ice sheets influenced global configurations of ocean circulation (UNFCCC, 2020). Because of global warming, the type, frequency and intensity of extreme events, such as tropical cyclones (including hurricanes and typhoons), floods, droughts, and heavy precipitations, are expected to rise as relatively small average temperature increases (Meehl et al., 2007).

Therefore, climate change is real. It is now with humanity, and it has destroyed planet Earth. Moreover, it is still ravaging planet Earth. Its effects are felt in every part of the Earth. From Europe to America, Africa to Asia, and other parts of the globe. The pangs of climate change are felt in the air, on land and in the water as things change from bad to worse. Until conscious and concerted efforts are made to overcome this monster, humanity may lose this battle. Humanity and planet Earth may suffer more.

Review of Empirical Studies

Pasquare and Oppizzi (2012) found that the two Italian newspapers studied (La Repubblica and the Corriere della Sera) have dissimilar schemata, with different impacts on their

readers on how they covered climate change issues. The *La Repubblica* built public consensus on the need for action against climate change, while *the Corriere della Sera* built a reporting schema to decrease action against climate change. Pasquare and Oppizzi's (2012) study concluded that although Italian newspapers could create public awareness to reduce the area's susceptibility to climate change, they opted for more newsworthy stories on devastated people, survivors and evacuated populations.

Boykoff and Roberts (2007) reported in their study that male respondents admitted that they had heard or read about climate change more than female respondents in all but 3 of the 24 selected countries of the study. The study also revealed that female respondents see global warming as the biggest concern more than male respondents. The research further revealed that respondents in their 30s and 40s did not consider global warming a challenge. However, respondents from Australia and the United States (US) are two countries that consider global warming to be the biggest challenge. Boykoff and Roberts' (2007) study concluded that the media, particularly the press of the 24 countries studied, had shown activism in depicting actions against climate change since the empirical evidence suggested that climate change required radical actions.

Fernandez-Llamazeres et al. (2015) in their study reported that although the indigenous people of Bolivian Amazonia have abundant understanding of ethnoclimatological knowledge that could help them in climate change science and local adaptability, provision of climate change information through participatory workshops (media communication) did not influence conspicuously individual's perception of climate change among the Amazonian people of Bolivia. The study concluded that such a situation posed challenges between how to translate local and scientific framing of climate change issues. This gives cause for concern about how to incorporate local knowledge of the people on climate change with global climate change strategy discussions.

In like manner, Mertz et al. (2009) found that farmers in Eastern Saloum, Central Senegal, were conscious of climatic changeability and that this has adversely affected their agricultural yields. The study further revealed that crop variations, keeping animals in stables, and replacing drought horses with cattle, which are inexpensive to forage, are some of the adaptative tactics farmers implemented in the study area to mitigate climate change. Mertz et al.'s (2009) study recommended that policymakers in the agricultural sector of Central Senegal should focus on providing flexible options instead of ambiguous solutions to climate change, which was uncertain to the farmers.

Similarly, Ghazali and Azmi (2013) found that the regularity of how Malaysian newspapers reported climate change issues was unstable because it straightly rose and fell. However, there was a continuous rise in how Malaysian newspapers reported climate change issues from 2008 to 2009. The study further revealed that the increased media coverage of climate change issues in that country was due to monitoring frameworks, political restrictions and financial motives. The study further revealed that Malaysian newspapers framed climate change stories mostly on public action. This was followed by a frame of the effects of climate change globally. Ghazali and Azmi's work (2013) concluded that the pattern of Malaysian newspapers' coverage of climate change issues was related to major events that happened about climate change.

Tagbo's (2010) study revealed that African media reported climate change issues very poorly, with 0.19 per cent of total reportage. The study also revealed that around 65 per cent of climate change stories in *The Guardian* newspaper dealt with global scenarios with little or no attention to Nigerian or local contexts. Tagbo's (2010) study concluded that African media reported climate change from foreign perspectives, thereby leaving out its local relevance.

Also, Andi's (2020) study revealed that most citizens of the United States (US) over 35 years old access climate change news from television, while those between the ages of 18 and 24 access climate change stories from alternative sources such as social media. The study equally found that political ideology on climate change played a role among the people and the media. Right-wing media outlets and individuals in the US have skeptical views of climate change and, therefore, do not see it as a serious problem. On the other hand, left-wing news media outlets and individuals see climate change as a severe challenge. Another twist in the findings of Andi's (2020) study was that those in the US who were not as worried about climate change surprisingly and frequently shared stories of climate change online. Similarly, in Sweden, people not concerned about climate change are almost twice as likely to share climate change newscasts online. These surprise findings resulted in a vocal minority making big noise online. Contrastly in Asia, particularly in China, those who see climate change as a serious problem are the ones who share climate change stories online. The study concluded that respondents have different news consumption habits about climate change, influenced by age, education and political affiliation.

A related study by Balarabe and Hamza (2010) found that there is a great close of media consciousness on climate change issues among residents of Kano. It was also revealed that social media were the dominant source of news information on climate change issues among Kano residents. The study concluded that how media reported climate change issues determines the perception of climate change issues among residents of Kano, Nigeria.

Likewise, Nzeadibe et al. (2011) in their study reported that farmers in the Niger Delta have low consciousness of climate change and its effects, even though the mass media played a key part in climate change alertness in the area. The study also revealed that farmers in the area have for years practised some inventive home-grown adaptative methods. Nzeadibe et al. (2011) study concluded that all stakeholders (extension workers, media, researchers and civil society) have innovations to learn from the Niger-Deltan farmers' home-grown adaptative methods which could assist in disseminating local inventions for widespread implementation in other communities.

Lastly, Ogwezi et al. (2022) reported that broadcast media in Lagos, Nigeria decreased the frequency of their reportage and the time they allocated to issues of climate change from 2016 to 2018. The study also found that there were resemblances in the pattern of climate change issues reported among broadcast media in Lagos within the period. The study thereafter recommended that Lagos broadcast stations should intensify their pattern of reportage of climate change issues in terms of frequency of reporting and allocation of time.

Theoretical Framework

The study is anchored on the perception theory. Perception theory was propounded when scholars observed that media audiences were not flaccid, as the all-powerful media effect theory argued

(Ajaero et al., 2012). Perception is a vital component of an individual. It is the perspective through which such an individual sees his or her universe (Umukoro & Ogwezi, 2021; Umukoro & Ogwezi, 2022). Equally, Akpoghiran et al. (2017) contend that perception entails how people form imprints of and make insinuations about persons, events and issues. Perception is thus influenced by a range of factors that can lead to different interpretations (Keame, 2008). Both interior and exterior dynamics influence perception. An individual's inner hypothesis, expectations and knowledge of the observer, motivation and emotions are the inside dynamics that determine how perception is formed. Environmental structures and beams are the external influences that help to form an individual's perception of issues, events or people.

In communication, perception is a vital issue because it helps to know how people (audiences) see media messages (Folarin, 2002). Folarin argues that perception is determined by complex variables such as psychosomatic temperament, previous involvements, ethnic prospects and communal associations. The above, combined with linguistic restrictions and narrow know-how, result in discriminatory perceptive attitude, acting as a 'stop-gate' with selective exposure, attention, and retention. Put in another way, an individual has to see a message before he or she can be attentive to it, he or she has to be attentive before he or she can perceive the message. He or she has to observe it before he or she can keep it in mind for future remembrance (Folarin, 2002). Summarily, selective exposure, attention, perception and retention work collectively in an intricate manner, and they add to the formation of the character of reception, prevention, denunciation and abjuration. These make an individual to be active receiver of media messages.

Residents of South-South, Nigeria will understand and relate to climate change issues from how they perceive media messages on climate change issues. Audience understanding and interpretation of media messages on climate change issues in the region will determine their response to the issues. This can help mitigate effects of climate change in South-South Nigeria.

Methodology

The survey design was used for the study. The survey involves drawing up questions on the subject matter to which a population sample will respond (Ijeh et al., 2015; Umukoro & Ogwezi, 2021). However, it should be noted that survey research requires careful planning and execution (Wimmer & Dominick, 2014). The population of the study are residents of South-South, Nigeria. South-South zone has six states: Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers. The zone has a population of 29,812,989 according to the 2022 population projection of 3.2% growth rate by the National Population Commission (NPC) (National Population Commission, 2020). The study sample was determined using the Australian National Statistical Service (NSS) online sample size calculator. This was done with a confidence level of 95%, a proportion of 0.5, a confidence interval of 0.05 and the population of 29,812,989. From the result, a sample of 385 was arrived at. The multi-stage sampling technique was adopted for the study. Multi-stage sampling splits a large population into phases to create a practicable sampling process. The first stage purposively selected the state capital of the six states in South-South, Nigeria, because media presence is more in the state capitals. The second stage was dividing the state capitals into zones within the capital cities such as Uyo L.G.A in Akwa Ibom State, Yenagoa L.G.A in Bayelsa, Calabar Municipal L.G.A. in Cross River State, Oshimli South L.G.A. in Delta State, Oredo L.G.A. in Edo State, and Port Harcourt L.G.A. in Rivers State. The third and last stage selected the individual respondents from the selected zones within the capital cities using the convenience sampling technique also known as accidental sampling technique. The questionnaire was used as instrument for data collection because of its ability to gather large amounts of data (Gever, 2024; Monday & Gever

2024). The data in this study were analysed using descriptive and inferential statistics, and the results are presented in tables.

Results and Discussion of Findings

A total of 385 copies of the questionnaire were randomly administered to designated participants (samples) within the selected zones in the state capitals of South-South Nigeria. 370 copies of the questionnaire were returned and found usable. This represents a 96.10% per cent return rate. The results of the study were analysed in line with the research objectives.

Table 1: Demographics of Respondents

Variables	Categories	Frequencies	Percentage (%)
Gender of Respondents	Male	215	58.11%
	Female	155	41.89%
	Total	370	100.00%
Age of Respondents	18yrs-25yrs	52	14.05%
	26yrs-35yrs	69	18.65%
	36yrs-45yrs	110	29.73%
	46yrs-55yrs	101	27.30%
	56yrs-above	38	10.27%
	Total	370	100.00%
Marital Status of Respondents	Single	107	28.92%
	Married	144	38.92%
	Separated	52	14.05%
	Divorced	40	10.81%
	Widowed	27	07.30%
	Total	370	100.00%
Educational Level of Respondents	No Formal Education	32	08.65%
	Primary Education	73	19.73%
	Secondary Education	110	29.73%
	Tertiary Education	155	41.89%
	Total	370	100.00%
State of Residence of Respondents	Akwa Ibom	61	16.49%
	Bayelsa	32	08.65%
	Cross River	55	14.86%
	Delta	70	18.92%
	Edo	59	15.95%
	Rivers	93	25.13%
	Total	370	100.00%
	Occupation of Respondents	Student	47
Worker		99	26.76%
Businessman/woman		80	21.62%

	Artisan	41	11.08%
	Farmer	17	04.60%
	Unemployed	74	20.00%
	Others (Retirees)	12	03.24%
	Total	370	100.00%

Source: Fieldwork, 2023

On respondents' gender, Table 1 showed that most of the participants were males, 215(58.1%), while female participants in the survey were 155(41.9%).

Also, Table 1 revealed that most of the participants were within the age bracket of 36 – 45 years 101(29.7%). Participants within 46 – 55 years were 101(27.3%), participants within 26-35 years were 69(18.7%), and participants within the age bracket of 18-25 years were 52(14.1%). The fewest participants came from those who were 56 years old or older.

That same Table 1 showed the marital status of respondents. There were 144 married participants (38.9%), who were the majority; while the 27 widowed participants (7.3%) were the least represented.

On the educational level of respondents, the same Table 1 further revealed that an average of 41.9% of the respondents in the various states investigated attained tertiary education, 29.7% had secondary education, 19.7% had primary education, and 8.7% had no formal education.

On the state of residence of participants, Table 1 again showed that the majority of the participants 25.1% came from Rivers State. Delta state came second in terms of hierarchy of highest participation with 18.9%; while 16.5% came from Akwa Ibom state. Only 8.7% of the participants came from Bayelsa state.

On occupation of participants, Table 1 indicated more workers, 26.76%, participated in the study. Others were businessmen or women 21.6%, those who were unemployed 20%, students were 12.7%, while artisans were 11.1%. The last response category went to those who were retirees, 3.2%.

Research Objective One: Perception of Residents of South-South, Nigeria on Media Messages on Climate Change Issues

Table 2: Perception on whether the media have done well in their reportage of climate change

Items	Frequency	Percentage
Strongly agree	44	11.9
Agree	206	55.7
Disagree	47	12.7
Strongly disagree	73	19.7
Disagree	370	100.0
Total		

Source: Field Work, 2023

Mean: ($\bar{X} = 3.09$)

Table 2 revealed the perception of residents of South-South Nigeria on media messages on issues of climate change. Data revealed that majority of the participants agreed that the media have done well in their messages on climate change issues 206(55.7%). 73(19.7%) of the respondents strongly disagreed with the media's performance and messages on climate change issues, while 47(12.7%) disagreed that the media did perform as expected in their messages on climate change issues. Participants' mean response ($\bar{x} = 3.09$) was confirmed using a hypothesised acceptance mean value of 2.5 ($\bar{x} = 2.5$). This implies that the media did not do well in their messages on climate change issues. This finding confirmed and extended the studies of Ghazali and Azmi (2013), Tagbo (2010) as well as Ajaero and Anorue (2018), who separately reported that the frequency with which Malaysian newspapers covered issues of climate change was unstable; African media reported climate change very poorly; as well as Nigerian and Ghanaian (West African) newspapers gave less coverage to issues of climate change respectively. This finding is vital as media practitioners and proprietors need to expand their messages on climate change issues.

Research Objective Two: Effects of Climate Change on Residents of South-South, Nigeria

Table 3: Effects of Climate Change on Respondent

What is/are the effects of climate change?	Frequency	Percentage
Excessive/Heavy Rainfall	93	25.14%
Desertification	00	00.00%
Low Crop Yield which Leads to Food Scarcity	51	13.78%
Drought	00	00.00%
Extreme Heat	45	12.16%
Increase in Flooding	114	30.81%
Spread of Climate Sensitive Diseases like Malaria	67	18.11%
Others	00	00.00%
Total	370	100.00%

Source: Field Work, 2023

Mean: ($\bar{X} = 3.99$)

Table 3 revealed the effects of climate change on residents of South-South Nigeria. Based on respondents' opinions, increase in flooding was indicated as the major effect of climate change on residents of South-South, Nigeria, with 114(30.8%). Other effects were excessive/heavy rainfall 93(25.1%), the spread of climate-sensitive diseases like malaria, and low crop yield, which led to food scarcity with 67(18.1%) and 51(13.8%) respondents, respectively. Only 45 respondents said they experienced extreme heat. The mean response ($\bar{x} = 3.99$) also supported respondents' opinions. This finding confirmed the work of Mertz et al. (2009) which reported that climate change affected farmers of Eastern Saloum, Central Senegal. The effect resulted in low and poor harvests, ultimately leading to food scarcity in that country. It also expanded the works of CSJ (2016) as well as Ajaero et al. (2018), who all reported that climate change affected the environment, which further impacted people and human activities and led to poor standard of living.

Research Objective Three: Mitigation Measures Adopted by Residents of South-South, Nigeria towards Climate Change

Table 4: Responses on Mitigating Effects of Climate Change

How do you mitigate the effects of climate change?	Frequency	Percentage
Reduction of Emission of Greenhouse Gases like CO ₂	23	06.22%
Proper Waste Disposal and Management	211	57.03%
Planting More Trees	41	11.08%
Using Environmental Friendly Cooking Gas like Ethanol	64	17.29%
Others (Good drainage system; Building of flood walls;)	31	08.38%
Total	370	100.00%

Source: Field Work, 2023

Mean: ($\bar{X} = 3.96$)

Table 4 showed respondents' opinions on mitigating effects of climate change. 211(57.0%) respondents which are in the majority indicated 'proper waste disposal and management', 64(17.3%) indicated 'using environmentally friendly cooking gas like ethanol', 41(11.1%) indicated 'planting trees', and 31(8.4%) indicated 'others such as good drainage system and building of flood walls'. Their mean response rate ($\bar{x} = 3.96$) revealed that most respondents supported adopting proper waste disposal and management. This outcome corroborated and extended the works of Mertz et al. (2009) as well as of Nzeadibe et al. (2011) whose studies reported that farmers in Eastern Saloum, Central Senegal and farmers in Niger-Delta, Nigeria adopted some measures to reduce the impacts of climate change on them and their agricultural livelihoods respectively.

Conclusion and Recommendations

The study examined public perception of media messages on climate change issues among residents of South-South Nigeria. The study found that most residents of South-South, Nigeria, perceived that the media have not done adequately in their messages on climate change issues, while a few perceived that the media have done well to an extent. This is because South-South, Nigeria residents perceived that the media can raise the bar in their messages on climate change issues. The study further revealed that climate change impacts residents of South-South, Nigeria. These impacts range from excessive/heavy rainfall, the spread of climate-sensitive diseases like malaria, and low crop yield, which leads to food scarcity, to extreme heat. However, the most devastating effect of climate change on residents of South-South, Nigeria, was increased flooding. Lastly, the study indicated that residents of South-South Nigeria are taking action to mitigate the effects of climate change on them and their environment. This action is commendable because they did not fold their arms in the face of the effects of climate change. They believe that mitigating climate change is also their responsibility. The study faced one limitation. Respondents initially were reluctant to participate in the study. However, after much persuasion and assurance that the

study was exclusively for academic purposes and their confidentiality was guaranteed, they later participated. From the findings came the following recommendations:

1. Media should generally improve their messages on climate change issues in South-South, Nigeria.
2. Governments at all levels and other partners should complement the efforts of residents of South-South, Nigeria to alleviate the plight of the effects of climate change on the people and their environment.
3. Further studies should be carried out to ascertain the somehow opposing perceptions of residents of South-South, Nigeria on media messages on climate change issues.

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