

SELECT NEWSPAPER REPORTAGE OF CLIMATE CHANGE, FLOODING AND IT'S EFFECTS ON FOOD SECURITY IN NIGERIA

Esther Likita Ogba

Department of Mass Communication
Federal University Lafia
Nasarawa State
esther.ogba@gmail.com /esther.ogba@arts.fulafia, edu.Ng

Abstract

The world today is experiencing a gradual threat of climate change, environmental degradation, and flooding resulting to food insecurity principally due to the uncontrolled and unregulated activities of man. This study investigated newspapers reportage of climate change, flooding and its effect on food security in Nigeria, what can be done to reduce or minimize the growing threat of climate change, flooding and food insecurity. In the study descriptive, analytical and quantitative techniques were employed to arrive at logical conclusion. The paper hinges on priming theory which states that, the media serve to provide the audience with standards and frames of reference. Priming tells us whether a phenomenon is communicated effectively, whether it is good or bad. The research revealed that the more the production activity by man the more the degree of abuse of the environment leading to the distortion of the ecosystem. The distortion of the ecosystem leads to flooding which destroy farmlands and the crops on the farms. The consequence is the continuous decrease in harvest which poses a growing challenge to food security. The paper posits that the media has a responsibility of educating by communicating effectively to the citizens about the danger of climate change which consequence is flooding and food insecurity. This has a negative effect on the quality of nutrition and consumption in Nigeria.

Key words: Newspaper, Climate Change, Flooding, Food Security, Nigeria

Introduction

Communicating climate change involves providing information on the increase in temperature, sea level and frequency of severe weather events such as storms, erosion, densification floods that affect the activities of man such as food production climate change is attributed to the human-induced activities, greenhouse gases in the atmosphere. This has become a global as well as national challenge. Global climate change is cause by accumulation of greenhouse gases in the lower atmosphere. Adequate knowledge of this phenomenon has become necessary since the concentration of the greenhouse gases is mainly due to human activities such as combustion of fossil fuels

which release carbon dioxide to the atmosphere. Deforestation has reduced the ability of the carbon dioxide to be absorbed by plants in the process of photosynthesis. Therefore, the concentration of carbon-dioxide in the atmosphere has increased with dire consequences on human existence. Climate change is taking place and represents one of the environments, social and economic threat facing the planet and humanity.

Climate change has become expedient because the inter-governmental panel on climate change (IPCC) in 2010 estimated that mean surface temperature will rise by 1.5 to 3.5 degrees 2100. This rate of warming, large scale precipitation changes, decrease in forest and distortion of ecosystem will occur more

in tropical Africa leading to a negative effect on the frequency and intensity of weather events such as flood that will affect food production. Climate change will cause sea level rise, thermal expansion of the oceans leading to sea level rise sea level rise will cause increased vulnerability to coastal flooding storm surges thereby affecting food security. The faster the climate change the greater will be the risk of damage to the environment which directly affects food production and consumption. This becomes a threat to human survival on earth. Therefore, reporting climate change has become increasingly important as a means of educating humanity to curb human activities that trigger climate change with its consequences of flooding and the effect on food production and human existence.

Communicating climate change, flooding and its effect has become necessary because human societies have depleted natural resources, degraded local communities. Population increase has modified local climate due to cutting down trees, building cities. This has in part affected human health due to the high heat wave-related sicknesses, decrease in fresh water supply and food production. Climate change has affected human health due to the sensitivity and vulnerability of human population to changes in temperature, rainfall, humidity, storms and flood. When the atmospheric balance is distorted, it affects the health of man.

Nigeria experienced its worst case of flooding in 2022, which was among the highest in recent decades, this was contained in a report by National Bureau of Statistics, National Emergency Management Agency and United Nations Development Programme (2023), with over 600 fatalities and 3.2 million people affected across 34 of the 36 states of the federation and the Federal Capital Territory. While flooding occurs annually in Nigeria, the 2022 floods have

caused unprecedented disruption and destruction and proved to be more intense than the 2012 floods, where approximately 3 million families saw their houses damaged or destroyed. Hundreds of lives and livelihoods have been lost, 1.4 million people have been displaced and over 569,000 hectares of farmland have been destroyed along with key infrastructure, negatively impinging on the cost of living across the country.

According to the report, the most affected states are Anambra, Bayelsa, Cross River, Delta, and Rivers in southern Nigeria and the Federal Capital Territory in central Nigeria, with Bayelsa state reported to be the worst affected, with approximately 700,000 people displaced or affected, as of 18 October 2022. By November 2022, Anambra, Kogi, Bayelsa, Jigawa, Delta and Nasarawa were reported as among the most affected states, with people from these regions accounting for over 1,302,789 people been directly affected. This number could be multiplied by many times over with the increased risk of water- and vector-borne diseases such as malaria, cholera, and typhoid for the people affected. A preliminary assessment conducted of the damage and loss by the Federal Government, working together with the World Bank has estimates that the total direct economic damages, based on reported statistics as of 25 November 2022 are in the range of US\$3.79 billion to \$9.12 billion, with the best (median) estimate at \$6.68 billion. This includes damages to residential and non-residential buildings (including building contents), as well as damages to infrastructure, productive sectors and agriculture.

The intensity of the 2022 flooding in Nigeria, together with the escalating patterns of climate-related disruptions across the country, underscore the urgent need for a deeper understanding of how climate change is communicated to the public. Although

considerable research has examined the scientific, environmental, and socio-economic dimensions of climate change and flooding, an understanding of how these issues are framed and reported within the Nigerian media landscape is critical. Where flooding poses direct threats to agricultural productivity, food availability, rural livelihoods, and public health, the role of the press in shaping public awareness and guiding national discourse becomes increasingly significant

Newspapers in Nigeria remain one of the primary sources of information for many Nigerians and serve as agenda-setters for public debate and policy attention. Inadequate media coverage may limit the capacity of citizens, communities, and policymakers to fully appreciate the risks associated with climate change, anticipate the consequences of extreme weather events, or adopt timely mitigation and adaptation strategies. Therefore, understanding the nature, depth, and orientation of newspaper reportage is essential to evaluating how effectively the media perform their informational and educational roles in a period of growing environmental vulnerability.

Against this background, this study examines the reportage of climate change, flooding, and their implications for food security in selected Nigerian newspapers. By analysing patterns of coverage, thematic emphases, depth of reporting, and framing techniques, the study aims to determine whether the press provides sufficient and accurate information capable of supporting public understanding and policy responses. This approach will help clarify how the media contribute to the national conversation on climate risks and food security challenges, thereby offering insights that can strengthen communication strategies and improve societal preparedness.

Problem

Climate change and flooding have emerged as major environmental challenges in Nigeria, with severe consequences for public health, sanitation, water availability, agricultural productivity, and food security. Studies such as (Iortyer & Yio 2023 and Akporise & Okoh 2024) have shown how climate-induced flooding destroys farmlands, disrupts food supply chains, increases poverty, and displaces human population, particularly in flood-prone states such as Kogi, Jigawa, Bayelsa, Rivers, Anambra, Benue, and Taraba. The unprecedented 2022 floods further demonstrated the scale of vulnerability facing Nigeria's food system and rural livelihoods.

Despite the growing studies on the impacts of climate change and flooding, these issues are not elaborately communicated through the various Nigerian newspapers. However, it is unclear whether newspaper reportage adequately prioritises climate change and flooding, effectively links these phenomena to food security challenges, or provides the public with sufficient context to understand their long-term implications. The extent to which newspapers give prominence, depth, and interpretative framing to climate-related flooding and its effects on food production and food security remains largely unexplored.

Newspapers play a critical role in shaping public awareness, influencing policy discourse, and guiding societal responses to environmental risks. However, inadequate or poor framing of reportage on these issues may weaken public understanding of climate threats and limit collective action toward mitigation and adaptation. Consequently, there is a need for a systematic examination of selected Nigerian newspapers to determine how climate change, flooding, and their

Statement

effects on food security are reported. Addressing these issues will contribute to media studies and climate communication research by providing empirical evidence on the role of newspaper reportage in shaping perceptions and responses to climate-related food security challenges in Nigeria.

Objectives of the Study

1. Ascertain the nature of reports given to climate change, flooding by *Daily Trust* and *Vanguard* newspapers.
2. Examine the prominence given to climate change, flooding issues in *Daily Trust* and *vanguard* newspapers
3. Assess how issues on climate change, flooding and food security are frame as reported by *Daily Trust* and *Vanguard* newspapers.

Theoretical Underpinning

This Study hinged on priming theory which states that, the media serve to provide the audience with standards and frames of reference. Priming tells us whether a phenomenon is communicated effectively, whether it is good or bad. Priming is an important concept in media effects. While agenda setting bring out the importance of the issue, priming offers explanation on how the information from the media are stored in the human mind and how it influence making decisions (University of Twente, 2004)

Media affect the judgement or behaviour by stimulating the associating thought which is caused due to mental relationship created inside the memory. The theory refers to enhancing the effects of the media by influencing how easily accessible the information is in the audience memory. Effects of priming are easily measurable and attributed to how we evaluate media content. Priming tells us what evaluation to make on topics, it described agenda setting outcomes (Carrero, 2021).

Priming is particularly relevant because the way newspapers highlight climate change risks, causes, consequences, and policy responses can activate certain associations in the minds of readers in Nigeria. These associations, once stimulated, shape how the public evaluates the severity of climate events, the responsibility of individuals, institutions, and the urgency for action. Priming effects are measurable and linked to how individuals assess media content, as they operate through the ease with which certain thoughts or interpretations can be retrieved from memory. In this regard, priming helps explain not only how readers understand climate-related information and their effects on food security, but also how newspaper reportage can influence public judgement, behavioural responses, and support for climate adaptation measures (Carrero, 2021).

Review of Literature

Climate change has a long-term effect of the sun's radiation on the rotating earth varied surface and atmosphere. There is usually annual and seasonal temperature and precipitation that is a product of changes in the climate of any part of the world. Land and sea being critical component of human existence react in many ways to the atmosphere. Climate change has some effects on vegetation, animal and human life. It plays a significant role in psychological process, from conception and growth to health diseases, flood and its effects on food security. Humans can affect climate change through the alteration of the earth's surface, introduction of chemicals and pollutants producing carbon-dioxide into the atmosphere. The activity of man distorts the natural habitat which provides an easy way for flooding and its negative effects on food security. Climate change influence life on earth, health, food production and the general

well-being of man. Climate change is partly responsible for the changes in pattern of rain, flooding which has negative effect destroying farmlands as well as houses. In the Northern part of Nigeria, climate change has led to gradual unpredictable rains;; desertification. While in the southern part of Nigeria has led to flooding, the August 1980 Ibadan flood, the 2022 Lokoja, Makurdi, Port-Harcourt flood have displaced many people from their farmland and residential locations (Daniel, 2024). This has affected food production in many parts of the country.

In Nigeria, climate change manifests unevenly across regions. The northern parts of the country experience rising temperatures, unpredictable rainfall, prolonged dry spells, drought, and desertification, while southern and coastal regions are increasingly affected by intense rainfall, flooding, sea-level rise, and coastal erosion. National and regional assessments confirm that these spatial variations have restructured agricultural systems, rainfall regimes, and food production patterns across the country (Emegha et al., 2025). Although earlier observations by Ojugbo (2010) documented long-term temperature increases, recent analyses show that these trends have intensified, with greater implications for food security and water availability.

Flooding associated with heavy rainfall has become more frequent and destructive in southern Nigeria, particularly during the July–October 2022 flood season. National assessments report widespread destruction of farmlands, displacement of households, loss of lives, and disruption of food supply systems. Coastal erosion in areas such as Ugborodo, Escavos, and Lekki further threatens fisheries and agricultural livelihoods. These events underscore the growing vulnerability of Nigeria’s food systems to climate-related disasters (National

Bureau of Statistics, 2023; Onefeli et al., 2023).

Beyond physical impact, climate change presents significant policy and communication challenges. Because a substantial proportion of climate change impacts are anthropogenic, mitigation and adaptation policies are required at both individual, national and international levels. Adaptation strategies have been shown to reduce vulnerability and food insecurity when supported by effective public awareness and institutional response (Alumona & Odoh, 2025). Climate change and food security in agriculture remain closely interconnected, as agricultural output in Nigeria depend heavily on temperature, rainfall, carbon dioxide concentration, and the interaction of these variables annually.

Media and communication studies further demonstrate that effective media engagement can positively influence public understanding, behavioural change, and policy support related to climate adaptation and food security. Williams and Misshack (2025) argue that sustained and well-framed media communication enhances public awareness of climate risks and promotes practices that reduce flooding impact and food insecurity. Similarly, Yadima (2025) showed that media priming significantly shapes public awareness and judgement on development-related issues, reinforcing the importance of examining how newspapers frame and prioritise climate change and flooding in Nigeria.

Recent empirical studies have provided substantial evidence linking flooding to food insecurity in Nigeria, particularly in agrarian and flood-prone regions. Iortyer, Dominic, and Yio (2023) examined the relationship between flooding and food security in the Benue Valley, one of Nigeria’s major food-

producing zones. Their study identified flooding as a recurrent phenomenon that significantly disrupts agricultural activities through the destruction of farmlands, loss of crops, displacement of farming households, and damage to storage and transportation infrastructure. The authors observed that seasonal flooding in the Benue Valley reduced household food availability and stability, thereby undermining both local and national food security. Their findings underscore the vulnerability of food systems in riverine and floodplain areas and highlight flooding as a critical environmental factor shaping food insecurity outcomes in Nigeria.

Similarly, Akporise and Okoh (2024) investigated the effects of flooding on household food security in rural communities of Delta State, Nigeria. Their study revealed that flooding adversely affects food security by reducing farm output, increasing food prices, and limiting household access to nutritious food. The authors noted that rural households experience heightened food insecurity during and after flood events due to the loss of livelihoods, destruction of crops, and limited adaptive capacity. The study further emphasized that repeated flooding episodes exacerbate poverty levels and weaken household resilience, thereby deepening food insecurity in flood-affected communities. In a study, Williams and Misshack (2025) showed that effective communication through the media has the propensity to promote food security and the capacity to engender positive change in human activities which prevent flooding

among others issues of climate change in Nigeria.

Overall, while extensive empirical research documents the impacts of climate change and flooding on agriculture and food security in Nigeria, few studies systematically examine how these issues are communicated through newspaper reportage. This issue is significant given the media's role in shaping public perception, influencing policy agendas, and priming audiences' evaluations of environmental risks. Addressing this issue provided a strong justification for analysing selected newspaper reportage of climate change, flooding, and their effects on food security in Nigeria.

Research Method

A quantitative content analysis was used to determine newspapers reportage of climate change: flooding and food insecurity in Nigeria. The population of this consisted of 678 issues of *Daily Trust* and *Vanguard* newspaper published in Nigeria between January to December, 2022. This is based on the fact that the newspapers published each day of the year.

Selection of sample size was systematically done at intervals. Both newspapers were taken for the period of 12 months. Using a composite week of five days from Monday to Friday was constructed with 165 issues of both newspapers were selected. The sample obtained includes week days in the month. The issues considered are reports on flood, food security, nutrition and water.

Data Presentation and Analysis

Table 1 Nature, Treatment Genre of Climate Change flooding, food security issues

| Genres | Daily Trust | Vanguard | Total | Percentage |
|-------------------|-------------|----------|-------|------------|
| News Stories | 52 | 38 | 90 | 54.55 |
| Editorials | 4 | 10 | 14 | 8.48 |
| Interviews | 14 | 8 | 22 | 13.33 |
| Feature | 12 | 4 | 16 | 9.67 |
| Letters to Editor | 10 | 13 | 23 | 13.95 |
| Total | 90 | 75 | 165 | 100 |

Source computation by the author 2025

The data in Table 1 show the content of climate change, flooding and food security articles covered by each selected newspaper within the study time frame. The research result shows that articles in the form of news stories were the highest with a percentage of 54.55%. These were straight news stories that are mainly based on the occurrence of events not investigative reports on climate change, flooding and food security in Nigeria.

Interviews and letters to editor followed with 13% each. This shows that the citizens were responding to the different ways the newspapers were presenting the news to the public. This means that the more the media focus on the issues of climate change, flooding and food security the more educative opportunity is given to the general public.

Table 2. Prominence accorded to Climate Change, Flooding and Food Security

| | Daily Trust | Vanguard | Total | Percentage |
|-------------|-------------|----------|-------|------------|
| Front Page | 25 | 28 | 53 | 32.12 |
| Middle Page | 65 | 46 | 111 | 67.27 |
| Back Page | 0 | 1 | 1 | 0.61 |
| Total | 90 | 75 | 165 | 100 |

Source computation by the author 2025

The empirical analysis of the of the research in table one shows the prominence given the coverage of climate change, flooding and food security in selected newspapers in terms of positioning. It reveals that the middle page articles ranked first (67.27%). There were more articles reported in the inside pages in the two newspapers. This implies that the media are making efforts to inform the

citizens about the climate change, flooding and food security issues. The findings shows that the front pages ranked second (32.12%), the front page has moderate reports on climate change, flooding and food security in Nigeria. A comparative analysis shows that Daily Trust has on average reported a total of ninety stories while Vanguard carried seventy-five stories. Structurally, Vanguard

carried more stories on their front pages (28) compared to *Daily Trust* that had 25 stories in their front page. Based on front pages *Vanguard* gave more prominence. However *Daily Trust* had more stories on the inside

page (65) while *Vanguard* had 46 stories that means *Daily Trust* gave more prominence to the issues of climate change, flooding and food security in Nigeria

Table 3. Reportage of issues on Climate Change, Flooding and Food Security

| Issues | Daily Trust | Vanguard | Total | Percentage |
|-------------|-------------|----------|-------|------------|
| Flood | 35 | 38 | 73 | 44.24 |
| Food Crisis | 30 | 17 | 47 | 28.48 |
| Nutrition | 15 | 8 | 23 | 13.93 |
| Water | 10 | 12 | 22 | 13.33 |
| Total | 90 | 75 | 165 | 100 |

Source: Computation by the author 2025

Finding in table 3 shows the categories of climate change issues reported by the selected newspapers and the reporting trends within the reported period. It is observed that stories on flood were predominant in the newspapers as they took the highest percentage of 44%. This is followed by reports on food crisis that had 28%. This shows the priority news in the country, the citizen are more concern about flood than the food security comparatively.

Discussion of Findings

The research was carried out to examine newspaper reportage of climate change, flooding and food security in Nigeria Using two national newspapers. The study aimed at finding out the frequency of coverage, level of prominence given to climate change, flooding and food security issues that are reported in the national newspapers and the frames used by the newspapers.

Accruing from the findings of this research, it is evident that the selected newspapers communicated effectively on issues of climate change, flooding and food security. Though reports on climate change is given more attention when flooding occurs with

44.24%. This is because evidence from the research analysed shows that newspapers coverage kept decreasing over the months of study. It can be deduce that the trends of climate change news reports by the newspapers was represented only when there was high flooding leading to destruction of farmland or property. More so some of the climate change reportage by selected newspapers range from flood, food crisis, nutrition and water sources.

The findings from Table one revealed that out of 678 issues reported only 162 stories were reported by the newspaper on climate change. Based on the findings, news stories carried more reports on climate with 52 by *Daily Trust* while *vanguard* had only 38 resulting to (54.55%). While editorials had 4 in the *daily trust* and 10 by the *vanguard* newspaper with (8.84%). This shows that the selected newspapers did not give importance to the issues of climate change based on the reflection of the positions of the newspapers. From the forgoing, result shows that the newspapers did not much importance to the reportage climate change, flooding has it relates to food security.

Results also indicated that, there was moderate prominence given to climate

change, flooding and food security. As most of the stories reported by the newspapers show that there were more of inside stories than front and back pages. Therefore, it can be deduce that the pattern of coverage in the placement of revealed the level of prominence given to issues of climate change by the Nigerian newspapers.

The study also found that news frames used on climate change, flooding and food security is framed from the angle of human protective interest as it took a higher percentage. Flooding had more stories than other issues. Some of the themes of the stories dwelt on food crises resulting from the destruction of farmland due to flooding, there were also stories on nutrition and water scarcity as relating to the effects it cause on food security in Nigeria.

The findings of this study align with priming theory which contends that media depictions *stimulate related thoughts in the minds of audience members*. For example, talking about “climate change” with a person might stimulate them to think about “extreme weather” because, for that person, those two concepts have become related. Media depictions can strengthen (or weaken) the association between those concepts. (International Journalism Handbook, n.d.)

Conclusion and Recommendations

This study examined newspaper reportage of climate change, flooding, and food security in Nigeria, focusing on nature, prominence,

and framing of issues in two national newspapers. The findings revealed that coverage was largely event-driven, increasing during periods of severe flooding that caused farmland and property destruction. Out of 678 issues analysed, only 162 addressed climate change, with Daily Trust reporting 52 and Vanguard 38, while editorials accounted for a small fraction of coverage. Most stories were placed on inside pages, reflecting moderate prominence, and human-interest frames dominated, emphasizing the impacts of flooding on food security, nutrition, and water scarcity.

These results upheld priming theory, which suggests that media depictions activate related concepts in audience minds, shaping perceptions and evaluations. By linking climate change with extreme weather, flooding, and food insecurity, newspapers can influence public awareness and responses.

Based on these findings, the study recommends that Nigerian newspapers provide continuous, comprehensive reporting on climate change and flooding, not only during extreme events. Coverage should emphasize human contributions to environmental degradation, consequences for food security, and strategies for mitigation and adaptation. Greater focus on food security, including scarcity and price fluctuations, will better inform and empower the public to respond effectively to climate-related risks.

References

- Akande, O., Ayanlade, A., & Orimogunje, O. O. (2011). Climate change impacts on coastal urban settlements in Nigeria. *Interdisciplinary Environmental Review*, 12(1), 1–15. <https://doi.org/10.1504/IER.2011.037972>
- Akporise, A. O., & Okoh, R. N. (2024). The effect of flooding on food security of households in rural communities of Delta State, Nigeria. *Nigerian Journal of African Studies*, 6(1), 45–62.
- Bello, O. B., Ganiyu, O. T., Wahab, M. K., Afolabi, M. S., Oluleye, F., & Ige, S. A. (2012). Evidence of climate change impacts on agriculture and food security. *International Journal of Agriculture and Forestry*, 2(2), 49–55.
- Carrero, I. (2021). Media priming and agenda-setting effects. *International Journalism Handbook*. <https://ijh.rodrigozamith.com/media-effects/priming-theory/>
- Daniel, D. M. (2024). Climate change and its effects on agriculture and food security in Nigeria. *Journal of Environmental and Development Studies*, 9(2), 112–128.
- Iortyer, D., & Yio, W. B. (2023). Flood and food security in the Benue Valley: Stylised facts. *ABUAD Journal of Social and Management Sciences*, 4(2), 89–104.
- National Bureau of Statistics, National Emergency Management Agency, & United Nations Development Programme. (2023). *Nigeria post-disaster needs assessment: 2022 floods*. Government of Nigeria.
- Onefeli, A. O., Egbebi, S. A., Akinade, O. H., Ajiboye, R. O., & Ngwuli, C. P. (2023). Climate change implications on floods and food security in Nigeria: The way forward. *Renewable Energy Journal*, 18(1), 77–92.
- Ojugbo, P. A. (2010). Climate change and sustainable development in Nigeria. *Journal of Sustainable Development in Africa*, 12(3), 1–15.
- Sarpong, E. O., & Ayidoho, A. (2012). Climate change and agricultural vulnerability in the Sudano–Sahelian zone of West Africa. *African Journal of Agricultural Research*, 7(13), 2035–2043.
- University of Twente. (2004). *Priming theory*. <https://www.utwente.nl/en/bms/communication-theories/sorted-by-cluster/media-effects/priming>
- Williams, E. E., & Misshack, N. (2025). Media roles and effective communication for food security in Nigeria. *Journal of Media and Development Studies*, 10(1), 33–49.
- Yadima, A. S. (2025). Media priming and public judgement on development issues in Nigeria. *Journal of African Communication Research*, 8(1), 33–50