

**ASSESSMENT OF THE EFFECTIVENESS OF RADIO ENVIRONMENTAL CAMPAIGN FOR FLOOD CONTROL IN LAMODI COMMUNITY IN OFFA, KWARA STATE, NIGERIA**

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**ABSTRACT:** The human environment is bedevilled by several challenges, including flooding. This has led to plans and programmes by both government and communities aimed at checking this incident. This study assesses how effective radio campaigns have been in mitigating the incidence of flooding by creating awareness and mobilising members of the Lamodi community in Offa Kwara state towards this menace. Grounded by the agenda setting theory of the media, the study adopts a descriptive survey design to gather primary data from 400 residents of Lamodi. Findings reveal that radio campaigns significantly heightened public awareness of flood-related issues, with 75% of respondents attesting to being aware of such campaigns. Furthermore, over 90% of respondents rated the campaigns as effective or very effective in community mobilization. The campaigns not only enhanced understanding of flood control measures but also spurred practical engagement in activities such as community clean-up exercises, drainage clearing, and participation in flood control committees. The study recommends that local government areas and other stakeholders continue leveraging radio as a platform for flood awareness and education while efforts should be made to diversify the radio campaign content to address emerging flood-related challenges and sustain public interest.

**Keywords:** Radio Campaigns, Flood Control, Environmental Communication, Climate Change Awareness, Environmental Campaign

## **INTRODUCTION**

Nigeria is faced with several challenges, one of which is flooding. This incident has become an annual and contentious issue across many states. More often than not, the worst affected areas are coastal and low-lying towns and villages. UNDRR (2019) reports that among several other countries, Nigeria ranks high in flood disasters that negatively impact infrastructure including residential areas, roads and agriculture. The flood disaster of 2012 resulted in the displacement of communities and the destruction of farmlands with its attendant economic losses (Adelekan, 2014). Nonetheless, the 2024 flooding seems to be the most devastating as its impact was felt across the entire regions of the country in varying degrees. Factors often blamed for this environmental destruction include deforestation, inadequate drainage systems, poor urban

planning and climate change. In recent times, the frequency and intensity of floods have worsened resulting in the loss of life of Nigerians, displacement of communities and destruction of property with its socio-economic consequences.

An important means of reducing the effect of flooding is through radio environmental campaigns. This is because radio is recognised as a vital source of information for the masses, including those living in rural areas. It is cheaper, has wide coverage and breaks the literacy barrier, among others (Okunna cited in Uche, 2023; Opubor, 2007 cited in Sanusi et al, 2024; Sanusi et al., 2023; Okunna & Omenugha, 2012). Radio has been employed in campaigns about the environment to create awareness and promote behavioural change (Myers, et al., 2013).

A study by Adekola et al (2021), shows that radio has a wide reach, and as such, can reach diversified audiences simultaneously. Thus, radio broadcasts in rural areas have raised awareness of the risks associated with flooding and helped the populace to prepare better. Through giving information about the imminence of flood, evacuation plans and safety measures, radio campaigns help communities prone to flooding to take necessary steps to reduce the effects of the disaster. Research further shows that radio campaigns become even more effective when they work together with government agencies. For instance, Eze and Onwuka (2020) found that collaboration between radio stations and local governments led to stronger responses from communities. People were more likely to participate in flood drills and follow recommended flood prevention practices. This partnership between media and government helps communities become more resilient to flooding and reduces the overall impact of these disasters.

However, challenges still exist. Poor infrastructural facilities, coupled with poor and inconsistent funding, can limit radio broadcasts in rural areas, thereby making it difficult for some communities to receive regular messages. Nonetheless, radio remains an essential tool for environmental campaigns in Nigeria, especially when the government provides great support and tailors the messages to the needs of the target community (Adeoye et al., 2021).

Many states in Nigeria spanning coastal, semi-urban and even rural communities have been affected by flooding in one way or the other. States including Akwa-Ibom, Anambra, Benue, Borno, Kogi, Delta, Lagos, Rivers and Cross River, among others, have battled the menace of flooding in recent times. Successive governments and policymakers have overlooked certain communities because of their perceived insignificance. One such community is the Lamodi area in Offa Kwara State, Northcentral Nigeria. The area is prone to yearly flooding, especially during the peak of the rainy season. Market women, motorists and the public are often apprehensive whenever it rains because of the possibility of flood overflowing the small culverts (bridges) that connect the community and the major market in the area called Owode.

Although radio campaigns have been effective in health and agricultural sectors, they are yet to be fully assessed in relation to the environment, particularly flooding (Chinedu et al., 2022). To this end, this study therefore aims to determine how radio stations in Offa have fared in environmental campaigns in the promotion of flood control measures among the residents of the Lamodi community. Thus, this study is poised to contribute to evidence-based strategies for flood control in Kwara State, Northcentral Nigeria.

### **Statement of the Problem**

Flooding remains a recurrent challenge in many states in Nigeria, including Kwara. This made the Nigerian Meteorological Agency (NIMET), designate many states in the country as flood-prone in its reports. Despite these forecasts, public perception suggests that proactive measures by government agencies and policymakers are often inadequate to mitigate flood risks. According to Adeoye et al. (2021), there appears to be a disconnect between information disseminated through radio and the actions taken by communities in flood-prone areas to mitigate the risk of flood due to certain factors including limited reach, lack of follow-up, inconsistent messages and language barriers.

Despite the vital role of radio campaigns, flooding continues to destroy many parts of Nigeria, thereby raising questions about the effectiveness of radio environmental campaigns. It has also been noted that past studies largely focused on technological and infrastructural aspects of flood control while limited attention was given to public awareness and communication strategies. Such studies often prioritise crisis communication over preventive education, neglecting the long-term aspects of flood risk reduction, thus creating a gap in understanding the role of radio campaigns in shaping public behaviour concerning flood control.

### **Objective of the Study**

The study aims to assess the effectiveness of radio on environmental campaigns for the control of floods in the Lamodi community in Offa Kwara State. The specific objectives are to:

1. examine the level of public awareness generated by radio campaigns on flood control in the Lamodi community
2. assess how effective radio campaigns are in mobilizing the Lamodi community for flood control measures
3. find out the most significant impact of radio campaigns on flood control in the Lamodi community
4. determine the ways radio campaigns have promoted community participation in flood control activities

### **Research Questions**

To guide the study are the following research questions:

1. What is the level of public awareness generated by radio campaigns on flood control in Lamodi community?
2. How effective are radio campaigns in mobilizing Lamodi community for flood control measures?
3. What is the most significant impact of radio campaigns on flood control in Lamodi community?
4. In what ways have radio campaigns promoted community participation in flood control activities?

## LITERATURE REVIEW

Akinrosoye and Abiola (2022) in a study that examines the role of media campaigns and environmental education as effective tools for flood control and sustainable development in Osun State, used a quantitative survey research design. Data were collected through structured questionnaires administered across four major towns—Osogbo, Ife, Ede, and Ilesha. The data were analysed using descriptive statistical tools, including frequency and percentage, and inferential Optimal Scaling Regression analysis (ORS) for categorical data. Findings reveal that media campaigns and environmental education significantly contribute to flood control efforts and foster sustainable development in the region. The study recommends introducing policies to incorporate environmental studies into the basic school curriculum to build early awareness of flood management strategies. Furthermore, it advocates for the Nigerian media industry to enhance its surveillance and advocacy roles to promote proactive flood prevention and management strategies.

Ibrahim and Daura (2022) note that in an era where the global impacts of climate change are becoming increasingly evident, it becomes necessary to tackle the issue from several angles. Despite evidence in the literature suggesting that media interventions, particularly during pre- and post-rainy seasons, can aid flood disaster management, their impact in Yobe State appears to be limited. This study explores the factors hindering effective media engagement in flood disaster management and identifies strategies to overcome these challenges. A qualitative research approach was employed in their study, utilizing key informant interviews to gather insights from 19 participants, including journalists from major media organizations, staff from Yobe State Emergency Management Agency (SEMA Yobe), and representatives of other disaster management agencies such as the Nigerian Meteorological Agency (NMA). Thematic data analysis was conducted using Atlas.ti version 8 software, produced a bi-thematic model comprising internal and external factors influencing media engagement. Internal factors include news characteristics, funding limitations, unprofessional practices, and profit-oriented media operations, while external factors encompass information deficits, mistrust, government inadequacies, and community perceptions of the media's role in disaster management. The study recommends that stakeholders prioritize media relations and establish pre-disaster management strategies during the pre-rainy season.

Ganiyu, et al. (2017), in their paper titled *Effective Media Involvement in Flood Disaster Management in Nigeria: Pressing Problems and Recommendations*. To investigate these challenges, 16 informants were interviewed, including journalists from two leading national newspapers and disaster managers from four government disaster management agencies in Nigeria. The data were analysed using NVIVO 10 software, revealing insufficient coordination, collaboration, and communication before disaster events. Additionally, relationships during and after disasters were characterized by distrust, blame-shifting, and tension. Their study underscores the need for pre-disaster engagement between media and disaster management organizations to build trust and foster functional partnerships. It recommends that disaster management organizations prioritize cultivating the media as critical stakeholders rather than peripheral participants. Similarly, the media should adopt a proactive and cooperative approach to disaster risk reduction, positioning themselves as integral partners in the process. Establishing robust pre-disaster relationships would

enhance information flow, reduce conflicts, and contribute significantly to national development and disaster resilience.

Salami and Oyedepo (2017) conducted "Radio and Flood Disaster Management in Nigeria: Challenges and Prospects". Through focus group discussions and in-depth interviews, they identified challenges facing radio presenters, including limited access to credible flood risk information. The study recommended training for radio presenters and improved content.

Ogunbode and Oladele (2020) conducted a quasi-experimental study to assess the impact of radio campaigns on Lagos residents' perceptions of flood risk. Their findings indicated an increase in flood risk perception after listening to radio campaigns, as represented by 75% of the respondents. Therefore, it was recommended that radio campaigns on flood disasters be sustained.

In a study that relied on the participatory rural appraisal technique to evaluate the effectiveness of radio, with the title, exploring the Role of Radio in Flood Risk Communication in Rural Nigeria, Ajewole and Olatunji (2018) found that 90% of the Total Respondents reported radio as an effective tool for the communication of flood risks. They recommended the establishment of community radios to help in disseminating messages associated with flooding.

Furthermore, in a 2022 study by Ibrahim and Sambo, the duo found that when radio messages are delivered in local languages, listeners understand and follow the advice more easily. This culturally sensitive approach builds trust and improves communication. Their study emphasizes that messages tailored to the community's language and culture not only share important information but also make people feel more involved in preparing for disasters.

## **Theoretical Framework**

### **Agenda Setting theory**

This study is underpinned by the agenda-setting theory. This theory was first propounded by McCombs and Shaw in 1972. The agenda-setting theory shows the essential role performed by the media in influencing people's perception of any given issue. The media can tell the audience what to think about and not necessarily what to think. This, the media does by repeatedly raising a particular topic for public discourse. This theory is important to this topic because of radio's potential to create awareness of flooding, highlight risks of flooding and measures for mitigation through news, interviews, talk shows etc. Admitted that a broadcast media such as radio has the potential to influence the public through campaigns, challenges such as reach, illiteracy, and listeners' fatigue can whittle down its effectiveness.

## **METHODOLOGY**

The study is empirical. It adopts quantitative methods to assess the effectiveness of radio campaigns for the control of flood in Lamodi community Offa in Offa Local Government Area of Kwara State. Residents were administered a structured questionnaire between August's first week and the first week of September 2024. The area has an estimated population of 5120 while the

entire local government area has a projected population of 174,090 (Afolabi & Alayemi, 2024). However, the sample studied was 400. The respondents were randomly selected by visiting each household living within the precinct of the flood-prone area of Lamodi community, where two culverts were constructed for ease of vehicular and human movements.

### DATA PRESENTATION AND ANALYSES

This section presents data on respondents' demographic characteristics, awareness of radio campaigns on flood control, attitudes toward flood control measures, and the impact of the campaigns.

**Table 1: Gender of Respondents**

Gender	No of Respondents	Percentage (%)
Male	220	55
Female	180	45
<b>Total</b>	<b>400</b>	<b>100%</b>

The frequency distribution table on gender indicates that 220 (55%) of the respondents were male while 180 (45%) were female. This shows that the majority of the respondents were male.

**Table 2: Age of Respondents**

Age	No of Respondents	Percentage (%)
18–25	120	30
26–35	110	27.5
36–45	80	20
46–55	40	10
56 and above	50	12.5
<b>Total</b>	<b>400</b>	<b>100</b>

The age distribution reveals that 120 respondents (30%) were aged 18–25, 110 (27.5%) were aged 26–35, 80 (20%) were aged 36–45, 40 (10%) were aged 46–55, and 50 (12.5%) were aged 56 and above. This indicates that the largest proportion of respondents fell within the 18–25 age range.

**Table 3: Level of Education**

Level of Education	No of Respondents	Percentage (%)
Primary	20	5
Secondary	140	35
Tertiary	240	60
<b>Total</b>	<b>400</b>	<b>100</b>

Data on educational attainment show that 20 respondents (5%) had primary school education, 140 (35%) completed secondary school, and 240 (60%) attained tertiary education.

**Table 4: Occupation of Respondents**

Occupation	No of Respondents	Percentage (%)
Student	160	40
Civil servant	40	10
Private sector employee	60	15
Business Owner	140	35
<b>Total</b>	<b>400</b>	<b>100</b>

The occupational distribution indicates that 160 respondents (40%) were students, 40 (10%) were civil servants, 60 (15%) were employed in the private sector, and 140 (35%) were business owners.

**Table 5: Awareness of Radio campaign**

Awareness of radio campaign on flood control	No of Respondents	Percentage (%)
Yes	300	75
No	100	25
<b>Total</b>	<b>400</b>	<b>100%</b>

Regarding awareness, 300 respondents (75%) affirmed their awareness of radio campaigns on flood control, while 100 (25%) were unaware. This highlights a high level of awareness among the community.

**Table 6: Frequency of listenership to radio campaign on flood control**

Listenership to Radio Campaign on Flood Control	No of respondents	Percentage (%)
Daily	120	30
Weekly	100	25
Monthly	40	10
Rarely	100	25
Never	40	10
<b>Total</b>	<b>400</b>	<b>100%</b>

The data indicate that 120 respondents (30%) listened to radio campaigns daily, 100 (25%) weekly, 40 (10%) monthly, 100 (25%) rarely, and 40 (10%) never. This shows that most respondents tuned in to the radio campaigns on a daily or weekly basis.

**Table 7: Level of understanding of flood control measures after listenership**

Level of understanding of flood control measures	No of Respondents	Percentage (%)
Very high	100	25
High	120	30
Moderate	140	35
Low	20	5
Very low	20	5
<b>Total</b>	<b>400</b>	<b>100%</b>

The level of understanding after listening to radio campaigns was reported as very high by 100 respondents (25%), high by 120 (30%), moderate by 140 (35%), low by 20 (5%), and very low by another 20 (5%).

**Table 8: Encouraged participation in community flood control measures**

Participation in community flood control measures	No of Respondents	Percentage (%)
Yes	340	85
No	60	15
<b>Total</b>	<b>400</b>	<b>100%</b>

The data show that 340 respondents (85%) stated that the campaigns encouraged them to participate in community flood control measures, while 60 (15%) did not agree.

**Table 9: Flood control activity engagement**

Flood control activity	No of Respondents	Percentage (%)
Community clean-ups	160	40
Drainage clearance	140	35
Local flood control committees	100	25
<b>Total</b>	<b>400</b>	<b>100%</b>

Radio campaigns motivated 160 respondents (40%) to engage in community clean-up exercises, 140 (35%) to clear drainage systems, and 100 (25%) to join flood control committees.



**Table 10: Effectiveness of radio campaigns in community mobilization**

Effect on community mobilization for flood control	No of Respondents	Percentage (%)
Very effective	220	55
Effective	140	35
Neutral	20	5
Ineffective	20	5
Very ineffective	0	0
<b>Total</b>	<b>400</b>	<b>100%</b>

On the effectiveness of radio campaigns, 220 respondents (55%) deemed them very effective, 140 (35%) considered them effective, 20 (5%) were neutral, and 20 (5%) found them ineffective. No respondent regarded the campaigns as very ineffective.

**Table 11: Most significant impact of radio campaigns on flood control**

Impact of radio campaigns on flood control	No of Respondents	Percentage (%)
Improved public awareness	160	40
Reduced flood disasters	140	35
Increased community participation	100	25
No significant impact	0	0
<b>Total</b>	<b>400</b>	<b>100%</b>

The campaigns' most significant impacts were identified as improved public awareness (160 respondents, 40%), reduced flood disasters (140 respondents, 35%), and increased community participation in flood control measures (100 respondents, 25%). None of the respondents reported no significant impact.

## DISCUSSION OF FINDINGS

In the discussion of findings, the authors had to recall the questions that guided the study vis-à-vis the data depicted in the analysis section.

**Question 1:** What is the level of public awareness generated by radio campaigns on flood control in the Lamodi community?

Data presented in Tables 5 and 6 show that three hundred individuals representing 75% of the total respondents were aware of radio campaigns on flood control in the Lamodi community. Furthermore, 120 respondents (30%) were listening to the radio daily while 100 respondents (25%) were listening to radio campaigns about flood control every week. This is an indication of a high level of public awareness generated by the radio campaigns on flood control.

**Question 2:** How effective are radio campaigns in mobilizing the Lamodi community for flood control measures?

Table 10 data indicate that radio campaigns have been of great effect in mobilizing the Lamodi community for flood control efforts. 220 (55%) of the respondents noted that it was very effective. 140 (35%) opined that it was effective. Thus, the bulk of the respondents were of the view that radio campaigns were very effective in mobilizing members of the community towards flood control measures. These findings are supported by Ogunbode and Oladele (2020) that listening to the radio increases flood risk perception.

**Question 3:** What is the most significant impact of radio campaigns on flood control in the Lamodi community?

Data in Table 11 indicate that 160 (40%) of the respondents were of the view that the most significant impact of the radio campaigns on flood control in the Lamodi community was an improvement in public awareness about flood-related issues. 140 (35%) opined that it resulted in the reduction of flood disasters in the area. 100 (25%) thought that it resulted in increased community participation in flood control measures. This is in line with Akinrosoye and Abiola's (2022) findings that media campaigns contribute significantly to flood control efforts. The findings are equally in tandem with Ajewole and Olatunji's (2018) findings that radio is an effective tool for the communication of flood risks.

**Question 4:** In what ways have radio campaigns promoted community participation in flood control activities?

The ways the radio campaigns have promoted community participation in flood control activities were in the area of motivation. Data in Table 8 indicate that 340 (85%) affirmed that radio campaigns encouraged them to participate in community flood control measures. Furthermore, Table 9 data had 160 (40%) respondents indicating that radio campaigns on flood control motivated them to engage in community clean-up exercises. 140 (35%) engaged in drainage clearing, while 100 (25%) of the respondents became members of flood control committees in the area.

The above results are in line with Akinbobola et al. (2020), who noted that radio campaigns have the capacity to influence people's behaviour by creating awareness and educating the radio audience about strategies to reduce flooding, such as early warning systems, proper waste disposal, conservation of the environment, clearing of blocked drainages and water channels, and evacuation strategies during emergencies.

## **Conclusion**

The findings of this study underscore the vital role of radio campaigns in addressing flood control in the Lamodi community. The study reveals that radio campaigns significantly heightened public awareness of flood-related issues, with 75% of respondents attesting to being aware of such

campaigns. This heightened awareness is further demonstrated by the frequency of listenership, with 55% of respondents tuning in either daily or weekly.

Moreover, radio campaigns were found to be highly effective in mobilizing community efforts for flood control measures. Over 90% of respondents rated the campaigns as effective or very effective in community mobilization. The campaigns not only enhanced understanding of flood control measures but also spurred practical engagement in activities such as community clean-up exercises, drainage clearing, and participation in flood control committees. This aligns with prior research by Akinrosoye and Abiola (2022) and Ajewole and Olatunji (2018), which emphasized the influence of media campaigns in driving community-based flood management.

The most significant impact identified was the improvement in public awareness about flood-related issues, reported by 40% of respondents. Additionally, 35% noted a reduction in flood disasters, while 25% highlighted increased community participation in flood control measures. These findings validate the strategic importance of radio as a communication tool in promoting behavioural change and fostering collective action against flooding.

### **Recommendations**

From the findings of this study, the authors make the following recommendations:

1. Local government areas and other stakeholders should continue to leverage radio as a platform for flood awareness and education.
2. Efforts should be made to diversify the radio campaign content to address emerging flood-related challenges and sustain public interest.
3. Radio campaigns should be complemented with visual and interactive media, such as social media platforms and community workshops, to reach a wider audience and cater for diverse preferences.
4. Community leaders and influencers should be involved in the campaigns to amplify messages and ensure greater community trust and participation.
5. Mechanisms for community feedback should be established to gauge the effectiveness of campaigns and identify areas for improvement.
6. There should be a constant collaboration among local government areas, NGOs, and community-based organizations to pool resources and expertise in implementing flood control measures.
7. Radio campaigns should be designed in such a way that not only address immediate flood risks but also encourage long-term behavioural changes, such as sustainable waste disposal practices and proactive disaster preparedness.

### **REFERENCES**

Adekola, O., Lamond, J., & Antwi, A. (2021). The role of community radio in flood risk communication and resilience building in urban informal settlements in Nigeria. *Environmental Hazards*, 20(3), 242-257.

- Adelekan, I. O. (2014). Floods and flood management in Nigeria. *Journal of Environmental Studies*, 34(1), 1-13.
- Adelekan, I. O., & Fadare, S. O. (2017). Effectiveness of radio broadcasts in disseminating flood risk information in Nigeria. *Journal of Environmental Planning and Management*, 60(5), 851-866. <https://doi.org/10.1080/09640568.2016.1227956>
- Adeniji, O. A., Akinyemi, F. O., & Oladele, I. O. (2019). Evaluating the effectiveness of radio campaigns in promoting flood risk reduction behaviours among rural communities in Nigeria. *Journal of Disaster Risk Reduction*, 3, 1-12.
- Adeoye, N. O., Ayoade, J. O., & Abegunde, A. A. (2021). Flood risk communication and community resilience in Southwestern Nigeria. *International Journal of Disaster Risk Reduction*, 62, 102408.
- Adeoye, N. O., Ayoade, J. O., & Fashae, O. A. (2021). Impact of flooding on urban and rural communities in Nigeria. *Journal of Environmental Management*, 295, 113125. <https://doi.org/10.1016/j.jenvman.2021.113125>
- Adesina, A. O. (2020). Assessment of the effectiveness of radio campaigns in promoting flood risk awareness among rural communities in Kwara State, Nigeria. *Unpublished doctoral dissertation*, University of Ilorin.
- Ajewole, O. C., & Olatunji, S. A. (2018). Exploring the role of radio in flood risk communication in rural Nigeria. *Journal of Rural Studies*, 59, 1-12.
- Akinbobola, A. O., Ayedun, O. A., & Ogundele, K. F. (2020). The role of mass media in environmental education in Nigeria: A case study of radio campaigns. *Environmental Education Research Journal*, 28(1), 67-81.
- Akinrosoye, A. I., & Abiola, O. L. (2022). The effect of media campaign and environmental education on flood control in Osun State, Nigeria. *African-British Journals*, 2(1). <https://abjournals.org/bjmcmr/papers/volume-2/issue-1/the-effect-of-media-campaign-and-environmental-education-on-flood-control-in-osun-state-nigeria/>  
<https://doi.org/10.52589/BJMCMR-XSDC7X3Y>
- Akinyemi, F. O., & Oladele, I. O. (2015). Radio and flood disaster management in Nigeria: An assessment of listeners' perception. *Journal of Communication and Media Research*, 7(1), 1-14.
- Amienyo, D., & Omofonmwan, S. I. (2017). Evaluating the effectiveness of radio campaigns in promoting climate change awareness in Nigeria. *Journal of Environmental Education Research*, 23(1), 43-58. <https://doi.org/10.1080/13504622.2016.1271726>

- Chinedu, N. O., Onwubiko, I. O., & Nnamdi, A. (2022). Flood control and environmental media campaigns in Nigeria: An evaluation of radio's role in community preparedness. *Journal of Environmental Communication*, 36(2), 133-146.
- Eze, S. C., & Onwuka, E. (2020). Analyzing the effectiveness of radio campaigns in disaster preparedness in Nigeria. *Journal of Disaster and Crisis Management*, 12(4), 325-339.
- Ganiyu, M. A., Mohammed, R., & Ismail, A. (2017). Effective media involvement in flood disaster management in Nigeria: Pressing problems and recommendations. *Asia Pacific Journal of Education, Arts and Sciences*, 4(1), 120-131.
- Ibrahim, A. M., & Daura, M. M. (2022). Modelling the challenges of news media engagement in community flood disaster management: Preliminary research evidence from Yobe State, Nigeria. *International Journal of Media and Information Literacy*, 7(2), 434-440. <https://doi.org/10.13187/ijmil.2022.2.434>
- Ibrahim, A. Y., & Sambo, S. (2022). Cultural dimensions of radio flood campaigns in Northern Nigeria: An empirical study. *African Journal of Media Studies*, 19(1), 112-130.
- Iyanda, O. S. (2018). Radio and environmental communication in Nigeria: A study of flood risk awareness. *International Journal of Communication*, 12, 1-20.
- Jharotia, A. K. (2018). Role of media in enhancement of environmental awareness. *Power of Media: Shaping the Future*. [https://www.researchgate.net/publication/323751233\\_Role\\_of\\_Media\\_in\\_Enhancement\\_of\\_Environmental\\_Awareness](https://www.researchgate.net/publication/323751233_Role_of_Media_in_Enhancement_of_Environmental_Awareness)
- Myers, T. A., Maibach, E. W., & Cobb, S. (2013). Environmental radio messages: An effective tool for promoting pro-environmental behaviours. *Environmental Communication*, 7(2), 147-165.
- NPC (National Population Commission). (2018). *2018 Nigeria Demographic and Health Survey*.
- Nwafor, G. C. (2006). Flood hazard mapping in Nigeria: A case study of the Niger Delta. *Journal of Environmental Management*, 83(1), 1-12.
- Nwankwor, C. I., & Nwosu, A. C. (2020). Assessing the impact of radio campaigns on flood risk perception and adaptation among rural communities in Nigeria. *Journal of Disaster Risk Reduction*, 4, 1-12. <https://doi.org/10.1016/j.jdrj.2020.02.001>
- Ogunbode, C. O., & Oladele, I. O. (2020). Assessing the impact of radio campaigns on flood risk perception among urban residents in Lagos, Nigeria. *Journal of Environmental Studies*, 40(1), 1-15.

- Okunna, C. S., & Omenugha, K. A. (2012). *Introduction to mass communication* (3rd ed.). New Generation Books.
- Oladele, I. O., & Akinyemi, F. O. (2020). Radio, flood risk communication, and community engagement in Nigeria. *Journal of Communication and Media Research*, 12(1), 1-15.
- Olukoya, A. (2019). Environmental media campaigns and their effectiveness in Nigeria. *Journal of Media Studies and Communication*, 44(3), 89-102.
- Oyinlola, M. A., & Adesina, A. O. (2019). Radio as a tool for flood risk communication in Nigeria. *Journal of African Studies and Development*, 11(2), 1-12.
- Salami, A. W., & Oyedepo, J. A. (2017). Radio and flood disaster management in Nigeria: Challenges and prospects. *Journal of Media and Communication Studies*, 9(1), 1-13.
- Sanusi, B. O., & Azeez, M. A. (2024). Prospects and challenges of broadcasting educational content during pandemics in Kwara State of Nigeria. *Journal of General Studies*, 5(2), 86-96. <https://jogsesut.org/>
- Sanusi, B. O., Talabi, F. O., Adelabu, O. T., & Alade, M. (2021). Educational radio broadcasting and its effectiveness on adult literacy in Lagos. *SAGE Open*, 1-8. <https://doi.org/10.1177/21582440211016374>
- Uche, A. O. (2023). Interpersonal communication. In C. S. Okunna (Ed.), *Communication and media studies: Multiple perspectives* (2nd revised & enlarged ed., pp. 729-746). New Generation Educare Ltd.
- UNDRR (United Nations Office for Disaster Risk Reduction). (2019). *Global assessment report on disaster risk reduction*.
- UNISDR (United Nations International Strategy for Disaster Reduction). (2005). *Hyogo framework for action 2005-2015*.
- UNISDR (United Nations International Strategy for Disaster Reduction). (2015). *Sendai framework for disaster risk reduction 2015-2030*.