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RECOMMENDATIONS FOR IMPROVING INFORMATION DISSEMINATION TO BETTER SUPPORT THE NEEDS OF FLOOD-AFFECTED POPULATIONS IN YOBE STATE, NIGERIA

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Introduction

Flooding has become an increasingly frequent and devastating event in many parts of the world including Nigeria and Yobe State in particular. Flooding problems are influenced by various factors like rapid population growth, poverty, limited resources, rapid urbanization, industrialization, negative agricultural practices, inadequate waste management, lack of environmental awareness and weak enforcement of rules and regulations which all leads to various consequences to peoples of the communities. These floods have severe implications, including the displacement of residents, loss of livelihoods, destruction of infrastructure and limited access to basic services such as health-care, education, clean water and food. Ajaero and Onokala (2013) maintained that global warming, negative agricultural practices, over-population, limited resources and rising sea levels results in floods or droughts which can cause people to become displaced from their communities reducing the amount of land available for agriculture, which will contribute to shortages of food and other resources.

Flooding is caused by high population density and rapid population growth in the community that put pressure on natural resources leading to increased demand for food, water, energy and resulting in environmental degradation. Wide spread of poverty and limited access to resources drive unsustainable practices such as deforestation for fuel wood, overfishing and improper waste management as communities prioritize immediate needs over long-term environmental sustainability. Rapid urbanization lead to unplanned settlements, increased demand for infrastructure and inadequate waste management systems and this results in pollution, encroachment on natural habitats and the loss of green spaces. Furthermore, industrial activities including textiles, chemicals and manufacturing contribute to land, air and water pollution also deforestation for agricultural expansion leads to habitat loss and biodiversity decline. Limited awareness and understanding of flooding and other environmental problems among the general population and inadequate education on sustainable practices contribute to the persistence of environmental problems in our communities. Accordingly, Barikdar (2023) stress that flooding experienced by many communities are influenced by factors such as its level of development, economic structure, production methods and environmental policies and these challenges includes air and water pollution resulting from industrialization, intensive agricultural practices including excessive use of fertilizers and pesticides which contribute to soil and water pollution, impacts of climate change such as sea-level rise, changing rainfall patterns and inconsistent enforcement of environmental regulations and weak institutional capacity to monitor and addresses environmental violations lead to non-compliance by industries and individuals which negatively affects the livelihood of people in their communities.

Climate change and agricultural degradation intensify the challenges of flooding and be a significant push factor in human

migration patterns. Africa and many areas in Nigeria are facing some environmental problems like flooding due to rising sea levels and erosion. These conditions will only add to the already substantial number of seasonal migrants and add strain on the country as well as on destination countries and the routes migrants travel. Podesta (2019) emphasizes that the destabilizing effects of flooding and climate change should be of great concern to all those who seek security and stability in their region. Furthermore, in the struggle for survival and development, some region creates a lot of negative impacts on the environment that ranges from over-exploitation of resources on non-sustainable ways, erosion, deforestation, destruction of ecosystem and pollution which often cause flooding and ultimately threatens the human existence in some areas in the of the state. (Gutti, Aji & Magaji, 2012).

Finding information is not a problem in today's world, the problem is finding the useful and trustworthy information at the right time. Therefore, internally Displaced Persons (IDPs) who are often the most affected require timely and accurate information to access emergency services that includes; relief aid, shelter, water, food and health-care. Despite the critical need for information during and after flooding events, the flood-affected populations in Yobe State often face barriers to accessing timely, accurate and reliable information. This research aims to identify these barriers, explore the information-seeking behaviors of flood-affected populations and provide recommendations to improve information dissemination systems thereby enhancing communication strategies and contribute to better disaster management and resilience-building in flood-prone areas.

Statement of the problem

Flood-affected populations in Yobe State face significant challenges in accessing vital information during flood emergencies. These challenges include limited access to communication channels, inadequate dissemination of emergency information, low literacy rates, and reliance on informal communication networks. These factors hinder the ability of displaced individuals to make informed decisions about evacuation, accessing aid and resettlement. Understanding the information needs and behaviors of these populations is essential for developing effective communication strategies that can provide critical and life-saving information during emergencies.

Walker (2021) opined that, the tragic dilemma of flooding in Africa and Yobe in particular contributes to the earth's environmental changes and it is one of the most vulnerable community in the country and this problem threaten not only the region but also the entire country's public health, its economy and social fabric.

Furthermore, it is important that research should be conducted on identifying the key information needs of the flood-affected populations, examine the information-seeking behavior of these populations during and after flooding, identify the barriers preventing timely access to information by flood-affected populations and provide recommendations for improving the dissemination of information to better meet the needs of flood-affected populations. Therefore, this research will aimed at providing recommendations for improving information dissemination to better support the needs of flood-affected populations in Yobe State, Nigeria.

Objective(s) of the Study

The following are the objectives of the study:

i. To identify the key information needs of flood-affected populations in Yobe State.
ii. To examine the information-seeking behavior of these populations during and after flooding events in Yobe State.
iii. To identify the barriers preventing timely access to information by flood-affected populations in Yobe State.
iv. To provide recommendations for improving the dissemination of information to better meet the needs of flood-affected populations in Yobe State, Nigeria.

The following are the research questions:

i. What are the specific information needs of flood-affected populations in Yobe State?

ii. How does these populations seek information during and after floods in Yobe State?
iii. What barriers exist that prevent them from accessing vital information in Yobe State?
iv. How can information dissemination be improved to better support flood-affected populations in Yobe State, Nigeria?

Literature Review

Flooding is concerned with both environmental influence on human life and human influence on the environment. It focuses on the nature and quality of the relationship between human communities and the ecosystem, how the environment provides the resource base for human existence and how the nature of exploitation of these resources by human communities enhances or undermines the natural resilience of the environment. Furthermore, the effect of flooding and its solutions is quite complicated and difficult to understand given the complexity or interrelations of different components of the ecosystem. Flooding, particularly in rural areas have long-lasting effects on vulnerable populations and that's the more reasons many researchers emphasizes the importance of timely and reliable information in disaster situations to reduce human and material losses. Kula (2019) It is however, the attitude or approach of human beings towards using the natural resources that is going to influence environment to a great extent. The knowledge of **environmental ethics** should also help in the conservation of natural resources.

Flooding challenges cause water pollution, air pollution, Deforestation, and erosion which directly have negative impact on people's social, economic and health life in the region. Koehn (2015) observed that, flooding can lead to mass displacement of people as IDPs requiring access to critical services such as health care, shelter, food, clean water and education. In region like Yobe State where formal communication, limited infrastructure and the absence of timely information exacerbates the suffering of affected populations. Lucas (2023) agreed that there are many environmental issues that affect our community but the major ones are flooding and global warming which leads to pollution and the loss of habitats. The loss of habitats is caused primarily by deforestation where large areas of forest are cut down to create more room for agriculture, resulting in soil erosion and a general loss of biodiversity.

Globally, the increasing impacts of flooding continue to be seen in reality for poor communities whose livelihoods are being washed away and children whose education is being truncated by the economic impacts of disaster. Duru, Aro and Ebunoluwa, (2022) maintained that the problem of environmental degradation has generated both global and local attention. While international environmental concerns are usually couched in broad terms like climatic change and desertification, the environmental problem of concern to local settings and vulnerable groups is generally localised in nature, revolving around immediate issues that threaten their livelihood and survival. these include deterioration of range-land, deforestation, degradation of topsoil, inappropriate disposal of waste, depletion of fresh water, pollution of air and water systems and animals facing extinction. These problems directly or indirectly impact on human well-being causing declining soil fertility that leads to poor crop yields while rangeland depletion reduces animal productivity and any deterioration in water quality adversely affects the fish fauna. According to Jiboye, Ikporukpo and Olatubara (2019) The spatial pattern of environmental degradation shows that flooding and coastal erosion are the most prominent environmental problems that cuts across majority of the settlements. Flooding as an environmental problem was reported as most severe by about 63% of the respondents and 68% of the communities during focus group discussions. Nevertheless, the effect of flooding cannot be over emphasized as it affects livelihoods of people in their various communities.

Stakeholders engagement is increasingly advocated as a means to solve some of the stickiest environmental problems we face at the individual, community, state or at the country

level with the aim of establishing a balance between man and the environment by through various environment protection programs and practices. Several efforts are being made by public, scholar's, and government officials to identify the causes and the increasing frequency of this flooding and its impacts on livelihood of people in their community (Adeoye, 2017). Furthermore, various studies suggest that the most pressing information needs of flood-affected populations include emergency evacuation procedures, relief aid availability, health services, and safety measures (Ngwu, 2018). However, gaps in the information available to these populations, especially in rural areas, increase their vulnerability during crises.

Accordingly, barriers such as low literacy rates, lack of access to communication technologies, and language barriers often prevent effective information dissemination (Obaje & Yusuf, 2016). In Yobe State, traditional media like radio and word of mouth are often the primary means of communication which may not always be reliable or comprehensive. Therefore, there is need to improve the quality and reach of information dissemination by adopting a multi-channel approach that includes both traditional media and newer technologies such as mobile messaging and social media (Oyeniran, 2019). Tailoring these strategies to the needs and preferences of the target population is key to ensuring that critical information reaches those who need it most at the right time.

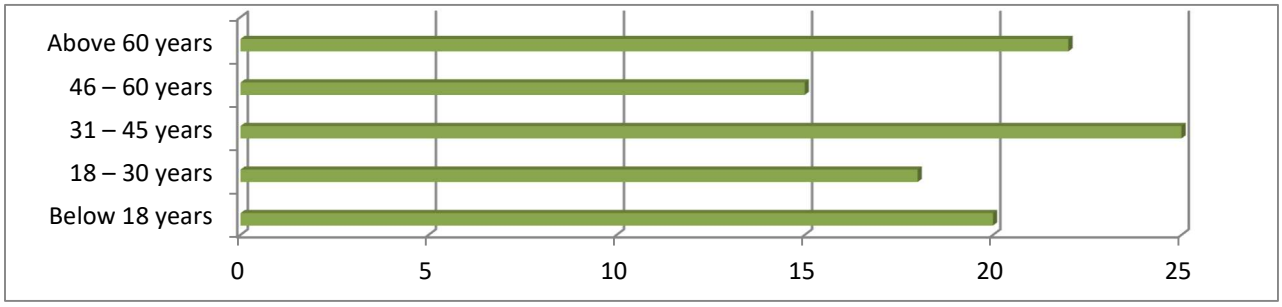
Data analysis and presentation

This report presents the findings from the study on information needs and dissemination in flood-affected areas of Yobe State. The study aimed to understand the demographic profile of the population, assess their information needs at different flood stages, identify information-seeking behaviors and preferred sources, pinpoint barriers to accessing information, and gather suggestions for improving information dissemination strategies. The analysis is based on respondent data, providing insights into potential trends and challenges. This report includes bar chart visualizations for key findings.

1. Demographic Profile of the Flood-Affected Population

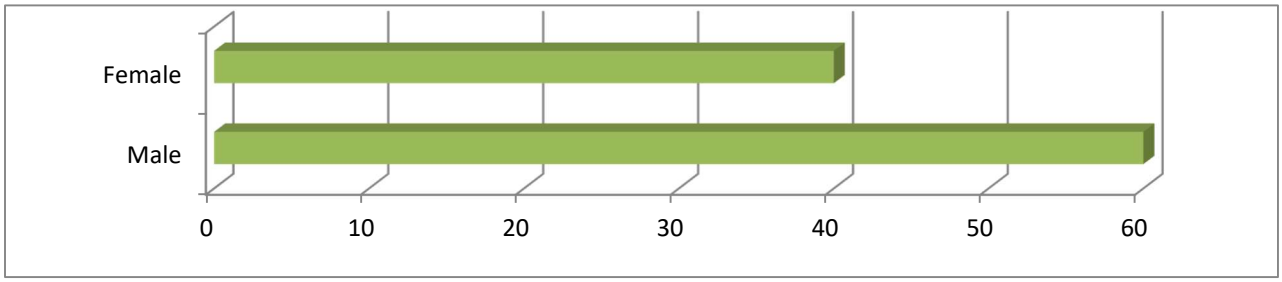
The demographic data indicates a diverse population. Below are visualizations of key demographic distributions.

Age Group Distribution



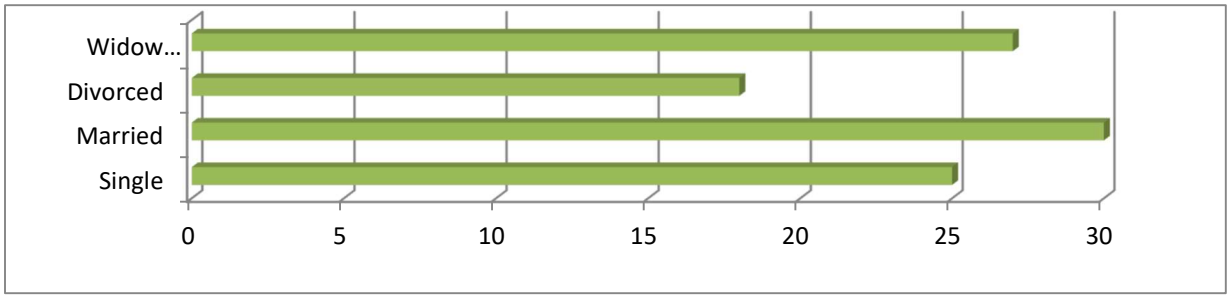
The largest age group is 31-45 years (25%), followed by above 60 years (22%) and below 18 years (20%).

Gender Distribution



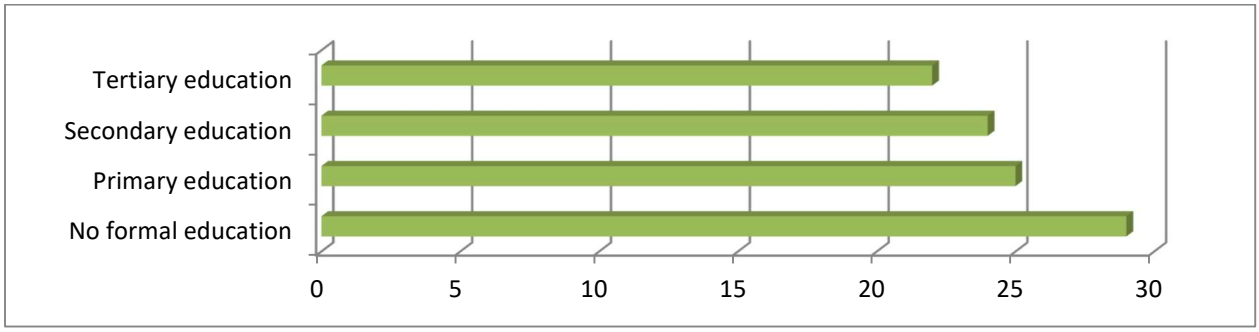
Males constitute a larger portion of the respondents (60%) compared to females (40%).

Marital Status Distribution



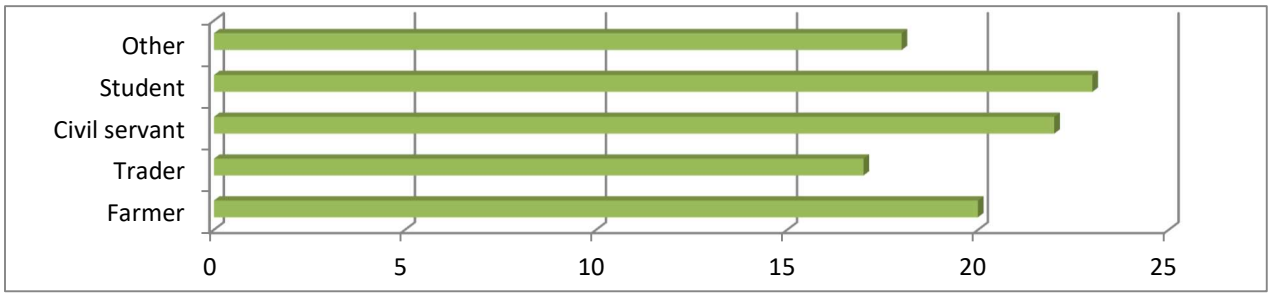
A significant portion of the population is married (30%), with widowed (27%) and single (25%) individuals also forming substantial groups.

Highest Educational Qualification Distribution



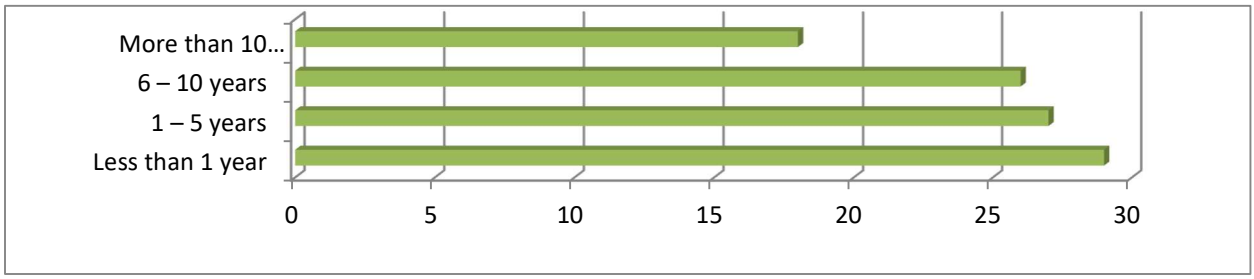
Educational attainment varies, with primary education being the highest qualification for 29% of respondents, followed by secondary (25%) and tertiary education (24%).

Occupation Distribution



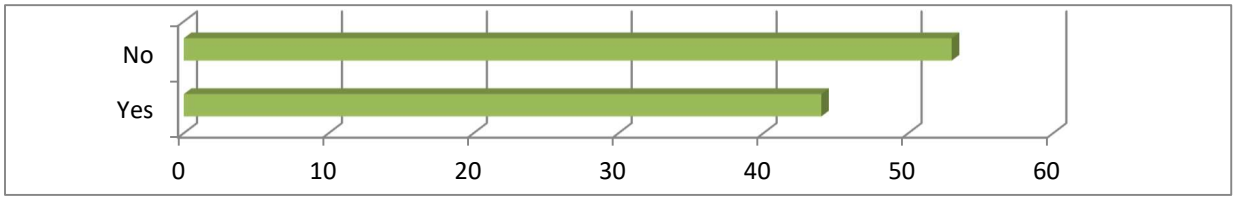
Occupations are varied, with students (23%) and civil servants (22%) being the most represented.

Length of Stay in the location Distribution



A considerable number of respondents have lived in the area for 6-10 years (29%) or more than 10 years and above (27%).

Prior Flood Experience

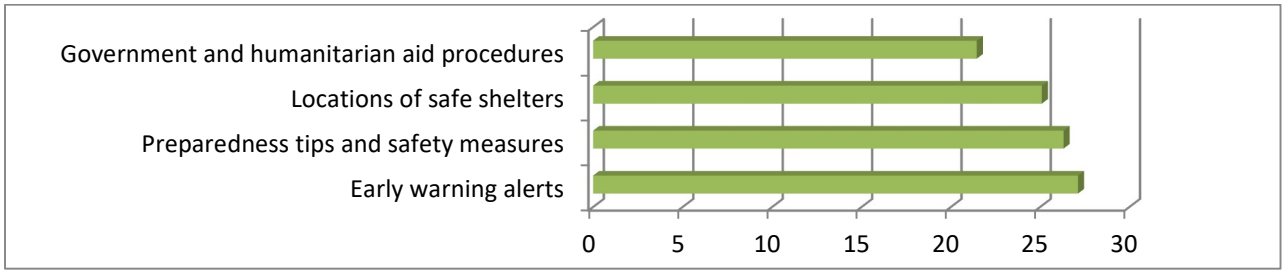


Notably, 44% of the respondents have experienced flooding before. A majority (57%) reported having a disability that affects their access to information.

2. Information Needs of Flood-Affected Populations

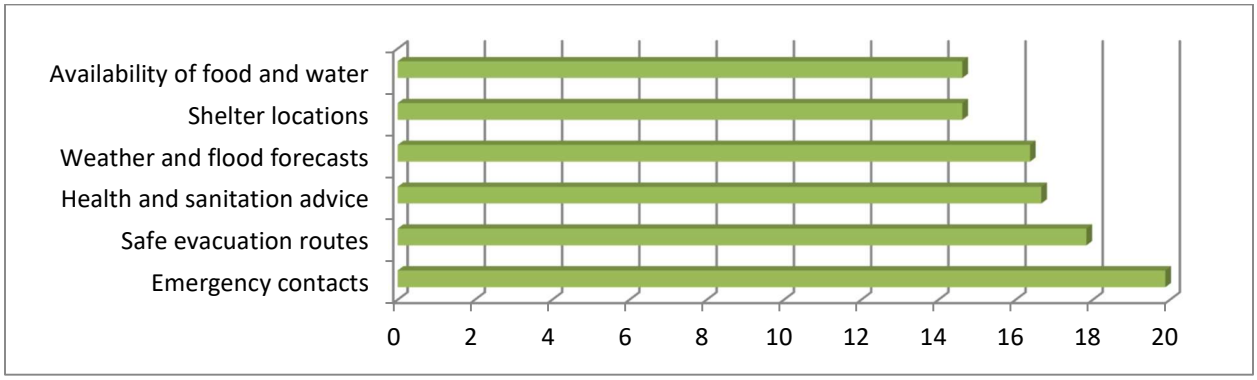
This section details the information needs of the flood-affected population at different stages of a flood event.

Information Needed Before Flood



Before a flood, the most crucial information needed by the population is Early warning alerts (27.13%) and Preparedness tips and safety measures (26.32%). Locations of safe shelters (25.10%) and 'Government and humanitarian aid procedures' (21.46%) are also important.

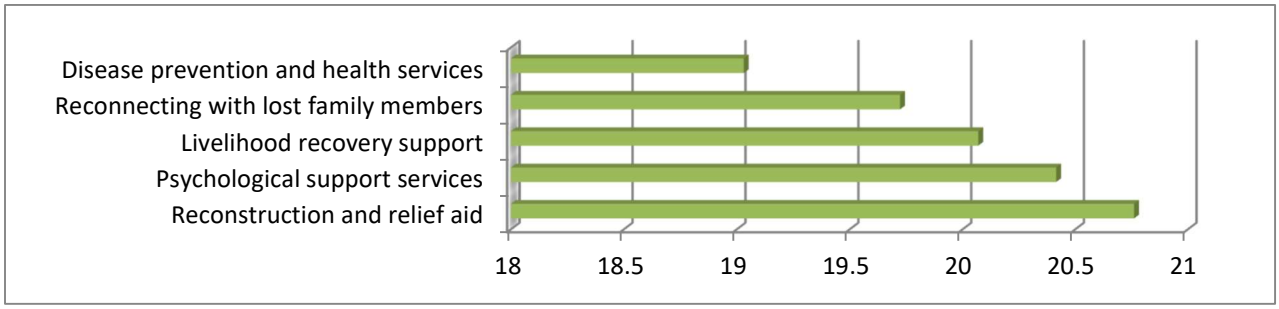
Information Needed During Flood



During a flood, Emergency contacts (19.88%) are most needed, followed by Safe evacuation routes (17.84%) and Health and sanitation advice (16.67%). 'Weather and flood forecasts'

(16.37%), Shelter locations (14.62%), and Availability of food and water (14.62%) are also significant.

Information Needed After Flood

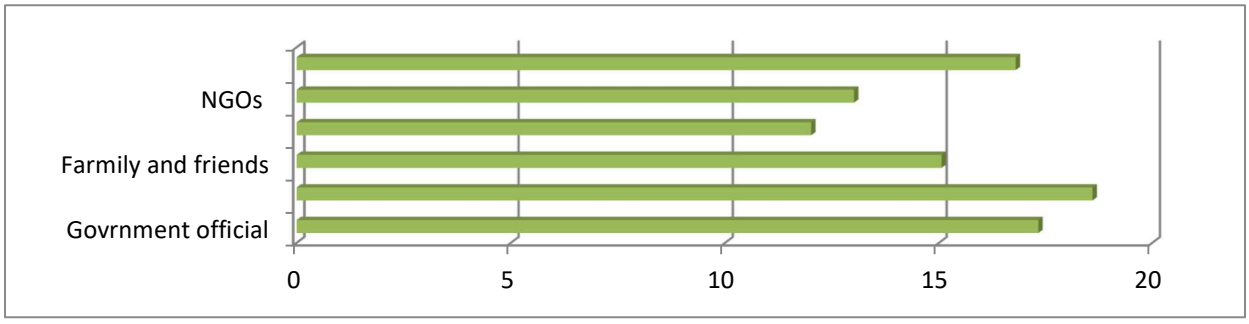


After a flood, Reconstruction and relief aid (20.76%) and 'Psychological support services' (20.42%) are the most sought-after information. Livelihood recovery support (20.07%), Reconnecting with lost family members (19.72%), and Disease prevention and health services (19.03%) are also highly needed.

3. Information-Seeking Behavior

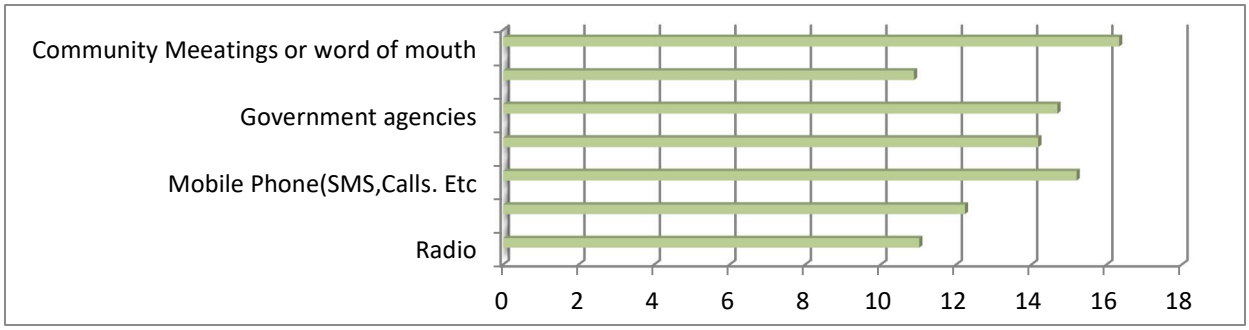
This section explores the information-seeking behaviors and preferred sources of information among flood-affected populations.

Sources Relied Upon During Flood



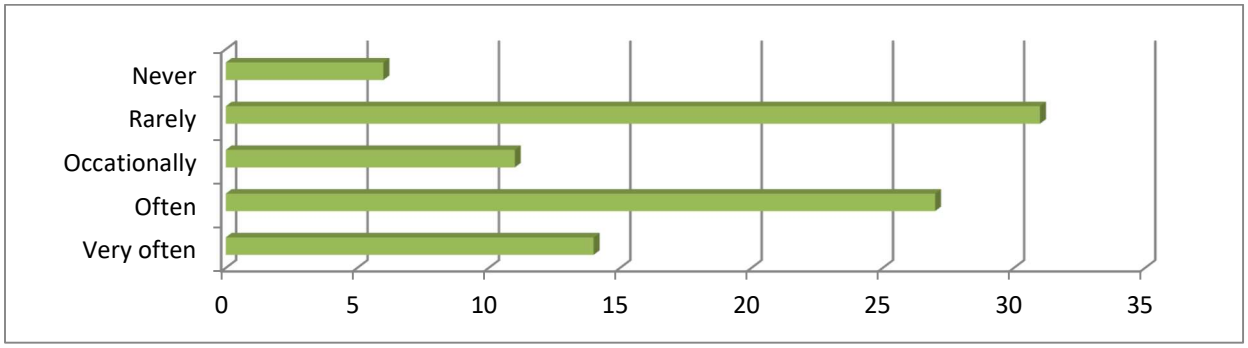
When relying on information during a flood, respondents most frequently turn to Community leaders (18.67%), followed by Government officials (17.33%) and 'Religious leaders' (16.80%). Media, NGOs, and friends/family are also significant sources.

Main Sources of Information



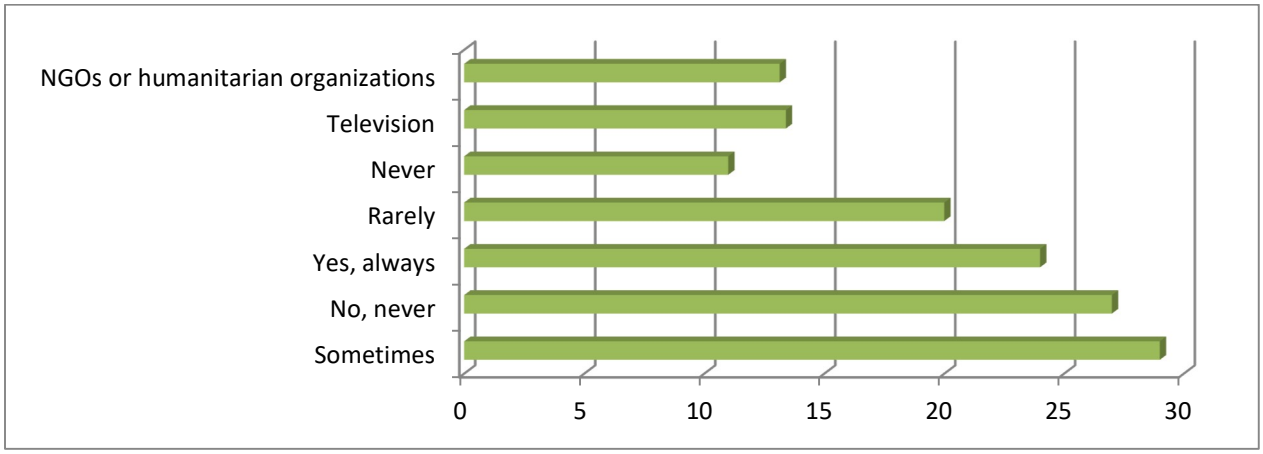
The main sources of information (before, during, and after a flood) are primarily Community meetings or word of mouth (15.72%) and Mobile phone (15.21%). Social media (14.69%) and government agencies (14.18%) also play a notable role.

Frequency of Checking Flood Information



Regarding the frequency of checking flood-related information, a significant portion of respondents (31%) rarely check, while 27% check very often. This suggests a polarization in information-seeking habits.

Perceived Timeliness and Accuracy of Information

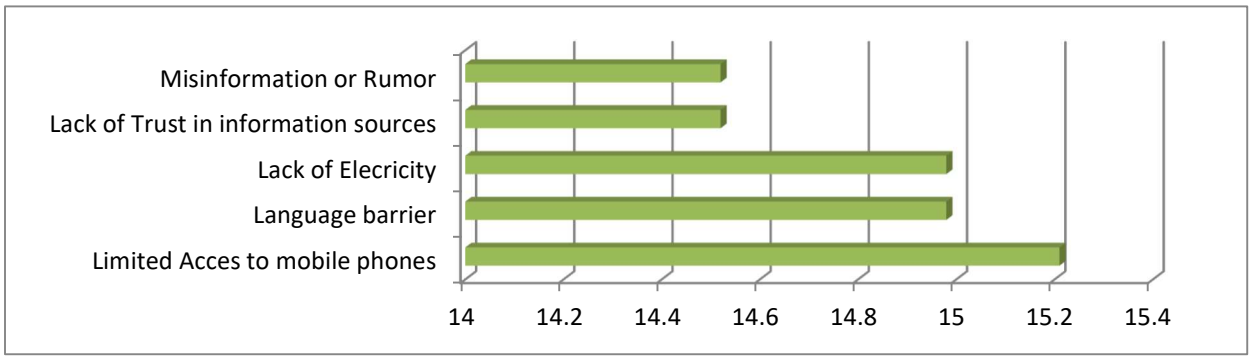


The timeliness and accuracy of information are perceived as Sometimes accurate by 29% of respondents, and 'No, never' by 27%, indicating a considerable lack of trust or inconsistency in information delivery.

4. Barriers to Accessing Information

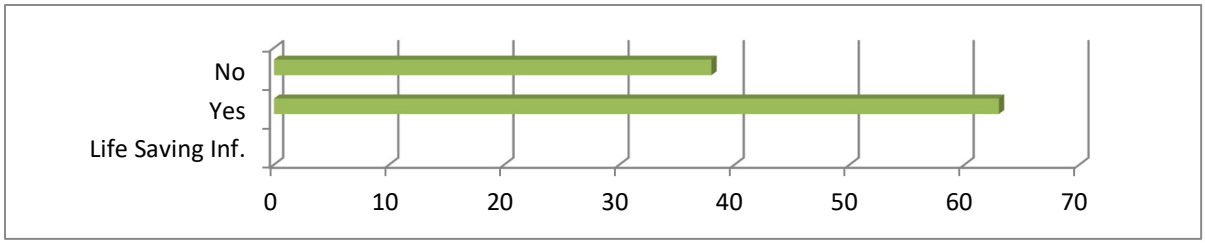
This section identifies the barriers to accessing information faced by flood-affected populations.

Challenges in Getting Information



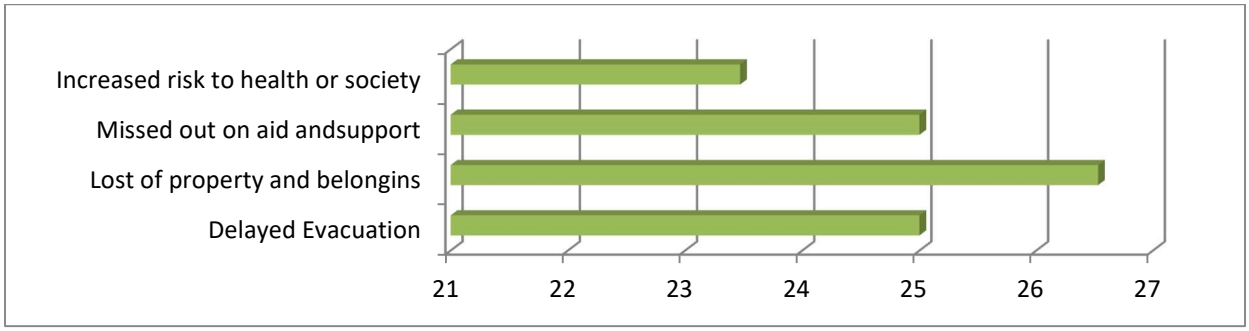
The biggest challenges faced in getting important information are Limited access to mobile phones' (15.21%), 'Language barriers' (14.98%), and Lack of electricity (14.98%). 'Lack of trust in information sources (14.52%) and 'Misinformation or rumors' (14.52%) are also significant barriers.

Unable to Access Life-Saving Information



A substantial number of respondents reported being unable to access life-saving information: 43% multiple times and 36% once.

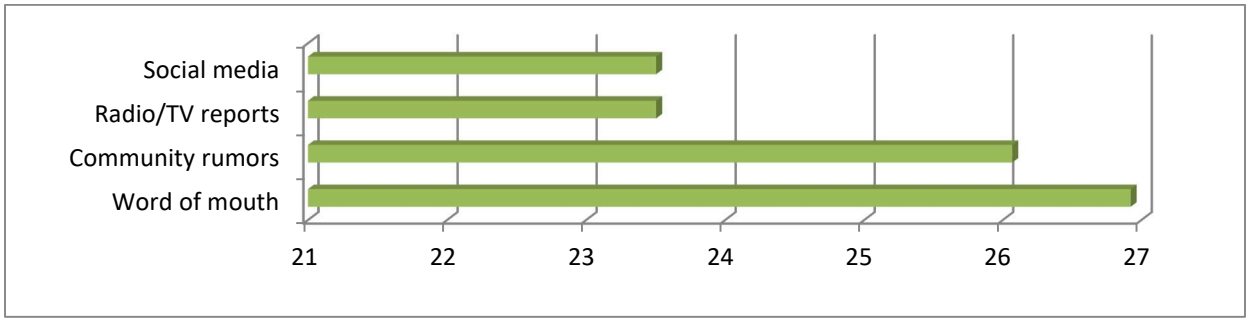
Consequences of Not Receiving Timely Information



The consequences of not receiving timely information include Delayed evacuation 'Loss of

property or belongings' (26.53%), ' (25%), 'Missed out on aid and support' (25%), and 'Increased risk to health or safety' (23.47%).

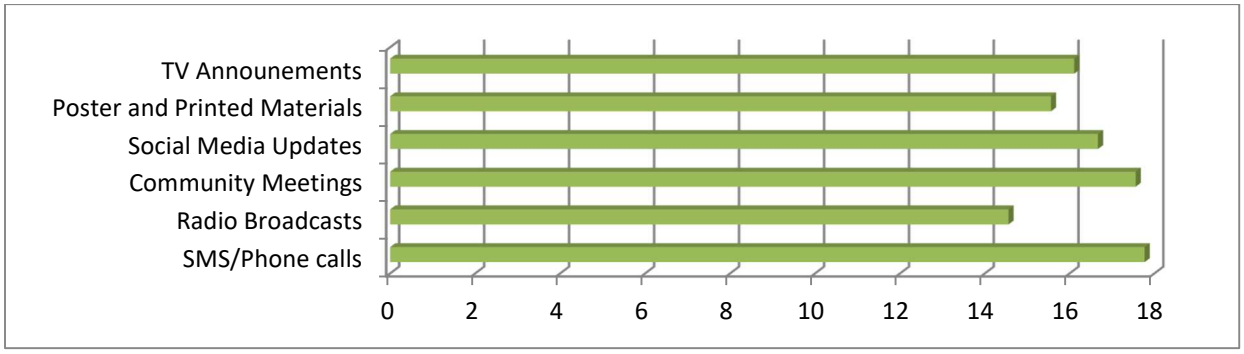
Sources of Misinformation



The most common sources of misinformation are Word of mouth (26.92%) and Community rumors (26.07%), followed by 'Radio/TV reports' (23.50%) and 'Social media' (23.50%).

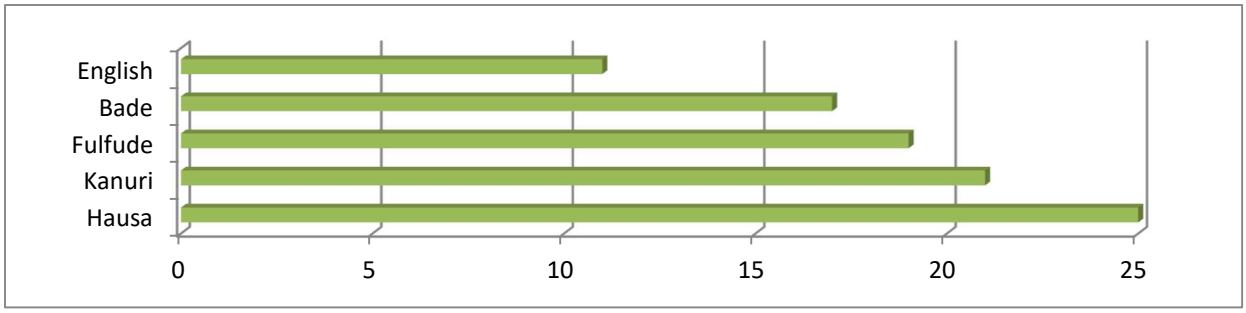
5. Improving Information Dissemination

Preferred Ways to Receive Information



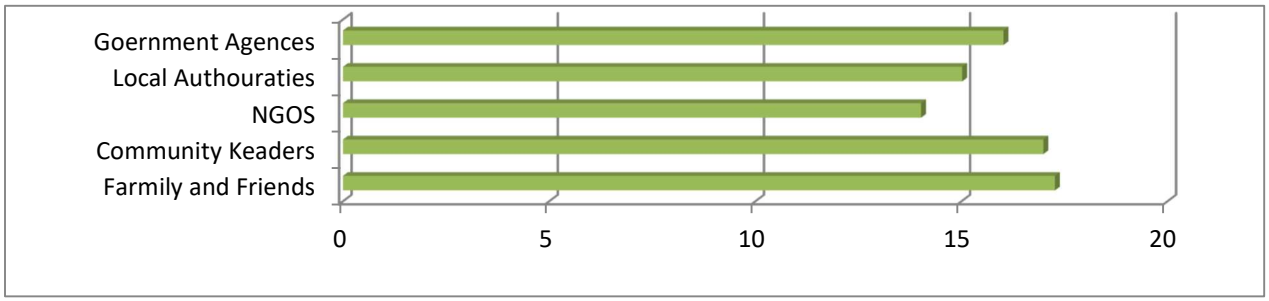
The preferred ways to receive flood-related information are 'SMS/phone calls' (17.77%) 'Posters and printed materials' (17.56%) and 'Community meetings' (17.56%), followed by 'TV announcements' (16.67%) and 'Social media updates' (16.67%). 'Radio broadcasts' (14.56%) and (15.77%) are also preferred.

Preferred Languages for Information



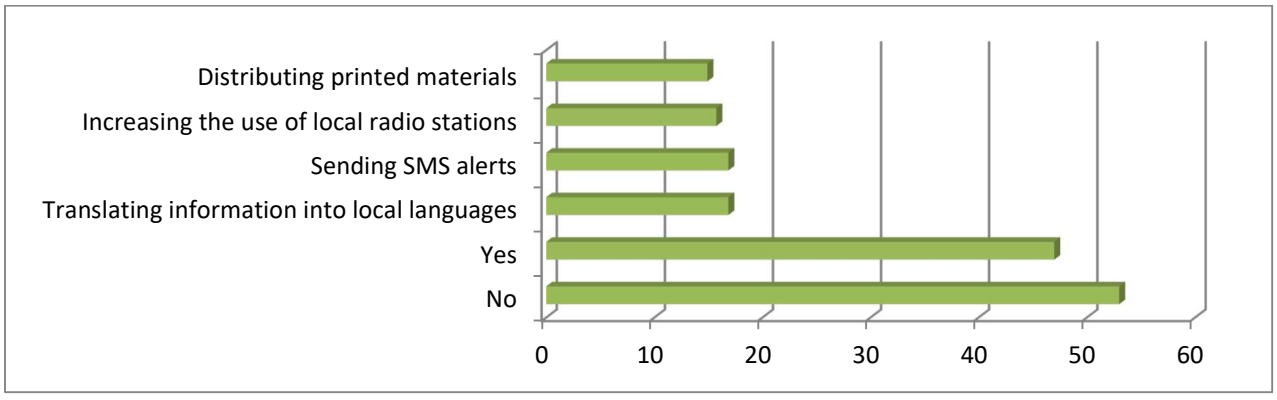
Regarding preferred languages, 'Hausa' (25%) Kanuri (20.44%) and Fulfulde (19.47 are most preferred, indicating the importance of local language translation.

Most Trusted Sources for Information



The most trusted sources for flood-related information are Friends and family (17.27%) and 'Community leaders' (16.99%), followed by NGOs, local authorities, and government agencies.

Suggestions for Improving Information Dissemination



Suggestions for improving information dissemination include 'Using social media for real-time updates' (17.96%), 'Organizing community awareness programs' (17.68%), and 'Translating information into local languages' (16.85%). 'Sending SMS alerts' (16.85%), 'Increasing the use of local radio stations' (15.75%), and 'Distributing printed materials' (14.92%) are also suggested. Finally, 47% of respondents had suggestions on how to make information more accessible.

Conclusion and Recommendations

Based on the research findings, it is evident that there is a significant need for timely, accurate, and accessible flood-related information in Yobe State. The reliance on community-level sources and the preference for local languages highlight the importance of localized and culturally sensitive communication strategies. Addressing barriers such as limited access to mobile phones, language barriers, and lack of electricity is crucial for effective information dissemination. Future efforts should focus on leveraging trusted community networks, utilizing diverse communication channels, and ensuring information is available in local languages to improve preparedness, response, and recovery efforts in flood-affected areas.

References

Aina, L.O (2004). *Library and Information Science Text for Africa.* Ibadan: Third World Information Service Limited, 53-55.

Ajaero, C. K. & Onokala, P. C. (2013). The Effects of Rural-Urban Migration on Rural Communities of Southeastern Nigeria. *International Journal of Population Research.* Article ID 610193, 10.

Barikdar, A. (2023). Environmental Problem and Economic Impact of Bangladesh. https://www.researchgate.net/publication/371701865 1-10.

Deoye, N. O. (2017). Challenges of Flood Disaster Management in Nigeria: Learning from the Experience of Zimbabwe. *Journal of Geography and Regional Planning*, 10(9), 231-241.

Dlakwa, H.D. (2005). *Methodlogy and data collection. In Fajonyomi,* A.A.; & Fajonyomi, M.G. (Eds). Research processes in education and social sciences. Lagos: Goldy O. Publishing Company, 47-68.

Duru, J., Aro, J. & Ebunoluwa, R. O. (2022).The effects of climate change on the livelihood of rural women: a case study of Ilorin South, Nigeria. *Bulletin of the National Research Centre,* 46 (165), 1-15, https://doi.org/10.1186/s42269-022-00834-9

Etikan, I., Musa, S.A. and Alkassim, R.S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.

Gutti, M., Aji, M. & Magaji, G. (2012). Environmental Impact of Natural Resources Exploitation in Nigeria and the Way Forward. *Journal of Applied Technology in Environmental Sanitation*, 2, 95-102.

Ibrahim, A. (2015). Flooding in Northern Nigeria: An Overview of the Environmental Impact and Local Responses. *Journal of Environmental Studies*, 12(3), 99-114.

International Federation of Red Cross and Red Crescent Societies (IFRC). (2018). Emergency Information Dissemination during Natural Disasters: Best Practices and Lessons from Global Experiences.

Jiboye, J. O., Ikporukpo, O. & Olatubara. C. O. (2019). Impact of Environmental Degradation on Livelihoods in the Coastal Areas of South West, Nigeria. *Journal of Aquac Resource Development* 10, 568. doi: 10.4172/2155-9546. 1000568

Koehn, P. H. (2015). Flooding, Displacement, and Development: A Perspective on Nigeria's Experience with Environmental Migration. *Environmental Migration Journal*, 4(2), 45-56.

Kula, E. (2019). *Economies of Natural Resources, the Environment and Policies*, Second Edition, Chapman and Hall London.

Lucas R. J. (2023). Environmental Problems & Impact on the Community. *Study.com*

National Emergency Management Agency (NEMA) Nigeria. (2019). Annual Flood Impact Report.

Ngwu, E. C. (2018). The Role of Media in Disaster Risk Reduction: A Study of Flood-affected Communities in Nigeria. *Journal of Disaster Risk Studies*, 10(1), 1-10.

Obaje, S. G., & Yusuf, Y. (2016). Flooding and Vulnerability of Communities in Nigeria: Examining the Role of Community Radio for Effective Communication. *International Journal of Water Resources Development*, 32(4), 709-724.

Oyeniran, R. A. (2019). The Role of ICT in Disaster Management: Case Study of Nigerian Flood Victims. *African Journal of Emergency Management*, 7(1), 67-83.

Podesta, J (2019). The Climate Crisis, Migration and Refugees. https://www.brookings.edu/programs/global-economy-and-development/

United Nations Office for Disaster Risk Reduction (UNDRR). (2020). Words into Action: Public Awareness and Public Education for Disaster Risk Reduction.

Walker, M. (2021). The Social and Economic Effects of Climate Change in Africa Wison center, Washington D.C, https://www.wilsoncenter.org/person/monique-walker

World Health Organization (WHO). (2015). Communicating Risk in Public Health Emergencies: A WHO Guideline for Emergency Response Frameworks.