

**EFFECTIVENESS OF INDIGENOUS LANGUAGE IN
COMMUNICATING FLOOD PREVENTION MESSAGES IN
AWKA NORTH LOCAL GOVERNMENT AREA, ANAMBRA
STATE**

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Abstract

Flooding remains one of the most recurrent and devastating natural disasters in Nigeria, particularly in Anambra State, where communities in Awka North Local Government Area are highly vulnerable. Despite various campaigns, preventive practices remain weak, raising questions about the effectiveness of communication strategies. This study examined the effectiveness of indigenous language in communicating flood prevention messages in Awka North. Anchored on the Diffusion of Innovations Theory and Cultural Relevance Theory, the study employed a survey design with a sample of 383 residents selected through multistage sampling. Data were collected using a structured questionnaire and analysed with descriptive statistics. Findings revealed

that although residents had received flood prevention messages in Igbo, most of them reported that they rarely encountered such messages, indicating limited exposure. Comprehension levels were high. The finding also revealed that residents are motivated to take preventive action by Igbo messages. The study identifies lack of standard Igbo terms for technical concepts as the major barrier in communicating flood prevention messages in indigenous Language. The study concludes that indigenous language significantly enhances comprehension and motivates behavioural change in flood prevention but remains underutilised in formal communication efforts. It recommends institutionalising Igbo in disaster communication, developing standardised technical terms, prioritising community-based channels, and expanding indigenous language use in mass media.

Keywords: Flood prevention, indigenous language, Igbo, disaster communication, Awka North LGA

Background of the Study

Flooding is one of Nigeria's most destructive natural disasters, repeatedly affecting millions of people across the country. Major floods in 2012 and 2022 displaced over a million people and caused widespread damage (Oguntola, 2022; Maclean, 2022). In 2024 alone, 31 states were impacted, leading to hundreds of deaths, thousands of injuries, and the displacement of more than 1.2 million people (RemoTv, 2025). These recurring disasters highlight the scale of the challenge and the urgent need for effective management strategies.

In Anambra State, riverine and low-lying communities such as Awka North, Anambra East, Anambra West, Ogbaru, and Ayamelum are particularly vulnerable. Floods in these areas destroy homes, livelihoods, and farmland, while also increasing the risk of waterborne diseases and food insecurity (Seid, 2025). Despite warnings from agencies like the Nigerian Meteorological Agency (NIMET), many communities remain unprepared, leaving residents exposed to repeated humanitarian crises.

To reduce the impact of floods, effective risk communication is essential. Agencies like NEMA and SEMA emphasize the importance of engaging communities, using early warning systems, and fostering collaboration among governments, traditional leaders, and local groups (Nakamura, Umeki, & Kato, 2017). Communication strategies must ensure that messages are understood, trusted, and acted upon, as poor communication often leads to panic and higher casualties (Shah et al., 2023; Sauer et al., 2021). In Nigeria's multilingual society, the use of indigenous languages is especially critical for reaching rural populations,

building trust, and encouraging proactive measures. This study therefore focuses on how indigenous language use can improve flood prevention communication in Awka North LGA

Statement of Problem

Flooding remains a recurrent hazard in Awka North Local Government Area of Anambra State, yet despite repeated prevention campaigns carried out by SEMA and NEMA, communities continue to record significant losses. In October 2022, flooding displaced 651,053 persons across six local government areas in Anambra State. Within this figure, Awka North LGA recorded at least 10,345 victims directly impacted by the floods, including the destruction of homes, submergence of farmlands, and displacement of residents from their communities (Vanguard,2022).

One major concern is that these campaigns are often communicated in English or in forms that are not culturally or linguistically aligned with residents, many of whom are more fluent in the Igbo language. This creates a communication gap that limits comprehension and reduces the ability of residents to act on prevention messages.

In addition, limited access to mainstream media and other formal communication channels in rural communities further restricts the reach of such campaigns. As a result, poor preventive practices such as dumping refuse in drainage systems and inadequate preparation for seasonal floods persist. This study, therefore, seeks to investigate whether the use of indigenous language in communicating flood prevention messages can improve comprehension, enhance participation, and ultimately reduce the vulnerability of communities in Awka North.

Objectives of the Study

- i. To assess residents' exposure to flood prevention messages in indigenous language in Awka North LGA.
- ii. To examine residents' comprehension of flood prevention messages delivered in indigenous language in Awka North LGA.
- iii. To determine the influence of indigenous language use on residents' preventive behaviours in Awka North LGA.
- iv. To identify barriers influencing the effectiveness of the indigenous language in disseminating flood prevention messages in Awka North

Research Questions

- i. What is the level of residents' exposure to flood prevention messages communicated in indigenous language in Awka North LGA?
- ii. How well do residents' comprehend flood prevention messages delivered in indigenous language in Awka North LGA?
- iii. To what extent does the use of indigenous language influence residents' preventive behaviours against flooding in Awka North LGA?
- iv. What are the barriers influencing the effectiveness of indigenous language in disseminating flood prevention messages in Awka North

Literature Review

Disaster Risk Communication

Disaster risk communication refers to the timely dissemination of information about potential hazards and preventive measures aimed at reducing vulnerability and strengthening community preparedness (Fathollahzadeh et al., 2024; World Health Organization, 2025). In developing countries, its effectiveness is often constrained by poor infrastructure, low literacy levels, and linguistic diversity. Scholars emphasise that disaster communication goes beyond mere information transmission to ensuring comprehension, cultural relevance, and active community participation (Fathollahzadeh et al., 2024; Ogie, Rho, Clarke & Moore, 2025). Specifically, Ishak and Chowdhury (2024) identify communication as a critical preparedness strategy in flood disasters, enabling communities to anticipate risks and adopt preventive measures such as clearing drainage systems, relocating from flood-prone areas, and complying with early warning advisories. However, Modeyin, Inobemhe, and Udeh (2025) argue that recurring flood devastation persists due to communication gaps, particularly the overreliance on English and mass media channels, which often exclude rural populations; they recommend more inclusive strategies that integrate interpersonal, customary, and traditional media platforms such as town announcers, radio, and television.

Indigenous Language as A Strategy in Communicating Flood Risk Messages

Language plays a crucial role in how communities interpret, trust, and act upon risk information. According to Laakso & Palomäki (2013),

language transcends basic communication; it is entwined with identity, power relations, and social inclusion, becoming a critical component in mitigating disaster risk. Language inclusion in disaster communication is essential, as evidenced by the varying impacts of disasters on linguistic minorities. Individuals who do not speak the primary language may have trouble understanding emergency notifications, evacuation guidelines, and safety procedures, making them more vulnerable during crises (Mokhele and Mvanyashe 2025). Language barriers might increase racial and socioeconomic inequalities and increase the risk of disasters for vulnerable communities. Furthermore, the effectiveness of disaster message dissemination and comprehension is greatly influenced by the language used in public communications, whether through traditional media or social media (Mokhele and Mvanyashe, 2025). This is also true of indigenous language use in communicating flood risk information. Scholars note that most campaigns that rely heavily on communicating in the most intelligible language to the people often fail to reach the intended audience and produce the desired result (Owolabi and Nurueen 2020). As the study by Modeyin et al (2025) captures it the most effective risk messages are those that quite self-consciously address the audience's perspectives and concerns. Similarly, the most effective procedures for formulating risk messages have been those that involve interactions with recipients and elicit recipients' perceptions and needs. Indigenous language not only improves comprehension but also fosters inclusiveness, ownership, and community participation.

Empirical Review

Audu (2024) examined the effectiveness of indigenous language in climate change communication in selected communities of the Federal Capital Territory, Abuja, focusing on whether the use of local languages enhances rural dwellers' understanding of climate change issues. The study covered an estimated population of 141,116 in Jiwa and Barangoni communities and was anchored on participatory communication theory, using Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) for data collection. Findings revealed that communicating climate change issues in English limited local comprehension due to low English literacy levels, as many residents primarily understood Hausa and Gbagyi. The study further observed that technical concepts such as emissions and ozone layer require simplification and translation into indigenous languages for clarity. Consequently, the study concluded that reliance on English undermines effective climate change communication in rural areas and recommended greater use of indigenous languages to improve understanding and engagement.

Owolabi & Nurudeen (2020) did a study on Indigenous Language Media and Communication for Health Purposes in the Digital Age. The study aims to investigate the reason most health information does not get to the intended audiences and produce the desired effect. The study revealed that most of the health information is not communicated in the most intelligible language to the people. Indigenous language media are potential channels through which health information could reach the grassroots, where more than 70 per cent of the nation's population are resident. It is also perceived that health communication could be made to produce more effect in this digital era as more citizen journalists could be raised to communicate in the indigenous language.

A study conducted by Nwammuo and Salawu (2018) on the effectiveness of indigenous language media in disseminating health information to rural women: the case of malaria campaigns via radio in Anambra state, Nigeria. This study therefore, examined the effectiveness of Igbo language in creating awareness about malaria control strategies among women in rural communities of Anambra State, Nigeria. The Health Belief Model (HBM) was used in the study as the theoretical framework of analysis. Survey research method was adopted, whereas purposive sampling technique was employed in selecting 399 respondents from women in ten rural communities of Anambra State. Questionnaire was used as instrument for data collection. The study found, among others that Igbo radio campaign in Sapientia Radio, Onitsha, tagged "kill mosquito, stop Malaria" has really helped in reducing the incidences of malaria attack among women in Anambra state who now adopt preventive strategies against malaria as emphasised in the campaign. The reason for this seems to be the use of indigenous language in creating awareness through the campaign. The study recommends, therefore, that selection of media for campaign messages should be done in relation to the particular characteristics of the area of study if the desired objective is to be met.

Theoretical framework

The study is anchored on the Diffusion of Innovations Theory and Cultural Relevance Theory. The Diffusion of Innovations Theory, developed by Everett Rogers (1962), explains how new ideas or practices spread within a social system through stages of knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003). In this study, the "innovation" refers to flood prevention behaviours, while the communication channel is the use of the indigenous Igbo language; the theory provides a framework for examining whether Igbo-language messages enhance awareness and accelerate the adoption of preventive

practices among Awka North residents. Cultural Relevance Theory, advanced by Gloria Ladson-Billings (1995), emphasises that communication is most effective when embedded in the cultural and linguistic realities of the target audience (Gay, 2018). Applied to disaster communication, the theory suggests that delivering flood prevention messages in Igbo improves comprehension, strengthens cultural identity, and encourages community participation, thereby increasing the likelihood of behavioural change.

Methodology

This study adopted a survey design targeting residents of Awka North LGA, Anambra State, with a projected population of 159,900 according to the National Population Commission and National Bureau of Statistics (2022). A sample size of 383 was determined using Krejcie and Morgan's formula at a 95% confidence level. A multi-stage sampling technique was employed: first, six out of the ten communities in Awka North (Awba Ofemili, Ugbene, Ebenebe, Amansea, Ugbenu, and Mgbakwu) were selected using a table of random numbers; second, two villages were randomly selected from each community, yielding 12 villages (Ezike and Umuosite; Ifite-Ora and Umu-Nokwa; Umuji and Uwani; Egbeagu and Orebe; Umuanেকে and Agueke; Ananwanyi and Umuotulu); and third, proportional sampling was applied to allocate the sample size across the selected villages.

GROUP	Villages	POPULATION	SAMPLE SIZE
Awba Ofemili	Ezike, Umuosite	1814	43
		1089	26
Ugbene	Ifite- Ora, Umu-Nokwa	1066	25
		1024	24
Ebenebe	Umuji, Uwani	1390	33
		1010	24
Amansea	Egbeagu, Orebe	1253	30
		1106	26
Ugbenu	Umuanেকে, Agueke	1128	27
		1092	26
Mgbakwu	Ananwanyi, Umuotulu	2084	49
		2124	50
Total	12Villages	16,180	383

In distributing the questionnaire, the researcher used a convenience Sampling, whereby questionnaire were served only to respondents who

were available at the time and showed a willingness to be sampled when the researcher visited each of the chosen villages. A questionnaire containing 14 questions (open-ended and closed-ended) was used as the instrument for data collection. Data gathered were presented and analyzed using SPSS 19 data analysis software.

The study employed a pretest (pilot study involving 20 respondents) and the Cronbach's alpha method of test of reliability of the instrument. The pretest method will involve distributing copies of the questionnaire to trial groups and retrieving them immediately. An acceptable score of 0.70 is often recommended. If the reliability score is high, it indicates that the survey items have strong internal consistency and are effective in measuring the intended constructs.

Data Presentation and Analysis

Demographic Data

In terms of the gender of the respondents, results from the study indicated that Male respondents constituted the majority (60%) of the sample, showing clear male dominance compared to females (40%). This goes to show that at the time of filling the questionnaires, more men were available and willing to respond to questions. On the age of the respondents, about 120, representing 31% of the entire 383 respondents, between the ages of 30-39, attempted the questionnaire. 110 respondents or 29% were in the ages of 40-49, 80 respondents, about 21% of the entire respondents, were within the ages of 18-29, while 73 respondents or 19% of the entire respondents, were 50 years and above.

Research question One: What is the level of residents' exposure to flood prevention messages communicated in indigenous language in Awka North LGA?

Table 1: Residents' Exposure to Flood Prevention Messages

Variable	Response	Frequency	Percentage %
Have you ever received flood prevention messages in the Igbo language?	Yes	240	63
	No	143	37
How frequently do	Often	26	7
			20

you receive			47
flood prevention	Sometimes	77	26
messages in Igbo language?	Rarely	182	
	Never	98	
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Which of these channels did you mostly receive these messages in Igbo language?		93	24
	Radio	35	9
	Television	140	37
	Community meetings	115	30
	Town criers/village announcers	Nil	Nil
		383	
			100
	Social media		
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Total			

Responses from Table 1 showed that the majority of the respondents 240 representing (63%) have received flood prevention messages in Igbo language. Regrettably majority of the respondents 182, representing 47%) rarely receive such messages in Igbo language. On the channel, they received the message; the majority, 140 (37%), said it's from community meetings.

Research Question Two: How well do residents comprehend flood prevention messages delivered in indigenous language in Awka North LGA?

Table 2: Comprehension of Flood Prevention Messages

Variable	Response	Frequency	Percentage %
How easy is it for you to understand flood prevention messages delivered in Igbo language?	Very easy		
	Easy	157	41
	Difficult		
	Very difficult	142	37
		51	13
		33	9

Compared to messages delivered in English, I understand Igbo language flood messages better.	Strongly agree	160	42
	Agree		
	Disagree	145	38
	Strongly disagree	48	12
		30	8
Do you feel that flood prevention messages in Igbo language explain preventive actions clearly?	Yes	280	73
	No	103	27
	Total	383	100

Responses from Table 2 indicated that 78% of the respondents find it either very easy or easy to comprehend flood prevention messages in Igbo language. Compared to messages delivered in English, 42% strongly agreed that they understand the Igbo language flood messages better. And the majority 73 % affirmed that flood prevention messages in Igbo language explain preventive actions clearly.

Research question Three: To what extent does the use of indigenous language influence residents' preventive behaviours against flooding in Awka North LGA?

Table 3: Influence on Preventive Behaviours

Variable	Response	Frequency	Percentage %
Receiving flood prevention messages in Igbo language motivates me to take preventive action.	Strongly agree		
	Agree	150	39
	Disagree	145	38
	Strongly disagree	55	14
		33	9

I have adopted preventive behaviours, because I understood the messages delivered Igbo language.	Yes	265	69
	No	118	31
Compared to English messages, Igbo language flood messages influence my actions strongly	Strongly agree		
	Agree	155	41
	Disagree		
	Strongly disagree	135	35
		55	14
		38	10
Total		383	100

Responses from Table 3 showed that the majority 77% of respondents, either strongly agreed or agreed that receiving flood prevention messages in Igbo language motivates them to take preventive action. 69% attested that they have adopted preventive behaviours, because they understood the messages delivered in Igbo language, while 76% either strongly agreed or agreed that compared to English messages, the Igbo language flood messages influence their actions more strongly.

Research Question Four: To identify barriers influencing the effectiveness of indigenous language in disseminating flood prevention messages in Awka North

Table 4: Barriers influencing the effectiveness of Indigenous Language use

Variable	Response	Frequency	Percentage %
What challenges do you think can influence the use	Lack of standard Igbo terms for technical words	127	33

of indigenous language in flood prevention communication?	Limited use of indigenous language in media	108	28
	Preference for English messages	65	17
	Poor translation of messages	83	22
Do you think flood prevention campaigns should rely more on indigenous language for a better impact?	Strongly agree		
	Agree	166	44
	Disagree	149	39
	Strongly disagree	40	10
		28	7
In your opinion, what is the best way to improve the use of indigenous language in flood prevention campaigns?	More radio/TV broadcasts in Igbo. Training communicators in indigenous language use.	85	22
	Community meetings in local language.	60	16
	Collaboration with traditional leaders	140	37
		98	25
	Total	383	100

.Responses from Table 4 showed that Lack of standard Igbo terms for technical words 127(33%) followed by Limited use of indigenous language in media,108 (28%), are some of the challenges of communicating flood prevention messages in indigenous language. Similarly, a majority of respondents (82.3%) either strongly agreed or agreed that flood prevention campaigns should rely more on indigenous language for better impact, while the most preferred strategy for improving indigenous language use in flood prevention campaigns was

community meetings in local language (36.6%), followed by collaboration with traditional leaders (25.6%).

Discussion of Findings

The first research question examined residents' exposure to flood prevention messages communicated in the indigenous Igbo language in Awka North LGA. Findings from Table 1 show that although a majority of respondents had received such messages at some point, exposure remains irregular, with nearly half indicating they rarely encounter them. Community meetings and town criers emerged as the primary channels of dissemination, while mass media platforms such as radio and television played a lesser role. This suggests that although indigenous language communication is present, its reach is limited due to inconsistent use across diverse media platforms. The findings align with previous studies (Ogie, Rho, Clarke, & Moore, 2025; Modeyin, Inobemhe, & Udeh, 2025), which observe that rural communities rely more on interpersonal and traditional channels than on mass media for disaster information, and with Mokhele and Mvanyashe (2025), who note that underutilisation of minority languages in mainstream communication restricts message access. Theoretically, the results support the propositions of Everett Rogers' Diffusion of Innovations Theory, which highlights the importance of communication channels in shaping awareness and adoption, as well as Gloria Ladson-Billings' Cultural Relevance Theory, which emphasises culturally embedded communication; thus, while exposure is modest, the reliance on culturally rooted Igbo-based community platforms demonstrates strong potential for improving disaster preparedness.

The second research question examined residents' comprehension of flood prevention messages delivered in the indigenous Igbo language in Awka North LGA. Findings from Table 2 indicate high comprehension levels, with 41% of respondents describing the messages as very easy to understand and 37% as easy, while only 22% reported difficulty. Additionally, 73% affirmed that Igbo-language messages clearly explained preventive actions, and nearly 80% agreed that they understood these messages better than those delivered in English. These results demonstrate that indigenous language communication significantly enhances clarity and accessibility. The findings support earlier studies such as Motsumi and Nemaconde (2025), who argue that indigenous language and knowledge systems strengthen understanding and trust in disaster communication, thereby improving responsiveness to warnings, while Mokhele and Mvanyashe (2025) caution that reliance on English and technical jargon often alienates rural populations. Theoretically, the

results reinforce Gloria Ladson-Billings' Cultural Relevance Theory, which posits that communication is most effective when aligned with the audience's cultural and linguistic context; in this study, the use of Igbo not only improves comprehension but also enhances persuasion through cultural resonance.

The purpose of the third research question was to investigate the extent the use of indigenous language influence residents' preventive behaviours against flooding in Awka North LGA. The findings in Table 3 showed that residents in Awka North were strongly influenced to take preventive action when flood prevention messages were delivered in Igbo. About 77% of respondents agreed or strongly agreed that such messages motivated them to adopt preventive behaviours, and 69% specifically indicated they had already engaged in practices like clearing drainage or avoiding flood-prone areas because they understood the messages. Furthermore, 75.7% agreed that Igbo-language messages influenced their actions more strongly than English messages. This clearly demonstrates the behavioural impact of indigenous language communication in disaster preparedness. And according to the findings of Ogie et al. (2025) localised, culturally grounded communication channels were more effective in driving behavioural change among flood-prone populations than official campaigns delivered in foreign languages. Similarly, Nwammuo and Salawu (2018) observed that indigenous languages enhance not only comprehension but also the likelihood of translating knowledge into action, since messages resonate with local values and lived realities. Conversely, reliance on English in disaster communication has often been associated with poor adoption of preventive measures among rural populations (Mokhele and Mvanyashe, 2025).

The fourth research question examined barriers affecting the effectiveness of indigenous language in disseminating flood prevention messages in Awka North LGA. Findings revealed that the major challenge was the lack of standard Igbo terms for technical concepts (33%), followed by limited use of indigenous language in the media (28%), poor translation of messages (22%), and preference for English messages (17%). These results indicate that although residents favour Igbo-language communication, practical constraints such as terminology gaps, inadequate institutional support, and translation inconsistencies undermine its effectiveness. This aligns with Audu (2024), who observed that technical terms in climate change communication must be simplified in indigenous languages to enhance local understanding. Notably, 82.3% of respondents agreed that campaigns should rely more on indigenous language for greater impact, reflecting strong community

support for localised messaging, consistent with findings by Motsumi and NemaKonde (2025) that culturally grounded communication improves disaster response in developing contexts. Furthermore, respondents identified community meetings in local language (36.6%) and collaboration with traditional leaders (25.6%) as the most effective improvement strategies, reinforcing Ogie et al. (2025)'s argument that trusted interpersonal networks and traditional authority structures are central to credible and participatory disaster preparedness communication.

The study concludes that indigenous language plays a vital role in flood prevention communication in Awka North LGA, as residents showed higher comprehension and stronger motivation to adopt preventive behaviours when messages were delivered in Igbo, despite irregular exposure. Although many residents have received Igbo-language messages, their limited frequency and inconsistent use across media platforms reduce overall impact. Nonetheless, challenges such as the lack of standard Igbo technical terms, limited media integration, poor translation, and preference for English highlight the need for deliberate institutional efforts to strengthen indigenous language use in disaster communication campaigns.

Recommendations

The study recommends the following:

1. Government agencies and NGOs should mandate the use of Igbo language in all flood prevention campaigns to ensure clear communication with rural communities.
2. Linguists, educators, and disaster experts should develop standardized Igbo terms for flood-related concepts to ensure accurate and consistent message delivery.
3. Flood prevention campaigns should focus on community meetings, town criers, and traditional leaders as trusted channels for effective message dissemination.
4. Media houses should broadcast more disaster awareness programmes in Igbo to increase exposure and strengthen preventive actions among residents.

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