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Sources of Information on National Issues among Border Communities in Yobe State, Nigeria

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Abstract Information has been termed as power in the 21st century. Every century has its uniqueness, and the uniqueness of the 21st century is the availability, ease of access, proliferation, and strength of information. This study examines the sources of information among border communities in Yobe State. The study attempts to find out how people in border communities in Yobe State access information and the specific sources of information they have access to, including non-mass mediated channels and platforms. It also strives to ascertain if people in border communities in Yobe State get information on national issues and, if so, how frequently do they get information on national issues, as well as the level of influence of international broadcast organizations on the perceptions of people in border communities in Yobe State. The study adopts source credibility and source complementarity theories and employs multiple-stage sampling, in which cluster sampling, raffle method of simple random sampling, and convenient sampling were used. Based on the findings, many of the respondents in the selected local governments stated that they accessed information through mediums like radios, televisions, computers, or mobile devices but did not have access to information in their respective communities. The data shows that 48.6% of the respondents in the selected local governments in Yobe State have access to specific media through which they get information. Further, the findings show that Sahel FM is a major source of information in the state as attested by 55.7% of the respondents. The study concludes that there is a need for people in the state to have substantial access to information through local media on issues affecting them in the rural areas rather than depending on foreign stations for information.

Keywords: border communities; national issues; source credibility; source complementarity; Yobe State.

1. Introduction

In the 21st century, information is considered power. Every century has its uniqueness, and the uniqueness of the 21st century is the availability, ease of access, proliferation, and strength of information. The obvious advancement in technology and civilization encouraged the real-time spread of information through many diverse channels. These channels include mass media, information and communication technologies (ICTs), and traditional communication systems. The compound of these developments made the 21st century

the “Information Age” (Faleye, 2019). These developments have also lured the attention of private and public stakeholders to the information and communication industry as an investment potential (Olomu et al., 2019).

From the public standpoint, various governments, ministries, departments, and agencies have invested huge resources in communicating information to the public. Private stakeholders have also invested massive resources in providing viable channels for conveying information. (Abdullahi & Gawi, 2021). Arguably, these gestures (both public and private) have led to commendable developments in the media industry. For instance, it is glaring how information is now overloaded on the media we are exposed to daily, which cuts across radios, televisions, newspapers, magazines, pamphlets, billboards, post bills, mobile phones, computers, and micro-devices (Oladehinde et al., 2018).

It must be noted that the target audience has benefited from the availability of information, especially in urban areas. Unfortunately, the rural areas remain detrimental, disadvantaged, and backward because of the deliberate sideline by the information channels. According to Omogor (2013), modern media channels are concentrated in the urban areas in Nigeria. This concentration has created a huge gap between the two distinct areas. The gap is visible in the areas of awareness of citizens’ social and economic rights, such as infrastructure and welfare, and civic rights, such as voter education, election, and national discourse for decision-making and policy promulgation (Masik et al., 2021).

The participation of the people in the above-outlined responsibilities in the urban area is far better than in the rural areas. This is a result of the gap in access to information. According to Nosiri and Ohazurike (2016), the media gap in North-East Nigeria is wider than any other region in the entire country as a result of media bias in the urban and rural areas. The rural areas are classified into two: border rural communities and non-border rural communities. The border rural areas suffer from unique backwardness due to neglect from both public and private media outlets (Egbe & Okoi, 2018). Among the six states in the North-East geo-political zone, Yobe State has the secondmost border rural communities apart from Borno State (Hoffmann & Melly, 2015).

Proper information enables people to go from being recipients of external development interventions to generators of their own development. According to Emeh et al. (2012), although development is sometimes used to indicate the overall contribution of information to the development of society or sometimes to highlight media as agent of such development (media products), which is based on a planned approach or process of information communication aimed at achieving developmental initiatives in such communities. As such,

the lack of accessibility of information among people in the state serves as a major impediment to community engagement. The knowledge gap in terms of access to information prevents the people of the state from community engagement, which could lead to the qualitative improvement of these border communities (Anjolaoluwa & Adeniyi, 2019).

In the 21st century, society needs information to champion its course of development. Sources of information are sacrosanct to national issues among border communities in the state. However, it is evidenced from existing literature that many of the border communities lack adequate sources of information that could lead to the quantitative transformation of such communities. The advancement in technology has ushered societies into a high level of information accessibility, and these societies must learn to adopt such new and innovative ICT frameworks to access information, especially on national issues. The availability of local news channels in such areas is imperative because it can boost societal access to information on national issues.

Yobe State in North-East Nigeria is among the six states bordering the Niger Republic. The state occupies an area of approximately 27,473.2 square kilometers and has a population of more than 2.5 million (2006 census). Out of the 17 local government areas (LGAs) in Yobe, four, namely, Geidam, Yunusari, Yusufari, and Machina, directly share a border with the Niger Republic.

This study is inspired by the fact that border communities are neglected by the government and private media investors despite serving as a bridging ground to other countries. Blum (2014) posits that the border community's active participation in the development and discourse of national issues is often neglected. However, these communities are often an arena for cross-border crime and represent a dynamic place of historically fostered cultural and socio-economic exchange (Gunawan & Ratmono, 2018).

Globally, borderlands are always alive with the consistent movement of people, goods, and services. Because of the existence of such communities, regional integration, harmony, and bilateral talks are often brought to the front burner. National issues, simply put, constitute the pressing problems that dominate public discourse and perhaps require urgent government intervention (Chen & Lu, 2020). National issues ought to reach all citizens irrespective of whether they belong to border communities or urban areas because these issues center on their welfare and well-being as citizens of the country. The media plays a pivotal role in ensuring people get information. The primary role of media is to inform people. Almost everybody gets his or her information about the world, national and local affairs, from the mass media. This fact gives the media an important function in society (Uchenna, 2019).

According to Ojomo and Amos (2021), the media serves as a vehicle through which society makes progress in terms of sustenance policies and national issues, such as health, security, agriculture, politics, economy, and national development. When it comes to news and information outlets or sources, Nigeria has them in all formats and in good numbers. Despite the availability, accessibility, and affordability, there are still lapses in rural areas (Kolawole et al., 2018).

1.1. Theoretical framework

A theoretical framework sets the basis for research and gives it some sort of direction. For this study, two theories are selected, which provide conceptual explanations and representations of key attributes, statements, and phrases regarding the sources of information among border communities in Yobe State. From the literature reviewed, two theories are considered relevant and set the basis for discussions. Each of these theories addresses a distinct part of the study. The theories are Source Credibility Theory and Source Complementarity Theory.

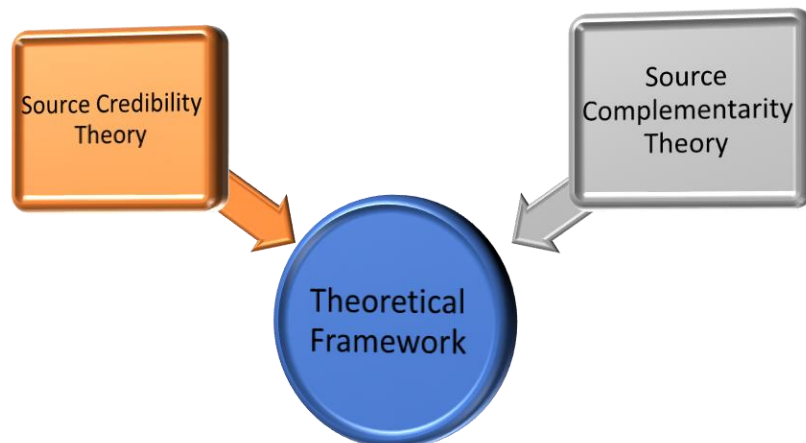


Figure 1. Source Credibility Theory and Source Complementarity Theory

Source Credibility Theory was propounded by Hovland, Janis, and Kanis in 1963 (see Figure 1). This theory, which is very much relevant to this study, posits that people or receivers of information are more likely to be persuaded when the source presents itself as credible. Credibility has been a subject of extensive research in the earliest years of communication. It is a measure of how “believable” a message is. Researchers have categorized the key components of credibility to include source credibility, message credibility, and medium (channel) credibility.

According to [Anjolaoluwa and Adeniyi \(2019\)](#), there are two dimensions to source credibility: expertise and trustworthiness. While asserting further, [Sokey et al. \(2018\)](#) observed that expertise describes the extent to which a source is seen as knowledgeable and qualified to provide the accurate information needed, while trustworthiness describes, in a nutshell, the rapport between the audience (receiver) and the source of information. Source credibility theory is an established theory that explains how communication's persuasiveness is affected by the perceived credibility of the source of the communication ([Sokey et al., 2018](#)).

Therefore, to achieve effective communication, the right source must be selected. The theory recognizes the fact that every citizen is born free and has the right to generate, acquire, or disseminate information; it, however, sensitizes every information consumer to the fact that sources of information must be competent as well as credible. The theory emphasizes that one of the variables that a communication source has is the choice of source. The credibility of the source, regardless of its format, is heavily influenced by the perceived credibility of the source of that communication.

Source Complementarity Theory is also called channel complementarity theory. This theory was proposed by Ruppel and Rains in 2012. They posit that channel complementarity theory was constructed in response to arguments that new(er) communication media and Internet-based technologies are displacing old(er) media technologies. The theory is founded on ideas from selective exposure theory ([Owolabi & O'neill, 2014](#)), uses and gratifications theory, and dual-process theories of message processing. It assumes that source use results from an enduring involvement in the message content. The central doctrinal kernel of the theory is that individuals will use any available source that satisfies their need for content.

This study adopts the Source Credibility Theory to explain the specific sources of information among the people of the border communities. This theory is in tune with one of the major objectives of the study. Source credibility theory posits that people or receivers of information are more likely to be persuaded when the source presents itself as credible. This means that the specific sources, which are preferred by the people, are most likely to have presented themselves as credible. This could be the international media stations that are serving as an alternative to the inability of the local media to reach the border communities.

Source Complementarity Theory is adopted because it explains the situation the audience often finds themselves in whenever they are in search of information, especially when the sources of information are numerous and require scrutiny or are too scarce to get. This is coupled with the fact that the people in the target area (Yobe in North-East Nigeria) are very

inquisitive and often look for information about national issues (Pennaz et al., 2018). Thus, their desire to get information leads them to explore various possible sources in their localities. This is based on the proposition of the theory that individuals who are motivated to acquire information about a topic or issue will use all sources that are perceived to fulfill that information need (Edet & Joseph, 2017). This notion made the theory relevant in setting the theoretical foundation for the study in a bid to examine the sources of information for the people living in the border communities and looking for news on national issues since national issues are concerns of every citizen (Ladan, 2019).

1.2. Problem statement

This study aims to examine specific sources of information among the communities in border areas of Yobe State. The findings of Okunade and Oni (2021) revealed that access to media among people in various communities is an issue that has generated a lot of interest among researchers. The deliberate sideline of the rural areas (border communities in this case) by the media has hampered their ability to access information, especially on national issues, which has led to the search for an alternative. The alternatives are the media of neighboring countries. Apart from the stations of neighboring countries, international broadcasting organizations are a viable alternative. These shortwave radio stations give the people opportunities to listen to or watch programs and news; however, they do not cover local news content as such. Further, a lot of people seem to attach more credibility to such international stations than local and national stations, which in essence attract the interest of this research. A review of related literature has also provided empirical support to this study. Familusi and Owoeye (2014) observed that in Nigeria, there is no comprehensive document on the information needs of rural inhabitants.

Similarly, Islam and Ahmed (2012) observed that because of a lack of information from local sources, people in such communities are not largely updated on emerging national and international issues like politics, health, etc., thereby keeping the communities least informed on diseases, such as sexually transmitted diseases like infections, emerging health issues, and birth control and similar issues. To bridge this gap as established in the literature, this study examines the specific sources of information among the communities in border areas of Yobe State.

Yobe State has Yobe Television (YTV) and NTA in Gashua, but NTA is not operational, while YTV cannot be accessed in this area. This factor has compelled many people living in these communities to largely depend on either Nigerian or international news sources. As a

result of this large dependence, people attach more credibility to these international or foreign stations. This study intends to analyze this trend (Aluede, 2017).

1.3. Research questions

This study was guided by the following research questions as the basic tools of scientific inquiry:

1. How do people in border communities in Yobe State access information?
2. What are the specific sources of information that border communities in Yobe State have, including non-mass mediated channels and platforms?
3. Do people in border communities in Yobe State get information on national issues?
4. How frequently do people in border communities in Yobe State get information on national issues?
5. What is the level of influence of international broadcast organizations on the perceptions of people in border communities in Yobe State?

2. Methods

This study adopts a quantitative approach in the form of a survey method using a questionnaire (Mohammed et al., 2019). Four major local governments bordering the Niger Republic in Yobe State made up the population for this study. The local governments are Geidam, Machina, Yunusari, and Yusufari. The consideration for choosing these four local governments was their proximity to and sharing of the border with a state in the Niger Republic “Diffa.” In each of these local governments, only the communities bordering the country were selected. The breakdown of these communities bordering the country is shown in Table 1.

Table 1. List of LGAs Bordering the Niger Republic Broken Down into Communities

S/NO	LGA	Border Communities
1.	Geidam	Garin-Gada Gonikraziyi Dunari
2.	Machina	Falmaram Dole Bogo Damai
3.	Yusufari	Tulotulo

S/NO	LGA	Border Communities
		Blamade
		Kuwaska and
		Tura
4.	Yunusari	Balari
		Gremadi
		Garin-Gawo

Table 2. List of LGAs Bordering the Niger Republic with Their Population Base on the 2006 Census and 2021 Projection

S/N	LGA	Population (2006)	Projection 2021
1.	Geidam	155,740	221,000
2.	Machina	60,994	86,000
3.	Yusufari	110,739	157,100
4.	Yunusari	125,940	178,700
	Total	453,413	642,800

Table 2 is a comprehensive list of the local government areas bordering the Niger Republic with their population based on the 2006 census and 2021 projection. The table served as a rationale for selecting the sample size for the study. A multistage cluster sampling technique was adopted for the survey. First, cluster sampling was used to group the LGAs into four clusters; this is based on the already existing condition of having a border with Niger. Second, cluster sampling was used to group the LGAs into 14 communities; this is a result of the communities directly sharing a border with the Niger Republic. In the third stage, one community was selected using the raffle method of simple random sampling from each of the four local governments, based on the fact that each community represents each local government. In the fourth stage, convenient sampling was used to arrive at individual respondents for the survey.

Therefore, a sample of 400 respondents was drawn using Taro Yamane (Yamane, 1973). The formula of Taro Yamane is presented as follows:

$$n = \frac{N}{1+N(e)^2} \quad (1)$$

$n = \text{samplesizerequired}$

$N = \text{numberofpeopleinthepopulation}$

$e = \text{allowableerror (0.05)}$

Substitute numbers in the formula:

$$n = \frac{11,106}{1+11,106(0.05)^2}$$

$$n = \frac{11,106}{1+11,106(0.0025)}$$

$$n = \frac{11,106}{11,107(0.0025)}$$

$$n = \frac{43,677}{27.8}$$

$$n = 399.9$$

$$n = 400 \approx$$

After calculating the sample size by substituting the numbers into the Yamane formula, the number of samples is calculated to be 399.9. To obtain reliable data, the researchers have rounded up the sample number to a sample size of 400. The sample size of this study, therefore, is 400. For the quantitative method, 400 respondents are considered as shown in Table 3.

Table 3. Sample Size for the Study

Selected Communities	The Population of the Selected Communities	Sample Proportion	Sample Size
Dunari	1,484	$\frac{1,484}{11,106 \times 400}$	53
Falmaram	3,380	$\frac{3,380}{11,106 \times 400}$	122
Tulutulu	1,280	$\frac{1,280}{11,106 \times 400}$	46
Garin-Gawo	4,962	$\frac{4,962}{11,106 \times 400}$	179
Total	11,106		400

3. Results and discussion

3.1. Conceptualizing access to information in rural communities

Access to information has often been identified as an important instrument for keeping citizens abreast of current happenings in their country. It will also enhance their participation in the policies and programs of the government, which are geared toward ensuring accelerated development. [Emeh et al. \(2012\)](#) observed that in Nigeria, the philosophy of people's participation in rural community development is increasingly gaining acceptance as an important instrument for mobilizing resources and organizing the rural populace to have

cogent interests in providing for their well-being. Governments at various strata, such as the federal, state, and local governments, have come to terms with the fact that there is an inherent imperative in “the traditional democratic theory,” which advocates the rural populace’s active participation in the decision-making and implementation of policies that affect and shape their lives. Given this recognition of the impetus of people’s participation, successive governments’ proposals for rural community development contain various forms of statements and commitments aimed at maximizing people’s participation in ensuring their general well-being through the provision of more channels of accessing information.

Harande (2009) stated that access to information and advice is a key resource for local people in maintaining active and independent lives. He argued that access to information is also critical to letting people know their entitlements to welfare benefits and sources of support to overcome social exclusion. Harande (2009) opined that the diverse nature of rural communities indicates that their information needs are many and multidimensional. This informed the decision to determine the totality of their information needs. In Nigeria, there is no comprehensive document on the information needs of rural inhabitants.

Information is needed by rural inhabitants in almost all human endeavors. Development and transformation can only be possible, effective, and relevant when the information needs of the rural dwellers are met positively. All the above-outlined information needs of the rural people cannot be fed without the provision of vibrant channels through which they can access such information. This is because, in the words of Harande (2009), the lack of information is a prevalent and pressing issue among rural communities, which has resulted in poor living conditions, illiteracy, and poverty.

In another empirical study, Gidado & Haruna (2007) examined farmers’ access to ICTs in the Bauchi Local Government Area of Bauchi State, Nigeria. They divided ICTs into two categories: conventional (radio/television) and contemporary or modern (computer/Internet and GSM). Results showed that radio was widely accessible to the people, followed by television, GSM, and computer/Internet. Their Chi-square analysis revealed that the age, background, and educational level of the respondents were significant in terms of their access to modern ICTs. The Kruskal-Wallis rank test on the reception of ICT services was not significant because, on average, at least the service of one of the categories of ICTs was received by the respondents in all the villages studied. The Mann-Whitney rank test on the problems confronting the respondents was significant due to access to information. The researchers recommended that widespread education on the use of modern ICTs, especially computers or the Internet, and the intensification of the use of existing conventional ICTs,

particularly the radio, will bring about a positive change in ICT access and reception in the study area ([Gidado & Haruna, 2007](#)).

Moreover, in rural areas of Africa, radios, televisions, and telephones have remained the most frequently accessed ICTs. They are used to relay information to most people in rural areas. As pointed out by [Aina \(2006\)](#), several years of research reveal that market information is the news most sought by farmers; when they are better informed, they are most able to sell their produce for higher profits. Further, in many developing countries, the initiatives of adopting ICTs in agricultural and rural development are receiving a boost. For instance, in Uganda, bold developmental steps have been taken by the government, development agencies, and non-governmental organizations.

An assessment of various ICTs currently in use to disseminate information to rural communities in sub-Saharan Africa shows that ICTs are yet to make a meaningful impact on the provision of extension services. For example, the ICTs used in providing extension information to rural communities in Kenya are mostly radio and television, while in South Africa, a relatively more advanced country, an integrated approach of telecenters, or multipurpose community centers and citizens post office, is being used. Like in the case of Kenya, Nigeria's main ICT models in use for providing extension information to farmers are radio and television.

[Kamba \(2009\)](#) stated that the provision of information services in Africa is limited and spread over a wide area, and access to various information services has become more difficult; the principal victims of these developments are rural people who do not have any means of becoming literate due to them being too illiterate, too young, too old, too poor, or too ill because of their economic and information poverty. He, therefore, highlighted the value and usefulness of information services in rural community development and the need for them to be managed effectively. His study hypothesizes that promoting the role of information through the establishment of an innovative community information center will strengthen and empower the rural people to be among global players in the knowledge-based economy, and it will provide opportunities for the development of the rural community in general. This entails that the development of any rural community is a positive indicator for the development of a nation.

Access to information by women in some communities in Nigeria is affected by several drawbacks, majorly because of government neglect of women in rural communities where information services are not well coordinated. It is agreed that information providers and experts need to pay attention to the information needs of various groups and the

communication process among each group of the user community. This is especially true for women in such communities, where a lack of local information content will eventually compel them to depend more on international news content, which in essence lacks the flavor and the ingredients of local content.

3.2. Empirical review

[Islam and Ahmed \(2012\)](#) investigated the information needs and the information-seeking behavior of rural, uneducated women and their families in three villages in Botswana. They found that most information needs are health-related, such as information regarding certain diseases, how they are contracted, and how they are treated. Participants also expressed a need for information relating to job opportunities and training, agriculture, family violence, and basic information needs for the family, as well as financial information such as government-aided funds. Most participants turn to medical practitioners, such as village nurses and traditional doctors, for their needs and depend upon their prior experience. Women utilize informal networks, such as information from friends, neighbors, and relatives, for what they believe to be reliable information ([Abiodun et al., 2019](#)).

[Aluede \(2017\)](#) analyzed the information-seeking behavior of rural dwellers in West Bengal, India. She investigated the principal areas of information requirements and the sources of information used. The study found that rural people need information about the specific needs of their occupation and general information for their day-to-day survival, like various government programs for rural development, healthcare, sanitation, housing, transport facilities, employment opportunities, self-employment schemes, legal aid, banking rules and regulations, land reform, tax laws, civil and political rights, etc.

[Mosel et al. \(2021\)](#) conducted a study on users and nonusers of information in rural areas in India. In their study, they identified the information needs of the rural communities. The needs identified included income generation, community leadership, community health, literacy support, educational opportunities, employment, bank loans, government policies, transportation, communication, sanitation, and environmental issues like pollution, climatic change, disasters, etc. ([Gunawan & Ratmono, 2018](#)).

[Edet and Joseph \(2017\)](#) investigated the extent to which media mix relates to the utilization of development information in the rural communities of the South-South zone, Nigeria. The study adopted the descriptive survey design. The population comprised all adult male and female rural dwellers from three out of the six states in the zone (Cross River, Akwa Ibom, and the Rivers States). The result showed that media mix had significant joint

contributions to the utilization of development information (Foyou et al., 2018). In addition, the result also showed that the alternate use of local media and face-to-face contact, the alternate use of mass media and face-to-face contact, and the alternate use of local media, mass media, and face-to-face contact had a significant positive influence on respondents' utilization of development information, whereas the use of any of the media of communication alone without supplementing it with other media had a negative impact (Chinwokwu & Michael, 2019).

3.3. Status of access to information

Table 4 examines the status of access to information in the selected LGAs of Yobe State. Based on the findings, it was discovered that 47.3% (n=186) of the respondents owned a medium like radios, televisions, computers, or mobile devices, while 42.5% (n=167) did not own such a medium, and 10.2% (n=40) were undecided. Similarly, those respondents who have access to information in their communities constituted 39.2% (n=154), while 53.7% (n=211) did not have access to information in their community, and 7.1% (n=28) were undecided. Additionally, when asked how the respondents access information in their communities, 31.3% (n=123) said they accessed information through traditional means, such as town criers, folk songs, folk tales, and talking drums, while 64.9% (n=255) disagreed, and 3.8% (n=15) were undecided.

Further, 67.2% (n=264) said they accessed information in their communities through face-to-face interaction with family, friends, and relatives, while 28.2% (n=111) did not access information through these means, and 4.6% (n=18) were undecided. 34.9% (n = 137) stated that they accessed information through conventional media, such as radios, televisions, newspapers, and magazines, while 63.3% (n=249) did not, and 1.8% (n=7) were undecided. The respondents who accessed information through modern media, such as social media, the Internet, and other ICT devices, accounted for 32.1% (n=126), while those that did not constituted 65.4% (n=257), and 2.5% (n=10) were undecided.

Table 4. Status of Access to Information

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
Do you own a medium, such as radios, televisions, computers, or mobile devices?	186	167	40	393	47.3	42.5	10.2
Do you have access to information in your community?	154	211	28	393	39.2	53.7	7.1

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
How do you access information in your community?							
a) Through traditional means, such as town criers, folk songs, folk tales, talking drums, etc.	123	255	15	393	31.3	64.9	3.8
b) Through face-to-face interaction with family, friends, relatives, etc.	264	111	18	393	67.2	28.2	4.6
c) Through conventional media, such as radios, televisions, newspapers, magazines, etc.	137	249	7	393	34.9	63.3	1.8
d) Through modern media, such as social media, the Internet, and other ICT devices	126	257	10	393	32.1	65.4	2.5
e) Others	-	-	-	-	-	-	100

Source: Fieldwork (2021)

Based on the findings, the majority of the respondents (47.3%) in the selected local governments do have their own mediums like radios, televisions, computers, or mobile devices. Further, 39.2% of the respondents stated that they have access to information in their communities, and 67.2% of the respondents have access to information in their communities through face-to-face interaction with family, friends, and relatives. This means that access to information by the respondents in the selected local governments in Yobe State is high.

Corroborating the findings of this study, Okunna (1992) found that almost all the women in the selected local governments owned radio sets, and the few who did not own had access to the medium. Some women owned television sets, while some did not but had access to the medium. However, some women neither owned nor had access to televisions. The result shows that many women indicated that they owned or had access to television sets.

Table 5. Types of Information Sought and Information Needs Satisfaction

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
Which type of information do you seek?							
a. Political	177	196	20	393	45.0	49.9	5.1
b. Social	198	171	24	393	50.4	43.5	6.1
c. Economic	188	202	3	393	47.8	51.4	0.8
d. Religious	215	173	5	393	54.7	44.0	1.3
e. Others	-	-	-	-	-	-	-
Do you get information that satisfies your needs?							
	174	192	27	393	44.3	48.8	6.9

Source: Fieldwork (2021)

Table 5 presents the types of information sought by the respondents and their information needs satisfaction. Based on the findings, 45.0% (n=177) of the respondents sought political information, while 49.9% (n=196) did not, and 5.1% (n=20) were undecided. Respondents seeking social information constituted 50.4% (n=198), while 43.5% (n=171) did not, and 6.1% (n=24) were undecided. Respondents seeking economic information accounted for 47.8% (n=188), while 51.4% (n=202) did not, and 0.8% (n=3) were undecided. Respondents who sought religious information constituted 54.7% (n=215), while 44.0% (n=173) did not, and 1.3% (n=5) were undecided. In addition, 44.3% (n=174) of the respondents stated that they received information that satisfied their needs, while 48.8% (n=192) did not, and 6.9% (n=27) were undecided.

It is evident from the findings that religious information (54.7%) is significantly high in the selected local governments in the state, followed by social information, with 50.4%. Further, 48.8% of the respondents stated that such information did not satisfy their needs. This means the respondents often sought religious information, and such information did not satisfy their needs as shown in Table 5.

Table 6. Specific Sources of Information

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
Do you have specific media where you get the information you seek?	191	187	15	393	48.6	47.6	3.8
State the Station							

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
a) YBC Radio	207	173	13	393	52.7	44.0	3.3
b) Sahel FM	219	167	7	393	55.7	42.5	1.8
c) Sunshine Radio	177	185	31	393	45.0	47.1	7.9
d) NTA Damaturu	183	196	14	393	46.6	49.9	3.6
e) YTV Damaturu	164	198	31	393	41.7	50.4	7.9
How does the station operate?							
a. Locally	112	281	-	393	28.5	71.5	0
b. Nationally	279	92	22	393	70.10	23.4	5.6
c. Internationally	160	193	40	393	40.7	49.1	10.2

Source: Fieldwork (2021)

Table 6 examines the specific sources of information in the selected local governments in Yobe State. The results show that 48.6% (n=191) of the respondents have specific media from which they sought information, while 47.6% (n=187) did not, and 3.8% (n=15) were undecided. The following stations were chosen by the respondents as the stations they sought information from. 52.7% (n=207) of the respondents sought information from YBC Radio, while 44.0% (n=173) did not, and 3.3% (n=13) were undecided. A total of 55.7% (n=219) respondents selected Sahel FM, while 42.5% (n=167) did not, and 1.8% (n=7) were undecided. 45.0% (n=177) chose Sunshine Radio, while 47.1% (n=185) did not, and 7.9% (n=31) were undecided. 46.6% (n=183) identified NTA Damaturu as their medium of choice, while 49.9% (n=196) did not, and 3.6% (n=14) were undecided. A total of 41.7% (n=164) respondents sought information from YTV Damaturu, while 50.4% (n=198) did not, and 7.9% (n=31) were undecided.

With regard to how the stations operate, 28.5% (n=112) of the respondents stated that the stations operated locally, while 71.5% (n=281) disagreed, and 0% (n=0) were undecided. 70.10% (n=279) of the respondents agreed that the stations operated nationally, while 23.4% (n=92) disagreed, and 5.6% (n=22) were undecided. 40.7% (n=160) said the stations operated internationally, while 49.1% (n=193) disagreed, and 10.2% (n=40) were undecided. The data shows that 48.6% of the respondents in the selected local governments in Yobe State have specific media from which they get information. The findings show that Sahel FM is a major source of information in the state as attested by 55.7% of the respondents, and most of the identified stations operate nationally as shown in Table 6.

Corroborating the findings of this study, [Islam and Ahmed \(2012\)](#) investigated the information needs of a small ethnic minority community in Thailand. They identified the sources of information used in the community and found that television was the most important source of information, followed by acquired experience, friends and family, newspapers, and radio.

Table 7. Access to Information on National Issues

Variables	Yes	No	Und.	Total	Percentage %		
					Yes	No	Undecided
Do you access information on national issues?	209	175	9	393	53.2	44.5	2.3
Do you have access to information in your community?	189	198	6	393	48.1	50.4	1.5
Which media provide more information on national issues?							
a. Community media	182	191	20	393	46.3	48.6	5.1
b. Traditional sources	146	231	16	393	37.1	58.8	4.1
c. National media	201	183	9	393	51.1	46.6	2.3
d. International media	173	210	10	393	44.0	53.4	2.5

Source: Fieldwork (2021)

Table 7 presents access to information on national issues by the respondents. Based on the findings, 53.2% (n=209) of the respondents stated that they have access to information on national issues, while 44.5% (n=175) disagreed, and 2.3% (n=9) were undecided. Regarding access to information in their communities, 46.3% (n=182) stated that they have access to information through community media, while 48.6% (n=191) disagreed, and 5.1% (n=20) were undecided. 37.1% (n=146) of the respondents accessed information through traditional sources, while 58.8% (n=231) disagreed, and 4.1% (n=16) were undecided. 51.1% (n=201) of the respondents accessed information through national media, while 46.6% (n=183) disagreed, and 2.3% (n=9) were undecided. Similarly, 44.0% (n=173) accessed information through international media, while 53.4% (n=210) disagreed, and 2.5% (n=10) were undecided.

The findings show that 53.2% of the respondents in the selected local governments in Yobe State have access to information on national issues, and 48.1% of the respondents have access to information in their communities. Furthermore, the findings reveal that national

media provides more information on national issues in the state compared with other types of media (see Table 7).

Table 8. Frequency of Access to Information on National Issues

Variables	Yes	No	Und	Total	Percentage %		
					Yes	No	Undecided
How often do you access information on the specific media you have in your community?							
a. Very Often	167	198	28	393	42.5	50.4	7.1
b. Often	178	189	26	393	45.3	48.1	6.6
c. Rarely	203	177	13	393	51.6	45.0	3.3
d. Very Rare	181	193	19	393	46.0	49.1	4.8
How much time do you spend on the media you have in your community daily?							
a) 30 Minutes	214	169	10	393	54.4	43.0	2.5
b) 45 Minutes	195	182	16	393	49.6	46.3	4.1
c) 1 Hour	156	234	3	393	39.7	59.5	0.8
d) 1:30 Minutes	112	266	15	393	28.5	67.7	3.8
How often do the available media provide information on national issues?							
a. Twice a day	172	215	6	393	43.8	54.7	1.5
b. Thrice a day	155	224	14	393	39.4	56.10	3.6
c. Daily	261	123	9	393	66.4	31.3	2.3
d. Weekly	108	270	15	393	27.5	68.7	3.8
e. Monthly	71	309	13	393	18.1	78.6	3.3

Source: Fieldwork (2021)

Table 8 discusses the frequency of access to information on national issues in the four local governments in Yobe State. The data addresses the specific media the respondents have access to in their communities. Based on the findings, 42.5% (n=167) stated that they “very often” had access to information on the specific media they have in their community, while 50.4% (n=198) disagreed, and 7.1% (n=28) were undecided. To the same question, 45.3% (n=178) answered “often,” while 48.1% (n=189) disagreed, and 6.6% (n=26) were undecided. 51.6% (n=203) responded “rarely,” while 45.0% (n=177) disagreed, and 3.3% (n=13) were undecided. Further, 46.0% (n=181) responded “very rarely,” while 49.1% (n=193) disagreed,

and 4.8% (n=19) were undecided. This indicates that the respondents in the four local governments rarely accessed information on the specific media they have in their communities as 51.6% constitutes the highest response to the question.

On the question of how much time the respondents spent on the media they have in their communities daily, the study discovered that 54.4% (n=214) of the respondents spent about 30 minutes, while 43.0% (n=169) disagreed, and 2.5% (n=10) were undecided. 49.6% (n=195) of the respondents spent about 45 minutes, while 46.3% (n=182) disagreed, and 4.1% (n=16) were undecided. 39.7% (n=156) spent about 1 hour, while 59.5% (n=234) disagreed, and 0.8% (n=3) were undecided. 28.5% (n=112) of the respondents spent about 1:30 minutes, while 67.7% (n=266) disagreed, and 3.8% (n=15) were undecided. The findings indicate that the respondents in the four local governments normally spent up to 30 minutes on the media they have in their communities.

Regarding how often the available media provided information on national issues, the data showed that 43.8% (n=172) of the respondents stated twice a day, while 54.7% (n=215) disagreed, and 1.5% (n=6) were undecided. 39.4% (n=155) answered thrice a day, while 56.10% (n=224) disagreed, and 3.6% (n=14) were undecided. Similarly, 66.4% (n=261) stated daily, while 31.3% (n=123) disagreed, and 2.3% (n=9) were undecided. 27.5% (n=108) responded weekly, while 68.7% (n=270) disagreed, and 3.8% (n=15) were undecided. 18.1% (n=71) stated monthly, while 78.6% (n=309) disagreed, and 3.3% (n=13) were undecided. The findings of the study reveal that the available media provided information on national issues in the selected local governments on a daily basis rather than on a weekly or monthly basis(see Table 8).

Table 9. Level of Influence of International Broadcast Stations

Variables	Yes	No	Und.	Total	Percentage %		
Do you have access to international broadcast stations in your community?	172	194	27	393	43.8	49.4	6.9
How often do you access them?							
a. Very often	183	191	19	393	46.6	48.6	4.8
b. Often	178	202	13	393	45.3	51.4	3.3
c. Rarely	213	172	8	393	54.2	43.8	2.0
d. Very rarely	176	197	20	393	44.8	50.1	5.1
Do the international media serve as your sources of information on national issues in the absence of	199	188	6	393	50.6	47.8	1.5

Variables	Yes	No	Und.	Total	Percentage %		
local media?							
Do the international media serve as an alternative to local media while seeking information?	201	169	23	393	51.1	43.0	5.8
Do the international media satisfy your information needs on national issues?	156	232	5	393	39.7	59.0	1.3

Source: Fieldwork (2021)

Table 9 examines the extent of influence of international broadcast stations. The findings show that 43.8% (n=172) of the respondents had access to international broadcast stations in their community, while 49.4% (n=194) disagreed, and 6.9% (n=27) were undecided. With regard to how often they access such information, the results show that 46.6% (n=183) said “very often,” while 48.6% (n=191) disagreed, and 4.8% (n=19) were undecided. 45.3% (n=178) said “often,” while 51.4% (n=202) disagreed, and 3.3% (n=13) were undecided. 54.2% (n=213) responded “rarely,” while 43.8% (n=172) disagreed, and 2.0% (n=8) were undecided. Further, 44.8% (n=176) stated “very rarely,” while 50.1% (n=197) disagreed, and 5.1% (n=20) were undecided.

To the question of whether international media serve as sources of information on national issues in the absence of local media, the data indicates that 50.6% (n=199) of the respondents responded in the affirmative, while 47.8% (n=188) disagreed, and 1.5% (n=6) were undecided. On the question of whether international media serve as an alternative to local media while seeking information, the findings show that 51.1% (n=201) answered in the affirmative, while 43.0% (n=169) disagreed, and 5.8% (n=23) were undecided. To the question of whether international media satisfy information needs on national issues, the study discovered that 39.7% (n=156) answered in the affirmative, while 59.0% (n=232) disagreed, and 1.3% (n=5) were undecided.

This means that members of the communities do have access to international broadcast stations in the state. However, based on the findings, the respondents rarely have access to them. The data also shows that international media serve as sources of information on national issues in the absence of local media. In addition, while seeking information, international media serves as an alternative to local media. However, international media does not satisfy their information needs on national issues as attested by 59.0% of the respondents.

Theoretically, the findings of the study are in line with the postulations of the adopted theories as source credibility theory explains the specific sources of information among the people of the border communities. This is in tune with the major objectives of the study. Source credibility theory posits that people or receivers of information are more likely to be persuaded when the source presents itself as credible. This means that the specific sources, which are preferred by the people, are most likely to have presented themselves as credible. This could be the international media stations that are serving as an alternative to the inability of the local media to reach the border communities. Similarly, source complementarity theory explains the situation the audience often finds themselves in whenever they are in search of information, especially where the sources of information are numerous and require scrutiny or are too scarce to get. This is coupled with the fact that the people in the target area (Yobe, North-East Nigeria) are very inquisitive and often look for information about national issues.

4. Conclusion

Access to information has often been identified as an important instrument for keeping citizens abreast of current happenings in their country. It also enhances their participation in the policies and programs of the government, which are geared toward ensuring accelerated development. However, it is apparent in the literature that in Nigeria, the philosophy of people's participation in rural community development is increasingly gaining acceptance as an important instrument for mobilizing resources and organizing the rural populace to have cogent interests in providing for their well-being. This study finds that the respondents in the selected local governments in Yobe State have specific media from which they get information. The findings further show that Sahel FM is a major source of information.

This study also found that the level of influence of international broadcast stations in Yobe State is significantly high as such information tends to influence the audience either negatively or positively. In addition, while seeking information, international media serves as an alternative to local media. However, such international media do not satisfy the people's information needs on national issues. The study found that social media, radio, and television as well as community leaders are the major sources of information in Yobe State. The study concludes that there is a need for people in the state to have substantial access to information through local media on issues affecting them in the rural areas rather than depending on foreign stations for information. Information resources for development can only be achieved when rural communities value information, such that they are ready to seek and use

information in solving daily activities regardless of the distance, format, or medium in which the information is available.

Authors Contribution

The first author initiate the idea of the research work and did the conceptual framework and the writing of the paper, while the second author analyse the data.

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The authors declare that they have no known competing conflict, and financial interests or personal relationships that could have appeared to influence the work reported in this study.

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References

- Abdullahi, A., & Gawi, Y. A. (2021). The effects of border porosity on Nigeria's national security: A study of Nigeria's northeastern border to Cameroon. *International Journal of Research and Innovation in Social Science*, 05(05), 442-450. <https://doi.org/10.47772/ijriss.2021.5526>
- Abiodun, T. F., Oladejo, O. A., Adetunberu, O., & Nwannenaya, C. (2019). Security intelligence cooperation and the coordinated war on terror Among Nigeria's security agencies: Panacea to stable national security. *Global Scientific Journal Publications: London*, 7(7). https://www.academia.edu/download/60482457/NEW_PUBLICATION20190904-98195-17sp7vk.pdf
- Aina, L. O. (2006). Information provision to farmers in Africa: The library extension service linkage. In *World Library and Information Congress* (Vol. 72).
- Aluede, J. A. (2017). Border relations in Africa and the impact on nation-building: A study of Nigeria and her limitrophe neighbours since the 1960s. *African Journal of Governance and Development*, 6(1), 10-26. <https://hdl.handle.net/10520/EJC-e5a90b398>
- Anjolaoluwa, O., & Adeniyi, S. (2019). Receptibility of Fall Armyworm (FAW) Information in Communication Media among Maize Farmers in Ogun State, Nigeria. *Journal of Agriculture and Food Technology*, 9(3), 1-7.
- Blum, C. (2014). *Cross-border flows between Nigeria and Benin*. Abuja: Friedrich Ebert Stiftung.
- Chen, Y., & Lu, Y. (2020). Factors influencing the information needs and information access channels of farmers: An empirical study in Guangdong, China. *Journal of Information Science*, 46(1), 3-22. <https://doi.org/10.1177/0165551518819970>
- Chinwokwu, E. C., & Michael, C. E. (2019). Militancy and violence as a catalyst to kidnapping in Nigeria. *International Journal of Police Science and Management*, 21(1), 17-35. <https://doi.org/10.1177/1461355719832619>
- Edet, I. P., & Joseph, A. L. (2017). Media mix as determinants of utilization of development information in rural communities of South-South, Nigeria. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 07(03), 08-14. <https://doi.org/10.9790/7388-0703050814>

- Egbe, B. O., & Okoi, I. O. (2018). Pre-colonial inter-group boundary relations in Africa: The Nigerian Experience. *Lwati: A Journal of Contemporary Research*, 15(1), 64-75. <https://www.ajol.info/index.php/lwati/article/view/169732>
- Emeh, I. E., Eluwa, I. J. & Ukah, E. O. (2012). Rural community development in Nigeria: A group of dynamics perspective. *Interdisciplinary Journal of Contemporary Research in Business*, 4(5), 1-18.
- Faleye, O. A. (2019). Border securitisation and politics of state policy in Nigeria, 2014–2017. *Insight on Africa*, 11(1), 78-93. <https://doi.org/10.1177/0975087818805887>
- Familusi, E. B., & Owoeye, P. O. (2014). An assessment of the use of radio and other means of information dissemination by the residents of Ado-Ekiti, Ekiti-State, Nigeria. *Library Philosophy and Practice*, 2014(1). link.gale.com/apps/doc/A381666593/AONE?u=anon~8c20aa23&sid=googleScholar&xid=fafc7423
- Foyou, V. E., Ngwafu, P., Santoyo, M., & Ortiz, A. (2018). The Boko Haram Insurgency and its impact on border security, trade and economic collaboration between Nigeria and Cameroon: An exploratory study. *African Social Science Review*, 9(1), 65-77. <https://digitalscholarship.tsu.edu/assr/vol9/iss1/7/>
- Gidado, A. S., & Haruna, U. (2007). Access of rural farmers to information and communication technologies (ICTs) for development of agriculture in Bauchi local government area, Bauchi State, Nigeria. *Nigerian Journal of Management Technology Volume*, 1(1).
- Gunawan, B., & Ratmono, B. M. (2018). Perspectives on the development of border regions in Indonesia. *Research on Humanities and Social Sciences*, 8(6), 1-6. <https://core.ac.uk/download/pdf/234676266.pdf>
- Harande, Y. I. (2009). Information services for rural community development in Nigeria. *Library Philosophy and Practice*, 1. <https://www.proquest.com/docview/224122215?pq-origsite=gscholar&fromopenview=true>
- Islam, M. S. & Ahmed, S. Z. (2012). The information need and information seeking behavior of rural dwellers: A review of research. *International Federation of Library Association and Institution*, 38(2), 137-147. <https://doi.org/10.1177%2F0340035212444513>

- Kamba, M. A. (2009). An overview of the provision of information for rural development in Nigeria. *Samaru Journal of Information Studies*, 9(1).
<https://www.ajol.info/index.php/sjis/article/view/55469>
- Ladan, I. S. (2019). Analysis of contemporary insecurity in Katsina State, Nigeria. *Direct Research Journal of Social Science and Educational Studies*, 6(7), 95-102.
<https://doi.org/10.5281/zenodo.3382915>
- Hoffmann, L. K., & Melly, P. (2015). Nigeria's booming borders: The drivers and consequences of unrecorded trade.
<https://policycommons.net/artifacts/1423387/nigerias-booming-borders/2037655/>
- M. Kolawole, A., Amoge, H., & Eunice, A. (2018). Assessment of the effect of Farmers-Herdsmen conflicts on national integration in Nigeria. *International Journal of Humanities and Social Science*, 8(10). <https://doi.org/10.30845/ijhss.v8n10p13>
- Masik, G., Sagan, I., & Scott, J. W. (2021). Smart City strategies and new urban development policies in the Polish context. *Cities*, 108, 102970.
<https://doi.org/10.1016/j.cities.2020.102970>
- Mohammed, U. F., Kazaure, S. I., & Durga Rao, P. (2019). Border security and changing pattern of nigeria-benin relations: An overview. *Journal of Sociology and Social Anthropology*, 10(1-3), 121-126. <https://doi.org/10.31901/24566764.2019/10-1-3.299>
- Mosel, I., Leach, A., & Hargrave, K. (2021). *Public narratives and attitudes towards refugees and other migrants: Ethiopia country profile* (Issue October).
<https://odi.org/en/publications/public-narratives-and-attitudes-towards-refugees-and-other-migrants-kenya-country-profile/>
- Nosiri, U. D., & Ohazurike, E. U. (2016). Border security and national security in Nigeria. *South East Journal of Political Science*, 2(2), 214-225.
<https://journals.aphriapub.com/index.php/SEJPS/article/view/808>
- Ojomo, O., & Amos, K. (2021). Influence of opinion leaders on voting decisions of urban and rural electorates in the 2019 gubernatorial. *African Scholar Journal of African Sustainable Development*, 20(2), 265-293.
http://www.africanscholarpublications.com/wp-content/uploads/2021/06/AJASD_Vol20_No2_March_2021-19.pdf
- Okunade, S. K., & Oni, E. O. (2021). *Nigeria and the Challenge of Managing Border Porosity. October.*

- Okunna, C. S. (1992). Among rural women in Nigeria: A case study. *Africa Media Review*, 6(3).<http://sanweb.lib.msu.edu/DMC/African%20Journals/pdfs/africa%20media%20review/vol6no3/jamr006003006.pdf>
- Oladehinde, G. J., Olayiwola, L. M., & Popoola, K. O. (2018). Land accessibility constraints of migrants in rural border settlements of Ogun State, Nigeria. *Environmental and Socio-Economic Studies*, 6(1), 46-56. <https://doi.org/10.2478/environ-2018-0006>
- Olomu, B., Alao, D. O., & Adewumi, E. (2019). Border security issues and challenges of the Nigeria customs service. *International Journal of Latest Research in Humanities and Social Science*, 2(3), 10-19. <http://www.ijlrhss.com/paper/volume-2-issue-3/2-HSS-330.pdf>
- Omogor, M. (2013). Channels of information acquisition and dissemination among rural dwellers. *International Journal of Library and Information Science*, 5(10), 306-312. <https://academicjournals.org/journal/IJLIS/article-abstract/494E19F40088>
- Owolabi, T. O. S., & O'Neill, E. (2014). Communication, MSMEs and Women Empowerment for National Development in Nigeria. *Asian Journal of Research in Social Sciences and Humanities*, 4(3), 21-34. <https://indianjournals.com/ijor.aspx?target=ijor:ajrssh&volume=4&issue=3&article=002>
- Pennaz, A. K., Ahmadou, M., Moritz, M., & Scholte, P. (2018). Not Seeing the Cattle for the Elephants: The implications of discursive linkages between Boko Haram and Wildlife Poaching in Waza National Park, Cameroon. *Conservation and Society*, 16(2), 125-135. https://doi.org/10.4103/cs.cs_16_153
- Sokey, P. P., Adjei, E., & Ankrah, E. (2018). Media use for health information dissemination to rural communities by the Ghana Health Service. *Journal of Information Science*, 2(1), 1-18. <http://ugspace.ug.edu.gh/handle/123456789/30058>
- Uchenna, E. (2019). Cross-border trade and infrastructure: A gender analysis of welfare outcomes in Nigeria. *SAGE Open*, 9(2). <https://doi.org/10.1177/2158244019844076>
- Yamane, T. (1973). *Statistics: An introductory analysis*. London: John Weather Hill, Inc.