
*Radio Medium as a Tool for Development Of Education
Sector in Zamfara State, Nigeria (Check)*

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Abstract

Media is one of the instruments which facilitates and gives a directional thrust to the efforts of development information to a large heterogeneous society. Indeed, radio in particular as a medium of information, has done well in developing a broad range and series of educational programmes in Zamfara State. Ilimi AbunNema, Ilimi Garkuwa, Literacy, Children Magazine and Gyara kayanka are educative programmes aired frequently in Zamfara State radio. The study used survey research to collect data from Bungudu, Zurmi, Bakura, Birnin Magaji, Shinkafi, Gummi, Bukkuyum, Maradun, Maru and Tsafe local governments of Zamfara State. The study reinforces the role of media (radio) as an indispensable tool in the educational sector. However, people still need re-orientation on media programmes in order to be adaptive as a source of learning/information in their day-to-day life.

Key Words: Facilitates, heterogeneous, indispensable.

Abstract

Media is one of the instruments which facilitates and give a directional thrust to the efforts of development in information dissemination to a large heterogeneous society. Indeed, Radio in particular as a medium of media tool of information has done well in developing a broad range and series of educational programmes in Zamfara State such as Ilimi AbunNema, Ilimi Garkuwa, Literacy, Children Magazine and Gyara kayanka are

sensational educative programmes aired frequently in Zamfara State radios. The study used a survey research (qualitative and quantitative) to abstracts data from Bungudu, Zurmi, Bakura, Birnin Magaji, Shinkafi, Gummi, Bukkuyum, Maradun, Maru and Tsafe local governments of Zamfara State. The role of media (radio) in Zamfara State is still indispensable tool towards the educational sector. Its role is still vulnerable as society sees its programmes as a modern way of learning.

The impact of radio towards development of educational sector in Zamfara State also pledges the state government in actualizing and providing more enhancing educational programmes as mention above, that will not only educate but informed and entertain the general public. Apparently the people still need re-orientation on media programmes in other to be adaptive as a source of learning/information in their day-to-day life.

Key Words: Facilitates, heterogeneous, indispensable, vulnerable, apparently.

INTRODUCTION

Media are the communication outlets or tools used to store and deliver information or data. The term “media” refers to components of the mass media communications industry, such as print media, publishing, the news media,

photography, cinema, broadcasting (radio and television), and advertising. The development of early writing and paper enabled longer-distance communication systems such as mail, including in the Persian Empire (Chapar Khaneh and Angarium) and Roman Empire, which can be interpreted as early forms of media. Writers such as Howard Rheingold have framed early forms of human communication as early forms of media, such as the Lascaux cave paintings and early writing. Another framing of the history of media starts with the Chauvet Cave paintings and continues with other ways to carry human communication beyond the short range of voice: smoke signals, trail markers, and sculpture.

The Term media in its modern application relating to communication channels was first used by Canadian communications theorist Marshall McLuhan, who stated in Counterblast (1954) "The media are not toys; they should not be in the hands of Mother Goose and Peter Pan executives. They can be entrusted

only to new artists because they are art forms." By the mid-1960s, the term had spread to general use in North America and the United Kingdom. The phrase "mass media" was, according to H.L. Mencken, used as early as 1923 in the United States.

The term "medium" (the singular form of "media") is defined as "one of the means or channels of general communication, information or entertainment in society, as newspapers, radio, or television" Communication channels through which news, entertainment, education, data, or promotional messages are disseminated. Media includes every broadcasting and narrowcasting medium such as newspapers, magazines, TV, radio, billboards, direct mail, telephone, fax, and internet. Media is the plural of medium and can take a plural or singular verb, depending on the sense intended.

In general, "media" refers to various means of communication. For example, television, radio, and the newspaper are different types of media. The term can also

be used as a collective noun for the press or news reporting agencies. In the computer world, "media" is also used as a collective noun, but refers to different types of data storage options.

AIMS AND OBJECTIVES

Radio has shaped our history and remains a powerful force for creating a more peaceful, sustainable, educative, vulnerable and inclusive future for all in our day-to-day life. The following are the aims and objectives of this study:-

1. To raise a greater awareness on the impact of radio medium among the public and its importance to our society
2. To encourage the state government to do more in decision making to establishing and providing more educational programmes via radio across the state
3. To also provide real-time information across the state and can become a valuable source of information where reliable news is scarce

RADIO AS A MEDIUM

Radio is the transmission of signals by modulation of electromagnetic waves with frequencies below those of visible light. In electronics, modulation is the process of varying one or more properties of high frequency periodic waveform, called the carrier signal, with respect to a modulating signal. This is done in a similar fashion as a musician may modulate the tone from a musical instrument by varying its volume, timing and pitch. The three key parameters of a periodic waveform are its amplitude (“volume”), its phase (“timing”) and its frequency (“pitch”), all of which can be modified in accordance with a low frequency signal to obtain the modulated signal.

During the 1930s, radio was considered an intimate and credible medium. The public used it as a news source and expected it to provide factual information. Radio was the first truly mass medium of communication, reaching millions of people instantly and altering

social attitudes, family relationships, and how people related to their environment.

Radio is an attractive medium among the various mass communication media because of its special characteristics. It continues to be as relevant and potent as it was in the early years despite the emergence of more glamorous media. It is a truism that in the first phase of broadcasting spanning three decades from the early twenties, radio reigned alone or was the dominant player. However, over a period of time, the media scene has changed drastically. Television with its inherent strength of audio-visual component has captured the imagination of the people. The advent of satellite television, the Internet and the convergence of technology have added further dimensions in media utilization patterns. However, despite the presence of a plethora of media, there is room and scope for each medium. Experience has revealed that ‘new technologies add things on but they don’t replace’. One medium is not displaced by another – each medium reinvents itself in

the context of changes in the communication environment. In the changed media scenario, radio is reorienting itself with more innovative programmes and formats. Advances in technology have given the youth more ways to access an increasing amount of information. Local and international news can be read in the newspaper, listened to on radio, watched on television and found on cell-phones or online. For those with access to these options, a wealth of information and entertainment is always readily available. In areas where access to technology is expensive, radio continues to play an important role in information sharing. Radio broadcasts can provide information and entertainment broadcasted 24 hours a day to provide the most recent updates about news or something entertainment related to listeners. When there is no access to the internet, young people can still search the airwaves for trustworthy sources. Even electricity is not a necessity for battery operated and hand-cranked radios. Sometimes a young person

in the rural part of Namibia would like to attend a soccer game, but they can't because they are far from the action, and radio is able to bring these events to life for such a person, as a radio presenter can excellently guide him or her through the game. With a radio by their side, people in villages or small towns are able to enjoy music and stay informed about ordinary events such as a street robbery or traffic congestion to more serious issues such as the change of governments, the tug of war among political rivals and the death of members of the community. In Namibia, radio is considered as one of the key mass communication mediums which reaches all areas of the country and has great potential to broadcast different kinds of information to almost the entire population. Dozens of radio stations are available in various languages to ensure that everyone receives news wherever they might be.

Radio is the technology of signaling and communicating using radio waves. Radio waves are electromagnetic waves of frequency between 30 hertz (Hz) and 300

gigahertz (GHz). They are generated by an electronic device called a transmitter connected to an antenna which radiates the waves, and received by a radio receiver connected to another antenna. Radio is very widely used in modern technology, in radio communication, radar, radio navigation, remote control, remote sensing and other applications.

In radio communication used in radio and television broadcasting, cell phones, two-way radios, wireless networking and satellite communication among numerous other uses, radio waves are used to carry information across space from a transmitter to a receiver, by modulating the radio signal (impressing an information signal on the radio wave by varying some aspect of the wave) in the transmitter. In radar, used to locate and track objects like aircraft, ships, spacecraft and missiles, a beam of radio waves emitted by a radar transmitter reflects off the target object, and the reflected waves reveal the object's location. In radio navigation systems such as GPS and VOR, a mobile

receiver receives radio signals from navigational radio beacons whose position is known, and by precisely measuring the arrival time of the radio waves the receiver can calculate its position on Earth. In wireless radio remote control devices like drones, garage door openers, and keyless entry systems, radio signals transmitted from a controller device control the actions of a remote device. Applications of radio waves which do not involve transmitting the waves significant distances, such as RF heating used in industrial processes and microwave ovens, and medical uses such as diathermy and MRI machines, are not usually called radio. The noun radio is also used to mean a broadcast radio receiver. Radio waves were first identified and studied by German physicist Heinrich Hertz in 1886. The first practical radio transmitters and receivers were developed around 1895-6 by Italian Guglielmo Marconi, and radio began to be used commercially around 1900. To prevent interference between users, the emission of radio waves is strictly regulated by law,

coordinated by an international body called the International Telecommunications Union (ITU), which allocates frequency bands in the radio spectrum for different uses.

RADIO TECHNOLOGY

Radio waves are radiated by electric charges undergoing acceleration. They are generated artificially by time varying electric currents, consisting of electrons flowing back and forth in a metal conductor called an antenna, thus accelerating. In transmission, a transmitter generates an alternating current of radio frequency which is applied to an antenna. The antenna radiates the power in the current as radio waves. When the waves strike the antenna of a radio receiver, they push the electrons in the metal back and forth, inducing a tiny alternating current. The radio receiver connected to the receiving antenna detects this oscillating current and amplifies it.

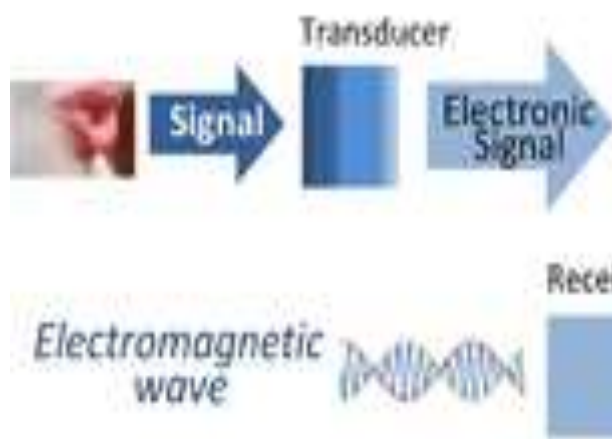
As they travel farther from the transmitting antenna, radio waves spread out so their signal strength (intensity in watts per square meter) decreases, so radio

transmissions can only be received within a limited range of the transmitter, the distance depending on the transmitter power, antenna radiation pattern, receiver sensitivity, noise level, and presence of obstructions between transmitter and receiver. An Omni-directional antenna transmits or receives radio waves in all directions, while a directional antenna or high gain antenna transmits radio waves in a beam in a particular direction, or receives waves from only one direction.

Radio waves travel through a vacuum at the speed of light, and in air at very close to the speed of light, so the wavelength of a radio wave, the distance in meters between adjacent crests of the wave, is inversely proportional to its frequency. The other types of electromagnetic waves besides radio waves; infrared, visible light, ultraviolet, X-rays and gamma rays, are also able to carry information and be used for communication. The wide use of radio waves for telecommunication is mainly due to their desirable propagation properties stemming from their large wavelength.

Radio waves have the ability to pass through the atmosphere, foliage, and most building materials, and by diffraction can bend around obstructions, and unlike other electromagnetic waves they tend to be scattered rather than absorbed by objects larger than their wavelength. Radio communication Information such as sound is converted by a transducer such as a microphone to an electrical signal, which modulates a radio wave produced by the transmitter. A receiver intercepts the radio wave and extracts the information-bearing modulation signal, which is converted back to a human usable form with another transducer such as a loudspeaker.

Radio stations play a critical role in modern society and form part of the critical communication channels that are used to consume information. Looking back to evolution, communication is one of the key ingredients that fueled our development. Through critical thinking, and exchange of information, we built societies, improved our standards of living, and even now as we speak, communication is facilitating the next invention. Back to radio, you might be wondering why it holds any significance, well if you have any doubt; we hope to put them to rest by taking a look at the role it plays in modern society. Every day, hundreds of calls are made to radio stations, mainly to share ideas and contribute to nation-wide discussions. A lot of people listen to radio, primarily because it is affordable, hence making it the perfect platform to discuss pressing issues. It brings everyone together, both the young, old, poor, and rich. Everyone can share their opinions, and through that create understanding and tolerance among communities and individuals. The



IMPORTANCE OF RADIO IN OUR SOCIETY

following are key roles of radio importance to our society:-

i. Educative:- Education is the reason why you are reading this article now. Through learning and research, humans have been able to make a lot of progress. Radio is one of the top places that people learn and get rid of ignorance. While not all radios are an education center, some of them make an effort to educate, especially on matters concerning society as a whole. Educational programmes are disseminated to large heterogeneous people.

ii. Entertainment:- Entertainment is a part of every social group. It plays a key role in socializing and helps people find happiness, especially during hard times. By playing music, and talking about interesting topics, radios provide high-quality entertainment that is free of charge and fulfilling to the listeners.

iii. Information:- Advances in technology have given people more ways to access an increasing amount of information. However, radio still plays a vital role in today's world. Radio is more

than just announcers, news and songs.

Radio is about companionship and the emotional connection with the listener. Radio broadcasts provide real-time information, and some that broadcast 24 hours a day, can provide the most recent updates to listeners. Radio has the ability to reach across borders and can become a valuable source of information where reliable news is scarce. Radio has proved its worth in times of emergency such as when access to the mobile network is down as a result of an overload, or phone lines are cut. Even when there is no electricity, most radio sets can be battery operated or have the ability to be hand cranked.

iv. Create job opportunity:- The radio industry provides a lot of employment, helping people grow their careers and live a comfortable life. To ensure that people are useful members of society, it is crucial to avail jobs, and give them an opportunity to do their part in development. It is for this reason that radio is important, as it employs a lot of people.

v. **Promote Businesses:-** One of the top ways to a business is to rely on marketing, and in the process reach new clients while maintaining the current ones. One of the best ways to get reliable results from marketing is using the radio platform. Businesses have been able to reach clients, and sell their products, in the process providing jobs themselves and growing nations.

ADVANTAGES OF RADIO MEDIUM

The followings are advantages of radio medium

- i. Radio programmes are so much cheaper to produce and producers are far more willing to invest time in encouraging new quitters and providing the entertainment people need (even) according to their “demography, geography, ethnography etc.”
- ii. Radio is much more portable medium than other media and allows the listeners to carry on listening while on the move. Many television writers started in a radio and many successful

television formats were tried out on radio first.

- iii. Radio offers more efficient targeting reaches people at relevant times and places
- iv. Radio reaches out in ad avoidance world and creates a large shares of mind for a brand
- v. Radio drives response especially on-line and has a multiplier effect on other media
- vi. Radio is a fried
- vii. Radio is the most accessible and portable of the media able to adopt more quickly to listeners’ changing listening habits
- viii. Radio is more easily targeted, with simultaneously both a healthy young and older listening profile

METHODOLOGY

The research was conducted in Zamfara State with a pick-up data from 10 local governments viz Bungudu, Zurmi, Bakura, Birnin Magaji, Shinkafi, Gummi, Bukkuyum, Maradun, Maru and Tsafe Local Governments between February -

June 2020. The study used a survey research where 200 questionnaires were administered in a simple random format to each selected local government and all respondents as each was given an equal opportunity to study and respond to the questionnaire administered. Guidance or translation was given to respondents as regards to the questionnaire where necessary. Out of the 200 questionnaire administered to each local government, there were variances in number of questionnaires returned and that gives a total number of *One Thousand Seven Hundred and Thirty Four (1,734)*. Hausa is the major language spoken as the study areas are occupied by both Christians and Muslims.

Demographic Information

Zamfara State has an area of: 34, 284 km² – Density: 131.7/km². According to National Population Commission of Nigeria and National Bureau of Statistics 2016, the population of Zamfara State as at last head count 21-3-2016 population projection is 4,515,400. The population

projection assumes the same rate of growth for all LGAs within the state. The following are statistical figure of the 10 local governments selected during the field work. Bungudu (356,200), Zurmi (404,800), Bakura (257,700), Birnin Magaji (253,500), Shinkafi (187,200), Gummi (284,700), Bukkuyum (297,900), Maradun (285,800), Maru (403,700), Tsafe (367,600). The study focused on both male and female, with age groups ranging from less than 18, 19-30, 31-45 and above 46. Each respondent were given the equal opportunity to fill appropriately.

Data Analysis and Interpretation

Data obtained from the field was subjected to descriptive statistical analysis using appropriate statistical tool.

Results

Table 1: Distribution of returned questionnaires from each local government

| Variable | Frequency |
|------------------|-----------|
| Local Government | |

| | | | | |
|---------------|--------------|-------------------|----------------|--------------|
| Birnin Magaji | 162 | Widow | 9.34 | 27 |
| Shinkafi | 170 | Widower | 9.8 | 18 |
| Gummi | 180 | Total | 10.4 | 1,734 |
| Bukkuyum | 166 | | 9.6 | |
| Maradun | 187 | Occupation | 10.8 | |
| Maru | 160 | Student | 9.2 | 304 |
| Tsafe | 177 | Civil Servant | 10.2 | 198 |
| Bungudu | 181 | Farmer | 10 | 812 |
| Zurmi | 173 | Business | 10 | 102 |
| Bakura | 178 | House wife | 10.3 | 318 |
| Total | 1,734 | Total | 100 (%) | 1,734 |

Field source 2020

| | | | | |
|--------------|--------------|----------------------------|----------------|--|
| Sex | | | | |
| Male | 1,220 | | 70.4 | |
| Female | 514 | | 29.6 | |
| Total | 1,734 | Based on structures | 100 (%) | |

Table 3: Responses from respondents based on structures 100 (%)

| | | | | |
|--------------|--------------|-------------------------|----------------|----------------|
| Age | | | | |
| ≤18 | 308 | Question | 17.8 | Yes (%) |
| 19-30 | 702 | Do you own a radio set? | 40.5 | 1,711(98.7) |
| 31-45 | 517 | | 29.8 | |
| ≥46 | 207 | Do you listen to radio? | 11.9 | 1,428(82.4) |
| Total | 1,734 | | 100 (%) | |

| | | | | |
|-------------------|--|------------------------------------|--|-------------|
| Field source 2020 | | Do you listen to radio programmes? | | 1,312(75.7) |
| | | Do the programmes educate you? | | 1,718(99.1) |

Table 2: Distribution of respondents based on demographic factors

| | | | | |
|-----------------------|--------------|---|----------------|----------------|
| Religion | | | | |
| Muslim | 1,024 | How long have you been listen to it? | 59.1 | |
| Christian | 710 | - 1yr ago | 40.9 | 940(54.2) |
| Traditional Religion | | - 2yrs ago | - | 710(41) |
| Total | 1,734 | - 3yrs and above | 100 (%) | 84(4.8) |
| Marital Status | | | | |
| Married | 1,012 | Which of these is your favourite radio channel? | 58.4 | |
| Single | 677 | - Pride FM (103.5) | 39 | 1,487(85.8) |
| | | - Zamfara Radio | | 247(14.4) |

| | |
|--|---|
| Which of these is your favourite radio programmes? | 1,734 inclusive male and female. Maradun local government has the highest number of returned questionnaire administered with a total number of 187(10.8%) while, Maru local government has the lowest number of |
| - Ilimi Abun Nema | 56(3.2) |
| - Ilimi Garkuwa | 51(2.9) |
| - Literacy | 74(4.3) |
| - Children Magazine | 41(2.4) |
| - Gyara Kayanka | 90(5.2) |
| - All | 1,422(82) |

Field source 2020

returned questionnaire with 160 (9.2) of the entity. This can be said that Maradun local has the highest turn up in response during the field survey.

Table 4: Responses from respondents based on their satisfactory

| Variable | Frequency | Percentage (%) |
|---|--------------|----------------|
| What would you say that effectiveness of radio programmes create awareness? | | |
| Very Strong | 1,004 | 57.9 |
| Strong | 718 | 41.4 |
| Weak | 12 | 0.7 |
| Total | 1,734 | 100 (%) |
| During the field data collation of the research, the total number of 9 male respondents from the 10 local governments is 70.4% (1,220/1,734) while 29.6% (514/1,734) are female. This might be as a result of religious or cultural domination of the indigenes for not allowing their females to interact outside. The females always remain indoors (an act termed as 'Kulle') and usually come out rarely. | | |
| How do you access the effectiveness of the programmes? | | |
| - Bad | - | - |
| - Good | 512 | 29.5 |
| - Educative | 1,222 | 70.5 |
| Total | 1,734 | 100 (%) |

Field source 2020

Responses were gotten from the age group of 19 – 30 years with 40.5%, this might be due to the fact that this age group own and listen to more radio programmes than others. While ages greater than 46 years has the least of 11.9% and this may as a result of lack of time dedication and other

Discussion of research findings

During the research, responses were gathered from the 10 local government selected from Zamfara state. 200 questionnaires were administered to each with variances of response that sum up

family activities distortion from listening to radio programmes. Ages less than 18 has 17.8% and ages between 31 – 45 are 29.8%.

From the demographic factor of respondents (religion), it punches out that the majority of respondents are Muslim with 59.1% (1,024/1,734) while 40.9% (710/1,734) are Christians. These implies that the majority of respondents residing in the 10 local government selected are Muslim.

From the record recorded, the marital statuses of respondents who are in the class of married are 58% (1,012/1,734), single are 39% (677/1,734), widow are 1.6% (27/1,734) and widower are just 1% (18/1,734). These has figure out that radio programmes are mostly listen by married statuses due to their time and resources devotion.

Also, from its findings and responses, the residuals of all local governments selected are farmers with 46.8% (812/1,734). The least residuals are business people with 5.9% (102/1,734). During the research, there was also a class

of students, civil servant and house wife.

From all indications of respondents Majority of them are farmers persons.

From table 3 above, responses show that 98.7% (1,711/1,734) of respondents owned a radio set, only 1.3% (23/1,734) do not have and this has implies that majority of the respondents own a radio set and 82.4% (1,428/1,734) do often listen to radio while 75.7% (1,312/1,734) of respondents do listen to radio programmes.

Also, from indication of respondents, 99.1% (1,718/1,734) has agreed 'yes' that the radio programmes educate them which 38.4% (665/1,734) of respondents listen to every 3hours on a daily basis, 34.1% (591/1,734) of respondents listen 2hours on a daily basis, 25.5% (443/1,734) 1hour on a daily basis and only 2% (35/1,734) do not listen to radio programmes on a daily basis.

Furthermore, 54.2% (940/1,734) of respondents has been listening to radio programs since over a year ago with 85.8% (1,487/1,734) of respondents chooses pride F.M has their favorite radio channel.

Apparently, many programmes are aired both on pride F.M and Zamfara Radio with 82% (1,422/1,734) of respondents listen to all programmes. And,

Lastly, table 4 has figure out the effectiveness and awareness of the radio programmes. 57.9% (1,004/1,734) of respondents had very strongly believe its importance while 41.4% (718/1,734) strong believe and 0.7% (12/1,734) of respondents sees it as weak. And finally, 70.5% (1,222/1,734) of all respondents sees all the radio as very educative while 29.5% (512/1,734) see it as very good.

Conclusion

From the analysis and inception of discussion above, the study has revealed and shown that radio programmes are indispensable tool and very vulnerable to the society, The role of radio in Zamfara State is still a vital tool towards the educational sector. Its role is still vulnerable as society sees its programmes as a modern way of learning. It also showed the impact of radio medium as an unquantifiable tool for learning and communication channels

through which news, entertainment, education, data, or promotional messages are disseminated. With radio Advances in technology have given people more ways to access an increasing amount of information.

However, radio still plays a vital role in today's world. Radio is more than just announcers, news and songs. Radio is about companionship and the emotional connection with the listener.

Recommendations

From the findings of this research, the followings are recommended:-

1. With more innovative programmes and formats. Advances in technology have given the society more ways to access an increasing amount of information. Local and international news can be listening to on radio. For those with access to these options, a wealth of information and entertainment is always readily available in areas where access to technology is expensive.

2. The study also pledges the state government in actualizing and providing more enhancing educational programmes that will not only educate but informed and entertain the general public.

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3. Apparently, the people still need re-orientation on radio media programmes in other to be adaptive as a source of learning/information in their day-to-day life.

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