

**AN EVALUATION OF RADIO IN CREATING ENVIRONMENTAL AND WASTE  
MANAGEMENT AWARENESS IN EDO STATE**

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**SEPTEMBER, 2023**

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**A PROJECT WORK SUBMITTED IN PARTIAL FULFILMENT OF THE  
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**SEPTEMBER , 2023**

**DECLARATION**

This research is based on a study undertaken by I, **OMOTI EMMANUEL JOSEPH** in the Department of Mass Communication, Faculty of Arts, University of Benin. This was carried out under the supervision of Dr. Collins kediehor . All ideas herein are products of my personal research and where the views of others have been used and expressed, they were duly acknowledged.

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**OMOTI EMMANUEL JOSEPH**  
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### **CERTIFICATION**

This is to certify that this research work was carried out by **OMOTI EMMANUEL JOSEPH**

of the Department of Mass Communication, Faculty of Arts, and University of Benin. Under the supervision of:

\_\_\_\_\_  
**Dr. COLLINS KEDIEHOR**  
**Project Supervisor**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**DR. DANIEL EKHEREAFO**  
**Head of Department**

\_\_\_\_\_  
**Date**

### **DEDICATION**

This research work is dedicated to the Almighty God

## **ACKNOWLEDGEMENTS**

First and foremost, praises and thanks to the God, the almighty, for his showers of blessing and protection through at my research work to complete the research successfully.

I would like to express my deep and sincere gratitude to my research project Supervisor, Dr. Collins Kediehor Dr. Ambrose Uchenunu Mr. Sunny Ekerikevwe,, Sunny Ekerikevwe, the department of mass communication, faculty of art, the editor for giving me the opportunity to do research and providing invaluable guidance throughout this research, his dynamism, sincerity and motivation home deeply inspired me. He has taught me the methodology to carry out the research and to present the research works as clearly as possible. It was a great privilege and honor to work and study under his guidance. I am grateful for what he has offered me. I would also like to thank him for his friendship, empathy and great sense of humor.

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## TABLE OF CONTENTS

Title Page-	- - - - -	i
-------------	-----------	---

Declaration-	-	-	-	-	-	-	-	-	-	-	-	-	ii
Certification-	-	-	-	-	-	-	-	-	-	-	-	-	iii
Dedication-	-	-	-	-	-	-	-	-	-	-	-	-	iv
Acknowledgement	-	-	-	-	-	-	-	-	-	-	-	-	v
Table of Content	-	-	-	-	-	-	-	-	-	-	-	-	vii
Abstract	-	-	-	-	-	-	-	-	-	-	-	-	x

## **CHAPTER ONE: INTRODUCTION**

1.1	Background of the Study	-	-	-	-	-	-	-	-	-	-	-	1
1.2	Statement of the Problem	-	-	-	-	-	-	-	-	-	-	-	3
1.3	Objectives of the Study--	-	-	-	-	-	-	-	-	-	-	-	5
1.4	Research Question	-	-	-	-	-	-	-	-	-	-	-	6
1.5	Significance of the Study-	-	-	-	-	-	-	-	-	-	-	-	6
1.6	Scope of the Study	-	-	-	-	-	-	-	-	-	-	-	7
1.7	Limitations of the Study.	-	-	-	-	-	-	-	-	-	-	-	8
1.8	Definition of Terms	-	-	-	-	-	-	-	-	-	-	-	8

## **CHAPTER TWO: LITERATURE REVIEW**

2.1	Brief History of Radio in Edo State	-	-	-	-	-	-	-	-	-	-	-	10
2.2	Radio Programmes and Programming	--	-	-	-	-	-	-	-	-	-	-	13

2.3	Review of the Concept of Broadcast Media --	-	-	-	-	-	-	-	14
2.4	Waste Management Systems - -	-	-	-	-	-	-	-	17
2.5	Radio as a Broadcast Media-	-	-	-	-	-	-	-	20
2.6	Benefits of Environmental and Waste Management Practices -	-	-	-	-	-	-	-	
	23								
2.7	Theoretical Framework -	-	-	-	-	-	-	-	26

### **CHAPTER THREE: RESEARCH METHOD**

3.1	Research Design	-	-	-	-	-	-	-	28
3.2	Population of the Study -	-	-	-	-	-	-	-	29
3.3	Sample Size - -	-	-	-	-	-	-	-	29
3.4	Sampling Technique - -	-	-	-	-	-	-	-	30
3.5	Research Instrument-	-	-	-	-	-	-	-	30
3.6	Validity and Reliability -	-	-	-	-	-	-	-	31
3.7	Reliability of the research Instrument -	-	-	-	-	-	-	-	31
3.8	Method of Data Collection -	-	-	-	-	-	-	-	31
3.9	Method of Data Analysis -	-	-	-	-	-	-	-	31

### **CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS**

4.1	Data Presentation-	-	-	-	-	-	-	-	32
-----	--------------------	---	---	---	---	---	---	---	----

4.2	Discussion of the Findings-	-	-	-	-	-	-	-	-	38
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**CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

5.1	Summary -	-	-	-	-	-	-	-	-	41
5.2	Conclusion -	-	-	-	-	-	-	-	-	42
5.3	Recommendations-	-	-	-	-	-	-	-	-	43
	References-	-	-	-	-	-	-	-	-	46
	Appendix-	-	-	-	-	-	-	-	-	49

**ABSTRACT**

The Usefulness of radio, borders on its ability to cause positive change in the society. The study was centered on the evaluation of Radio in creating environmental awareness

and waste management. The study was anchored on the Planned Behavior Theory. It further employed a quantitative survey method and adopted the positive sampling techniques; questionnaire was used to collect data which were presented and analyzed in some frequency tables and percentages. Findings reveal that radio station within its features of sound is capable of influencing and inducing responsible environmental behaviour. But then, it cannot compel people to change but can set the agenda for change. Also, the environmental waste problem can be best managed by modifications of human behavioural patterns by developing responsible environmental behaviour. The study concludes that Waste management is one of the greatest environmental challenges facing us in this country, Nigeria. The researcher therefore recommends that radio station should conduct regular enlightenment and sensitization on environmental issues, recycling of waste there should be a strict enforcement of environmental policies and laws.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

According to Anijah et al (2013), throughout the world, the problem of polluted environment has become a very disturbing phenomenon. Environmental problems plaguing the world are enormous. But perhaps the most serious and worrisome in Nigeria is the physical environment in terms of low level of sanitation and gross environmental indiscipline in our cities and communities. In September 2000, leaders of 189 countries including Nigeria, gathered at the United Nations headquarters and signed the historic Millennium Declaration, which gave birth to the Millennium

Development Goals (MDG). MDG goals number 14 and 15 give rise on the need of humans to protect and sustain both the land and water bodies. Anijah et al (2013) stated that the problem of waste management in Nigeria has become a national malaise. Filth is an eyesore and a nuisance. It signifies decadence and backwardness. A look at the Nigerian homes, toilets, streets, kitchens, corridors, gutters, staircases, markets, abattoirs, would reveal the very low levels of sanitation.

Solid waste management in urban centers worldwide continues to attract attention because it is mismanaged and yet it poses a danger to public health. In most of African towns, waste collection has been centralized (Mugambwa, 2009). The composition of wastes generated is mainly decomposable organic materials. This calls for efficient collection systems to avoid health, aesthetics and environmental impacts which would otherwise lead to community illnesses, resistance to treatment and reduced immunity. Waste disposal and management is both an urban and rural problem (Chung and Poon, 2001). Every person is a potential generator of waste and thus a contributor to waste accumulation. To generate waste is one thing, the type of waste generated is another and yet also the way the generated waste is managed or disposed of is quite a different issue. It has more often than not turned out that the rate at which wastes are generated is far higher than the capacity to responsibly manage this waste (Chung and Poon, 2001). Waste is generated by, and from different sectors;

domestic, commercial, industry and others and in many instances; the waste management responsibility has been left to the government or administrative authorities (Barr, 2003). There is growing consensus that both the immediate stakeholders in the issue of waste (the generators of waste) and those who manage their wastes well all suffer from the consequences of waste accumulation and poor waste management.

In Nigeria, both the governments and the people depend on communication and updates from the mass media. Not only for disseminating information but also in setting agenda for the development and other allied activities. Hence, communication media become powerful tools for disseminating information on the environment. Radio is a formidable mass media tool for public mass enlightenment. It is an electronic device that uses electromagnetic waves for the transmission of messages, information to the general public. According to Akintayo (2013) the Radio has become a part of everyday life in Nigeria; and people for various reasons beyond the traditional entertainment, education and information purposes, depend on radio. Radio therefore becomes about the easiest and cheapest tool for social mobilization and public enlightenment breaking the barrier of class and education. It is against the backdrop identified above that this study aim to evaluate the use of radio in creating

environmental and waste management awareness in Nigeria, using Benin City as the focus of the study.

## **1.2 Statement of the Problem**

The problem of waste management and eradication in Nigeria has been left unattended to by the Nigerian government. Several mechanisms have been put in place to deal with this problem including the involvement of several organizations and companies, such as private, government and Non-governmental agencies. There is enough evidence that the status of hygiene and sanitation is still poor in Benin City, Edo State, with huge piles of wastes dumped on roads, household compounds, city squares, outside hospitals, schools and almost every-where. In Benin City, solid waste disposal and management is thus both an urban and rural problem. Every institution and household is a potential generator of waste and thus a contributor to this problem. Whereas the concept of wastes is almost a fact of life for as long as man exists, the challenges come from the categorization of waste, accumulation and disposed of these wastes.

In Benin City, there are big heaps of garbage in front of business centers, streets, schools, hospitals, markets and residences. This problem of accumulated wastes and poor management and disposal practices are partly due to absence of a functional government system to manage domestic, municipal and industrial wastes, coupled

with nonexistence of awareness campaigns about the national environmental laws and regulations. This problem is also due to increased population, business activities and settlement creation. The local people's, practices, skills, information and will for safe waste management are often not only inadequate but also poor. Individuals at the household and institutional levels lack familiarity with dangers of chemical substances which result from accumulated wastes. This also means that local populations behave inappropriately when handling their wastes.

Consequently, the risk of diseases arising from poor sanitation and environment especially during rainy seasons has increased in both towns and rural areas. The negative effects commonly neglected are the possible diseases such as typhoid fever, malaria, diarrhea, child birth defects, and cancer and so on. Therefore, there is a need for this study to establish the extent to which radio programs cover issues related to proper waste management practices, the extent to which people in Benin City receive these awareness messages and their reactions, as well as identifying the alternative ways of improving waste management practices.

### **1.3 Objectives of the Study**

This study objective seeks:

1. To find out the types of waste management awareness programmes on radio in Benin City, Edo State.

2. To determine how waste management awareness programmes on radio, influences the waste management behaviors of residents in Benin City, Edo State.
3. To find out the effects of waste management awareness programmes on radio, affect citizens in Benin City, Edo State
4. To find out ways to improve on radio programmes on waste management awareness in Benin City, Edo State.

#### **1.4 Research Questions**

Based on the problems identified above, the questions below appear necessary:

1. What are the types of waste management awareness programmes on radio in Benin City, Edo State?
2. How does waste management awareness programmes on radio, influences the waste management behaviours of residents in Benin City, Edo State?
3. What are the effects of waste management awareness programmes on radio, affect citizens in Benin City, Edo State?

4. What are the ways to improve on radio programmes, on waste management awareness in Benin City, Edo State?

### **1.5. Significance of the Study**

This study is very important for the spread of environmental consciousness to the citizens of Nigeria, specifically of those in Benin City, Edo State, and to those who will venture into broadcasting (most especially the radio broadcasting); this is because it will give an insight on the need for broadcasters to join in the battle to save and protect our platforms through highlighting the importance of eco-consciousness and waste management. It will also serve as first hand source of information for Environmental Scientists who are looking for ways to improve the level of environmental awareness and consciousness of the people. This is as knowledge of the current status of waste disposal options and the level of awareness of waste management will help stakeholders involved in waste management to establish policies and implement measures to control waste collection and disposal in Nigeria.

Journalists and media practitioners will be able to use material evidence from this work to plan radio awareness programmes that will see to the proper preservation of the environment. This is also as the government and policy makers in the Nigeria, especially Edo State, will use the findings made in the study to plan for effective waste management practices and awareness for the State. Scholars intending to

research on ways and methods for the promotion of wastes management practices will be able to collect viable information from this study for further analysis and research on the subject matter.

### **1.6. Scope of the Study**

The study is focused on the waste management practices that are carried out by the residence of Benin City and its environs in Edo State, Nigeria. It will cover the various strategies and policies as implemented by the government, as well as other stakeholders in Edo State. Strategies for the better implementation of waste management practices will also be focused on and presented in the study.

### **1.7 Limitations of the Study**

The researcher encountered some limitations during the course of the study, and some of them are outlined as:

1. Limited access to archival materials on waste management practices in Benin City, Edo State. This is due to the fact that the concept of waste management and Mass communication research in Benin City is at its infancy, and scholars are still investigating its characteristics.

2. The researcher was faced with little funding to travel down to all the identified locations for the research, where waste management practices are carried out in the City.
3. The study is limited to the area of Benin City, which is only a fraction of cities contained in Edo State. Although it is expected to represent the waste management practices as found in other cities of the State.

### **1.8. Definition of Terms**

Some concepts and terms used in this study are further explained below:

**Environment:** This is the total ecosystem that exists in a particular place and time. It is the area dominated by humans and animals for their daily survival.

**Management:** This is the planning, organizing, and control of processes, events and people towards achieving a desired objective.

**Mass Media:** this is the medium in which information is disseminated to the general public. It involves the use of tools such as the radio, television and internet resources.

**Pollution:** this is the spread of harmful and contaminated materials around the environment. The contaminated materials can be in both solid, liquid and gaseous forms.

**Radio:** Radio is an audio device of passing messages to a large audience. It is essentially the remission of rays or waves that bear signals called programmes. Radio entails sending messages through the process of electromagnetism.

**Waste Management:** this is the identification, collection, transport, treatment and disposal of unwanted or unusable material, substances or by-products., together with monitoring and regulation of the waste management process, technologies and economic mechanisms.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

Thus chapter contains the review of related literatures on the use of radio for public awareness on waste management. It is essentially a report on literatures written by other scholars on the subject matter under study.

## **2.1 Brief History of Radio in Edo State**

Before we talk about the history of radio in Edo, there is a need to briefly examine radio broadcast in Nigeria. In 1933, the British colonial government introduced the Radio Distribution System (RDS), which is a British Broadcasting Corporation (BBC) in Lagos. This birthed radio broadcasting in Nigeria. Radio signals connected to box-like speakers through wired systems relayed BBC broadcast to homes in Nigeria.

In 1935, the Radio Distribution System changed to Radio Diffusion System. Licensed receivers increased to about 2000 in 1939. This same year, the Ibadan station was commissioned, followed by Kano station in 1944. The Turner Bryon Committee was mandated to come with recommendations on setting up radio services with a national identity recommended, the setting up of the National Broadcasting Services (NBS) in 1949. It was founded in 1951 in Lagos State. The NBS went further to create autonomous regional stations in Enugu, Kaduna and Ibadan and furthermore, created provincial centers in Jos, Maiduguri, Sokoto, Kano and Ilorin.

The Federal Radio Corporation of Nigeria (FRCN) was established in 1978, the Voice of Nigeria was created in 1990. With the creation of new states comes a proliferation of the service along state lines. The first private radio station is Edo Broadcasting Service established in 1965.

According to Media Nigeria (2018), Edo State has over 12 radio stations which include both private owned and government owned radio stations, they include the following:

- 94.1 – Hillside FM (Auchi Polytechnic Radio)
- 95.775 - Edo Broadcasting Service, Aduwawa
- 101.5 – Bronze FM (FRCN), Aduwawa
- 92.3 – Independent Radio, Benin City
- 105.5 – RayPower FM, IhuenNiro, Benin City
- 92.7 -- K – U FM, Benin Auchi Road, Benin City Edo State
- 93.7 – SilverBird Rhythm FM, Ugbowo, Benin City
- 97.3 – Vibes FM, Benin City
- 100.1 – Uniben FM (University of Benin Radio)
- 96.9 – Speed FM, Benin City

These and more are some of the radio stations situated and located in Edo State with Edo State Broadcasting Service heavily counted as the first radio station to be stationed in Edo State. For the purpose of this project work, Independent Radio Benin (ITV) will be focused on as a reference to other radio stations

### **2.1.1 Independent Radio, 92.3 FM, Benin City**

Independent Television is a private commercial radio station situated in Benin City, Edo State. It is owned by and registered in Nigeria under Chief Gabriel Osawaru Igbinedion situated at Glass House, Airport Road, Benin City, Edo State, Nigeria. It started its first operation in 1993 and became fully commercialized in March, 1997.

Independent Radio Television is a broadcasting media performs the duty of educating and enlightening the people and at the same time, entertains them while ensuring they see the right thing to do. They engage in different programmes on air which include:

- Rush Hour
- News Hour etc

According to a presenter at Independent Television Benin, these programmes are targeted programmes in different times, targeting different sets of persons in different locations. In an interview with the researcher, exposed further that these programmes are meant to educate people to the civic obligations, civic duties, both to the government and to their environment which affects them directly.

These programmes therefore, focus more on the environment, its cleanliness, duties of the citizens in maintaining a clean and healthy environment while at the same time, call on the government of the day to take care of refuse dumps, incinerators which most times are being abandoned besides environment of people.

Hence, they reach out to both the citizens and the government to look after the waste management and thereby raise the environmental and waste management of the citizens of the state.

The radio station has also embarked on Social Media Campaign to also emphasize on proper waste management. They have also engaged in physical sanitation, actively joining other volunteers in cleaning up the environment.

## **2.2 Radio Programmes and Programming**

Radio program, radio programme or radio show is a segment of content intended for broadcast on radio. It may be a one-time production or part of periodically recurring series. A single programme in a series is called an episode.

Radio programming is the process of organizing a schedule of radio content for commercial broadcasting and public broadcasting by radio stations. The Independent Radio, Benin 92.3 FM engages in many activities which cut across entertainment, politics, sports, education, news, enlightenment, cultural, recreational, etc. Some of the programmes being aired by Independent Television Benin include but not limited to the following:

- Rush Hour
- News Hour etc.

These and more are being carried out by Independent Television Benin which affects both the environmental, societal, political and economic aspects of the people.

### **2.3 Review of the Concept of Broadcast Media**

Broadcast media involve electrically and simultaneously sending information containing signals, print messages and audio or video content to a vast group of recipient using television, radio, newspapers, magazines and digital media including the internet, emails and texts. Broadcast media helps in the distribution of audio or video content to a dispersed audience via any electronic mass communications medium, but typically one using the electromagnetic spectrum (radio waves), in a one-to-many model (Peters, 1999). Broadcasting began with AM radio, which came into popular use around 1920 with the spread of vacuum tube radio transmitters and receivers. Before this, most implementations of electronic communication (early radio, telephone, and telegraph) were one-to-one, with the message intended for a single recipient.

The term “broadcasting” evolved from its use as the agricultural method of sowing seeds in a field by casting them broadly about (Douglas,1987). It was later adopted for describing the widespread distribution of information by printed materials or by telegraph. Over the air broadcasting is usually associated with radio and television, though more recently, both radio and television

transmissions have begun to be distributed by cable (cable television). The receiving parties may include the general public or a relatively small subset; the point is that anyone with the appropriate receiving technology and equipment (e.g., a radio or television set) can receive the signal.

Rim- Rukeh and Ogbemi (2007) opined that the broadcast media can help individuals to understand the interaction between resources (mental) and the environmental management. Nwodu in Nwabueze (2007) noted that communication through the broadcast media (radio and television) is an integral part of environmental or solid waste management, because it is central to every human attitudes and as such would be used in coordinating the resources for a synergist approach to the management of the environment. Therefore, environmental communication consists of all forms of communication to keep the public enlightened and aware of environmental issues and trends it is abused on. This ascertains that the role of radio communication on waste management has become imperative. These roles as highlighted by Rim-Rukeh and Ogbemi (2007) are to create awareness in environmental issues and it can be used to promote responsible environmental behavior especially as it concerns solid waste handling and management.

Mc Quail (2010) sees broadcast campaign (radio and television) as the planned attempt to influence public behavior, attitudes and knowledge on behalf of a cause,

person, institution or topic using different media like Television, Radio and other broadcast channels over a specific period of time. Likewise, Banjo, Adebambo and Dairo (2009) posits that the media (radio and television) played effective role in environmental communication which could be used to raise public awareness and consciousness towards waste management with high degree of effectiveness. It is known that heavy dependence and exposure to the media tend to shape people's beliefs and perception about various issues on solid waste in life.

Researches indicated that communication and public awareness has played a special role to promote environmental behavior change. Rim-Rukeh and Ogbemi (2007) stated that communication and awareness can support individuals to enhance their understanding and the collaboration between resources (natural) and the environment. Barr (2003) emphasized that a greater knowledge of the principles of environment, behavior, attitudes and theories of the waste minimization through communication is to boost the ability of the individuals to participate in their daily practices in solid waste management. Therefore, communication focused on environment and waste management issues are playing main role to keep the public aware of the problems related to the risks and dangers of the presence of wastes. Awareness of the community and its attitudes to waste management is normally affect the population's will to cooperate and participate in a suitable waste management daily

practices. Communication messages with regard to environment and health dangers due to lack of solid waste management are key factors required to be regularly communicated to all sectors of the population.

#### **2.4 Waste Management Systems**

The safe disposal of waste is imperative for the realization of several fundamental human rights, most especially the right to life and the right to a healthy environment. Nigeria is a signatory to and has ratified the African Charter on Human and People's Rights (ACHPR). Ratification of the ACHPR comes with the attendant responsibility of maintaining a healthy environment. The entitlement to a healthy environment is also a constitutional right in Nigeria albeit in a non-justifiable form.

Waste management as earlier explained means the careful planning, actions and activities required to manage waste from its inception to its final disposal. This includes the collection, transportation, treatment and disposal of waste together with monitoring and regulation of the waste management process, technologies and economic mechanisms.

Waste management systems therefore means the different structures, institutions put in place either by state or private individual with enabling laws to guide the collective process of sorting, storage, collection, transportation, processing, resource recovery, recycling and final disposal of waste in a particular geographical

location. For instance, in Ondo State, there is both the Ondo State Waste Management Agency (OSWMA) which tackles the challenge of disposal of municipal wastes and the Ondo State Integrated Wastes Recycling and Treatment Project (OSIWRTP) which deals with recycling, etc. The efforts of a plethora of private enterprises and waste management cannot be ignored as these have contributed immensely to improve waste management in Nigeria as private enterprises and waste pickers are also involved in waste recycling.

However, Ogwueleka (2009) identified the common methods of municipal waste disposal in Nigeria as follows:

- Open Dumping
- Open Burning
- Incineration
- Unregulated Landfills
- Composting

**Open Dumping:** Open dumping of solid waste is a common practice in Nigeria. This entails a large expanse of land whereby refuse are dumped either in a temporal or permanent basis. Open dumping of waste cannot be considered as a long-term environmental method of disposal. Dumping wastes into drainages, streams with the aim that they will be washed down to the river or flood. Sadly, they end up causing blockages in our water ways. These methods or systems of waste disposal

involve both the good and the old ways of disposing waste. But, Nigeria is peculiar to using crude ways in practicing both the different system of waste disposal.

**Open Burning:** Refuse gathered at a place is being burnt openly without regulations, either in large mass or in bits. Ogwueleka (2009) notes that highly toxic smoke from continuous smoldering fires and foul odour from decomposing refuse cause health hazard to scavengers at the dump site, and pollution of groundwater.

**Incineration:** This entails a waste treatment process that involves the combustion of organic substances contained in waste material. This type of burning is controlled industrially. Incineration is a practical method of disposing and converting waste materials into heat, gas, steam and ash. This method has not been adopted by many states in Nigeria. Incineration is part of waste recycling.

**Unregulated Landfills:** These involve using municipal wastes to fill up land holes or level up the ground. This method though a good one can become a danger if unregulated. Nigeria practices unregulated landfills.

**Composting:** This means the use of waste as manure/ fertilizers. It involves heaping them in a place especially the decayed waste and used for farming purposes.

Ukpong (2006) believes that sustainable waste management is anchored on the 4Rs of waste management namely: reduction, recovery, reuse and recycling. This

forms the basis of contemporary waste management strategies of whatever design, orientation and scope. It embraces attitude towards waste management.

However, studies of Ifegbesan (2009) showed that the best approach towards waste management is responsible environmental behaviour or the right attitude and self-consciousness of the value or worth of the environment.

## **2.5 Radio as a Broadcast Media**

Broadcast media are the media organs or channels such as radio and television that produce and transmit media messages for public reception or consumption (Ogbuoshi, 2011). As electronic media, they are known as been very powerful in instant and prompt dissemination of information to their heterogeneous audience simultaneously. This they do successfully, especially in the area of informing, and educating their audience on the right things to do concerning any issue of public interest just like this female genital mutilation practice.

According to Maccise and Montaser(2018), the transmission of radio and television programs from a radio or television station to home receivers by radio waves, is referred to as "over the air" (OTA) or terrestrial broadcasting. In most countries, it requires a broadcasting license. Transmissions using a wire or cable, like cable television (which also retransmits OTA stations with their consent), are also considered broadcasts but do not necessarily require a license (though in some

countries, a license is required). In the 2000s, transmissions of television and radio programs via streaming digital technology have increasingly been referred to as broadcasting as well. As a communication concept, it is the most persuasive machinery or channel of communication that uses electromagnetic impulses to reach the public instantly without the connection of wires. Hence, it is one of the most effective means of creating awareness.

The broadcast media are expected to provide an imperative check on the various institutions of the society by instilling a sense of order and stability to the society (Wogu, 2009). It is generally recognized that the first radio transmission was made from temporary station set up by Guglielmo Marconi in 1895 on the Isle of Wight. The radio broadcasting of music and talk intended to reach a dispersed audience started experimentally around 1905-1906 and commercially around 1920 to 1932. VHF (very high frequency) stations started 30-35 years later. According to Ogbuoshi (2011), broadcasting in Nigeria began December 2, 1932 with a station built in Lagos as a monitoring relay for BBC which started Radio Distribution Service and later metamorphosed into the Nigerian Broadcasting Service. "Programmes were originated and transmitted from London to subscribers in Nigeria by telephone wires and were purely British though sometimes they were tailored to suit the taste of colonial listeners". Aliede (2003) also confirmed this when he says that "most of the

programmes were European Oriented”. “Regional broadcasting according to Nwanze (2003) began in 1959 with Western Region in the lead”. The industry has come a long way and has gone through a lot of changes in trying to keep pace with the intricacies of an ever-changing society (Udomisor, 2013). But with the creation of 36 states and arrival of democratic government, the broadcast media became all government tool as well as individuals who can afford and meet up the demand of running the industry hence, public and private broadcast media are significant sector of the Nigerian society.

The radio as a broadcast media perform an indispensable role in the development of any nation (Chapman, 2003). Radio and television are usually regarded as the most effective tools in communication for the support of development (Nwanze, 2003). They contribute immensely to the development and sustenance of democracy. Likewise, Orhewere and Kur (2003) refer to the broadcast media as playing decisive roles in the lives of the citizens no matter where they are located and whatever stage of development. The media depend on electricity for transmission e. g radio, television, recordings and video (the new electronics). It is the transmission of voices to and music at great distances to a large number of people.

Nwanwene (1995) writes that broadcasting is a technology that uses the radio waves. It is the transmission through space by means of radio frequencies of signals capable

of being received orally by the general public. The inbuilt mechanisms in radio are powerful that receivers stay in their houses, tune to the appropriate channels and get the voice message. Ume-Nwagbo (1995) comments on the functional benefits of the media as agents of mass communication that provide varieties of programmes, “which meet the needs of listeners and viewers in the country and those across the urban boundaries of the society.

## **2.6 Benefits of Environmental and Waste Management Practices**

Environmental and waste management encompasses all aspects of humans and its interaction with the environment. Being eco-conscious demands our embracing sustainable principle which is not just a trend. Cultivating sustainable practices help organizations become more efficient, competitive, creative and profitable. It is more than simply "a good thing to do".

Below are more benefits of environmental and waste management practices:

- **Attract New Customers and Increase Sales:** Green and sustainable practices can make your company more marketable. Consumers are more conscious of the environment, and making improvement will strengthen your reputation. Technology and social media have enabled buyers to easily (and publicly) promote or criticize companies for their green practices, or lack thereof respectively.

- **Tax incentives:** There are variety of tax credits, rebates and grants from both the Federal and State governments, not excluding private corporations for manufacturers who proactively implement more sustainable improvements. There may be incentives to your business.
- **Boost Workforce Morale and Innovations:** Being Environmental and waste management aware brings sustainable improvements and collaborative effort. When employees work together to identify and implement green and sustainable initiatives, it fosters a culture of teamwork and continuous improvement. By internally communicating the importance of changes and the impact they are having on the business environment, manufacturers will positively influence and boost the moral of the workers and corporate culture. Environmental and waste management awareness can also ignite innovation through creativity. For example, if engineers are asked to reduce material scraps or recycle more waste during the manufacturing process, it often leads to additional ideas for operational improvements.
- **Societal Impacts:** In addition to helping your company or institutions profitability, your actions can make a real difference. By implementing changes, you will have a smaller carbon footprint and reduce the number of toxins released into the atmosphere. Future generations ultimately will benefit from

improved air and water quality, fewer landfills and more renewable energy source.

- **Reduce Energy-related Costs:** Energy and water costs are the primary concern for manufacturers. Focusing on improvements can reduce these expenses. Often, these improvements are realized on a long term savings as opposed to quicker, short term cost reductions. For instance, switching to energy-efficient lighting and adjusting lighting levels in accordance with your production schedule will reduce your long term electrical costs. Regular equipment inspections will also prove beneficial. Implementing strategies such as recycling and going paperless will also save on supply costs. Sustainability can improve your bottom line.

## **2.7 Theoretical Framework**

This study is anchored on the "Planned Behaviour Theory". The Planned Behaviour Theory started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. According To Ifegbesan (2009), the theory of Planned Behaviour (TPB) was developed by Ajzen and Fishbein in 1980, as an attempt to predict human behavior. The PBT theory helps to understand how people's behavior can be changed for good. The TPB is a theory which predicts deliberate behavior because behavior can be deliberate and planned. It also helps us to understand how we can change the behavior of people.

Application of the Planned Behaviour Theory can be perceived or found in the field of environment psychology that is to say, sustainable behavior, intention to practice such behavior, perceived behavioural control can be hindered by constraints such as belief that one's behaviour will not have any impact applying the theory of the planned behavior (TPB) in these situation.

TPB has been widely used in environmental behavior research to predict a person's interest to participate in a specific behavior (Ifegbesan, 2009). The broadcast of media which radio is one and part of are the best instrument to enlighten the inhabitants on positive attitude towards the environment. Studies have used the theory of planned behaviour as a framework as not only good for understanding, explaining and predicting behaviors, but also to provide a useful guide for designing intervention strategies to change or maintain behaviour.

The rationale for the application of the TPB theory to this study is based on the idea of attitude or change in behavior. That is, an individual's intent to participate in Environmental and Waste Management activities, is subject to awareness programmes being heard by the individual in the radio, as this further lead to environmental friendly behaviours.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter discusses the research design adopted for the study, population, sample size and sampling technique, research instrument, validity and reliability, methods of data collection, administration of the research instrument, as well as the methods of data analysis.

#### **3.1 Research Design**

This study adopted the survey research design for the collection, analysis and presentation of data. The reason for choosing the survey research design is because, it

is very suitable when a study is focused on large populations with different strata of distribution (McCombes, 2021). The survey research also allows for the collection of data directly, with the researcher gaining first-hand knowledge and original insights into the research problem. The design also allow for the research to venture into the field to gather quantitative data that represents primary information in relation to the subject matter of the study.

### **3.2 Population of the Study**

The population for this study was limited to residents in Benin City, Edo State. In the 2006 Nigerian census, Benin City had an estimated population of approximately 1.496 million people (World Population Review, 2023). Out of this population, 200 respondents were selected for the study

### **3.3 Sample Size**

For the purpose of this study, 200 respondents were selected from the total population in Benin City, Edo State. Out of this total population, a ratio 1 out of 1,

496 females and a ratio of 1 out of 1,496 males were randomly selected for the study. The online sample size calculator (<https://www.calculator.net/sample-size-calculator.html>) was used in determining the sample size of the study, the parameter used are:

Population Proportion = 50%

Confidence Level = 85%

The margin error in the calculation=5%

Population Size = 1,496,000

### **3.4 Sampling Technique**

The sampling procedure used in the collection of data was the purposive sampling technique. This is because it allows for personal judgment, and implies that all elements are selected on the basis of the population and aims of the study. Purposively, 200 respondents were picked at random from members of the public in Benin City, Edo State. The purposive sampling was used because, it helps researchers to identify the cases, individuals, or communities' best suited in answering the research question. Also, the purposive sampling is used because the study requires a lot of background information about the research topic.

### **3.5 Research Instrument**

A closed ended questionnaire containing some set of questions drawn from the research questions was used as the research instrument for data collection. The questionnaire is selected for the study because, it offer a fast, efficient and inexpensive means of gathering large amounts of information from sizeable sample volumes. According to McLeod (2018), the questionnaire is particularly effective for measuring subject behavior, preferences, intentions, attitudes and opinions. The questionnaire is divided into two sections: the demographic section which included age, gender, qualification, e.t.c, and questions section. It required the respondents to tick their preferences on some questions, while others enquired written statements.

### **3.6 Validity of the Research Instrument**

The instrument used was validated by the supervisor after carefully examining the questionnaire and its relevance in capturing the interest of the proposed respondents. The validated instrument enabled the researcher to obtain accurate information needed for the completion of the project work within a stipulated time.

### **3.7 Reliability of the Research Instrument**

The reliability of the research instrument was done by test and retest method. This involves the instrument administered repeatedly to a small section of the selected respondents, and their responses recorded for its reliability for the study.

### **3.8 Method of Data Collection**

The method of data collection used for this study is the personal administration of data collection instruments. It is also called the face-to-face method in which copies of the questionnaire was administered personally by the researcher to the respondents and collected from on the spot.

### **3.9 Method of Data Analysis**

The method of data analysis used in this study is the simple percentage count of descriptive data such as frequencies and percentages of responses from respondents. The responses to questions on the questionnaire were presented statistically using tables; thus, data were collated using the quantitative method.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND PRESENTATION OF FINDINGS**

This chapter focused on the analysis of data generated in this study through the research instrument. It also contains the testing of the hypotheses and presentation of results.

#### **4.1 Data Analysis**

##### **Section A: Demographic Information of Respondents**

Data contained in Table 1 below is related to item 1, Section A in the questionnaire.

**Table 1: Age of Respondents**

<b>Age Range</b>	<b>Number of Respondents</b>	<b>Percentage</b>
18 -35	44	22.%
35 -65	120	60%
65 and above	36	18%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Field Survey, 2023

In Table 1 shows that out of 200 respondents, 44 (22%) of the respondents are within the age range of 18 - 35, while 120 (60%) are in the age range from 35 - 65. 36 (18%) were from 65 and above. This indicates that majority of the respondents that took part in this study are adults (35 – 65 years) and showing inputs from people with informed decision.

Data contained in Table 2 below is related to item 2, Section A in the questionnaire.

**Table 2: Gender of Respondents**

<b>Gender</b>	<b>Number of Responden</b>	<b>Percentage</b>
Male	131	65%

Female	69	35%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Field Survey, 2023

Table 2 shows that out of 200 respondents, 131 (65%) are males while 69 (35%) are females. The higher percentage (65%) shows that more male than female respondents participated in the research.

Data contained in Table 3 below is related to item 3, Section A in the questionnaire.

**Table 3: Occupation of respondents**

<b>Occupation</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Student	101	50%
Trader	53	27%
Employee	42	21%
Employer	4	2%

Others	0	0%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Field Survey, 2023

Table 3 shows that out of 200 respondents, 101 (50%) are students, 53 (27%) are traders, 42 (21%) are employees, 4 (2%) are employers, and none (0%) were from other profession. The higher percentage of 50% shows that more students participated in the research than other professions.

Data contained in Table 4 below is related to item 4, Section A in the questionnaire.

**Table 4: Marital Status of Respondents**

<b>Status</b>	<b>Number of Respondents</b>	<b>Percentage</b>
Single	141	70%
Married	59	30%
<b>Total</b>	<b>200</b>	<b>100%</b>

**Source:** Field Survey, 2023

In Table 4 shows that out of 200 respondents, 141 (70%) of the respondents are single, while 59 (30%) are Married. The higher percentage (70%) indicates that there are more single than married persons that participated in the research.

### **Section B: Questions**

This section contains the analysis of responses contained in Section B of the questionnaire. The responses were measured on five point Likert scale below:

Strongly Agree (SA) = 5

Agree (A) = 4

Undecided (U) = 3

Disagree (D) = 2

Strongly Disagree (SD) = 1

### **Table 5: Questions**

S/N	Statements	SA	A	U	D	SD
1.	Do you agree that that radio is a means for getting information	133 66%	54 27%	13 7%	0 0%	0 0%
2.	Radio can be used to support awareness on waste management.	189 90%	9 4%	2 1%	0 0%	0 0%
3.	Waste management programmes on radio can influence your attitudes/behaviors towards waste management.	83 44%	33 16%	67 34%	9 4%	4 2%
4.	Waste management awareness programmes on radio help to improve your level of environmental consciousness.	150 75%	40 20%	2 1%	7 3%	1 1%
5.	Waste management awareness programmes on radio will negatively affect residence in Benin City, Edo State.	124 62%	13 7%	46 23%	12 6%	5 2%
6.	Waste management awareness programmes on radio will positively affect residence in Benin City, Edo State.	92 46%	7 4%	78 39%	9 4%	14 7%
7.	More time allotted to programmes on waste management will help to improve on waste management practices in Benin City, Edo State.	177 88%	14 7%	4 2%	3 2%	2 1%
8.	More funding of programmes on waste management will help to improve on waste management practices in Benin City, Edo State.	180 90%	6 3%	5 3%	7 3%	2 1%

**Source:** Field Survey, 2023

In item 1, 133 respondents (66%) strongly agreed to the statement that radio is a means for getting information; 54 respondents (27%) agreed, 13 respondents (7%)

were undecided, 0 respondents (0%) disagreed and 0 respondents (0%) strongly disagreed. Item 2 shows that 189 respondents (95%) respondents strongly agreed that radio can be used to support awareness on waste management; 9 respondents (4%) respondents agreed, 2 respondents (1%) were undecided and 0 respondents (0%) strongly disagreed to the statement. In item 3, 88 respondents(44%) strongly agreed to the statement that radio waste management programmes influences listener's attitudes/behaviors towards waste management; 33 respondents (16%) agreed, 67 respondents (34%) were undecided, 9 (4%) disagreed, and 4 respondents (2%) strongly disagreed. In item 4: 150 (75%) respondents strongly agreed to the statement that waste management awareness programmes on radio can help to improve listener's level of environmental consciousness; 40 respondents (20%) agreed, 2 (1%) were undecided, 7 respondents (3%) disagreed and 1 respondent(1%) strongly disagreed. In item 5, 124 respondents(62%) strongly agreed to the statement that radio waste management awareness programmes on radio will negatively affect residence in Benin City, Edo State; 13 respondents (7%) disagreed, 46 respondents (23%) were undecided, 12 respondents (6%) disagreed and 5 (2%) strongly disagreed. In item 6, 92 respondents (46%) strongly agreed to the statement that radio waste management awareness programmes on radio will positively affect residence in Benin City, Edo State; 7 respondents (4%) disagreed, 78 respondents (39%) were undecided, 9

respondents (4%) disagreed and 14 respondents (7%) strongly disagreed. In item 7, 177 respondents (88%) strongly agreed to the statement that more time allotted to programmes on waste management will help to improve on waste management practices in Benin City, Edo State; 14 respondents (7%) agreed, 4 respondents (2%) were undecided, 3 (2%) disagreed, and 2 respondents (1%) strongly disagreed. In item 8, 180 respondents (90%) strongly agreed to the Statement that more funding of programmes on waste management will help to improve on waste management practices in Benin City, Edo State; 6 respondents (3%) agreed, 5 respondents (3%) were undecided, 7 respondents (3%) disagreed, and 2 respondents (1%) strongly disagreed.

#### **4.2 Discussion of Findings**

The higher percentage of 60% of respondents who are in the age range from 35 – 65, indicates that majority of the respondents that took part in this study are adults. This indicates that information contained in the questionnaire is from individuals with informed decision. The higher percentage of 65% respondents who are males shows that more male participated in the research than female respondents. This also shows an area dominated by masculine gender with passion for information for decision making. The higher percentage of 50% respondents who are students shows that more students participated in the research than other professions. This finding also indicates

that the study was carried out in an academic environment with many students in the surroundings. The higher percentage of 70% respondents, who are singles, indicates that there are more single than married persons that participated in the research. This supports the findings made in Table 3 that many of the people residing in the research area, are students and not yet married. Table 5 above shows findings made in the analysis of the questions presented to respondents. This is presented below. From the analysis, it could be seen that majority of the respondents agreed to the following; radio is a means for getting information. Radio can be used to support awareness on waste management. This is in line with Media Nigeria (2018) statement that there are viable radio stations in Benin City Edo State, disseminating information to the public. Findings further shows that waste management programmes on radio can influence listener's attitudes/behaviors towards waste management. Waste management awareness programmes on radio helps to improve on listener's level of environmental consciousness. These findings supports the postulation of McQuail (2010) that radio is a medium used for the influence of public behaviour, attitude and knowledge on behalf of a cause. Findings from the analysis shows that waste management awareness programmes on radio will positively affect residence in Benin City, Edo State. This supports the views of Nwodu and Ogbemi (2007) that radio is a media which helps individuals to acquire the knowledge and skills in managing the

environment. Findings shows that more time should be allotted to radio programmes on waste management awareness, as it will help improve on waste management practices in Benin City, Edo State. Also, more funding of radio programmes on waste management awareness will help to improve on waste management practices in Benin City, Edo State. These findings support Adekola et al (2021) report that the integration of various stakeholders' effort in waste management service will strengthen waste management practices in Edo State.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS.**

This chapter presents the summary, conclusion and recommendations of this research work, having analyzed and answered the research questions of the study.

## **5.1. SUMMARY**

The influence of the Radio on the people on matters that concerns creating environmental and waste management awareness in Edo State which entails, being physically mentally and psychologically aware of our environment and how to protect it for our better living and also waste management which entails the careful gathering, handling and treatment of waste to remove or in worst case scenario minimize its harmful effects on the society has been analyzed in this research study. The researcher conducted this study on how radio stations create awareness on Eco consciousness and waste management among resident cum listeners of Radio. Relevant concepts were defined and analyzed and the study was based and guided by The Theory of Planned Behavior which was used in this study. It has provided explanation of how the radio can be used to influence people's behavior towards waste management and Eco consciousness for good. A self structured questionnaire was used to collect data from the respondents. Two hundred (200) copies of questionnaires were administered and three hundred and thirty three was retrieved back.

In summary, the findings imply that:

- The radio station with its features of sound is capable of influencing or inducing responsible environmental behaviour. But then, it cannot compel people to change but can set the agenda for change.
- That the environmental waste problem can be best managed by modifications of human behavioural patterns by developing responsible environmental behaviour.
- Awareness and knowledge on environmental issues like waste management may not translate to responsible environmental attitude unless there is willingness to participate in environmental management.

## **5.2. CONCLUSION**

Waste management is one of the greatest environmental challenges facing us in this country, Nigeria. In order to inculcate positive attitude towards inhabitants, there was need to adopt enlightenment campaigns by the broadcast media (Both Radio and Television).

## **5.3. RECOMMENDATIONS**

Emerging from the above findings and discussion, the study recommends:

### **1. Regular Public Enlightenment and Sensitization of Environmental Issues:**

It is constructive for the mass media in Nigeria to regularly sensitize the public on the need to manage wastes properly and other environmental issues. For this, environmental communication becomes imperative. It is the application of communication principles and strategies in keeping man abreast and awake to environmental concerns. Durations on environmental issues are short and appear weekly and even occasionally. Therefore, the broadcast media for example, can do this by carrying out regular news programmes on the environment. There should be discussions, interviews with experts on environmental issue. There should be phone-in or caller programmes to determine public participation and impact. The public should have the right of access to environmental information held by authorities. Making information about the environmental policy available is essential for achieving sustainable development.

### **2. Recycling of Wastes:**

Basically, the government with private firms could go into partnership in converting wastes into useful and marketable value. The study showed that only few inhabitants recycled their waste. Recycling of waste has not been taken as a way or method of waste management. There is need for the broadcast media to teach inhabitants the importance of recycling. Recycling has now become a very important aspect of effective waste management. Refuse is no longer considered to be unwanted material but a source of raw material which may be reprocessed into new products.

### **3. Strict Enforcement of Environmental Policies and Laws:**

Strict enforcement of environmental policies and laws is a major step towards environmental management. Efforts of the Federal Environmental Protection Agency and all States Environmental Waste Management Board or Agencies have not yielded the desired results. The use of regulations and legislations can play important roles in achieving high standard of cleanliness and the reduction of waste management burden in Nigeria. For Instance, loitering of refuse and abandoning old vehicles should be liable to a heavy fine. Many of the broadcasters interviewed agreed that environmental laws should be strictly enforced by the relevant authorities. Some Nigerians do not adhere to environmental laws unless they are enforce to do so. Positive attitude towards the environment sometimes can be enforced.

In all, the government should provide adequate funding for agencies concerned with environmental management and ensure proper implementation of programs and policies. The media should intensify their efforts at public enlightenment by presenting environmental information in the local languages to remove the language barrier. Particular emphasis should be placed on the effect of domestic activities on solid waste and global ecological climate. Environmental education should be incorporated into the school curriculum at all levels in order to build a generation of environmentally conscious citizens

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## APPENDIX

Department of Mass Communication,  
University of Benin,  
Benin City.

Dear Respondent,

### QUESTIONNAIRE

I am a student of the department of Mass Communication, University of Benin. I am conducting a research on the topic “**Evaluation of Radio in creating Environmental and Waste Management awareness in Edo State**”. Kindly give your candid responses to the questions below. Your responses will be of utmost confidentiality.

Thank you.

Yours faithfully,

**OMOTI EMMANUEL JOSEPH**  
**RESEARCHER**

## QUESTIONNAIRE

### Section A: Demographic Information

Instruction: Please tick (✓) in the bracket to indicate your answer.

1. **Age:**                    18-35    [ ] 35-65    [ ] 65 and above [ ]
2. **Gender:**                    Male    [ ] Female[ ]
3. **Occupation:** Student [ ] Trader [ ] Employee [ ]Employer [ ]Others[ ]
4. **Marital Status:** Single            [ ] Married [ ]

### Section B: Questionnaire Statements (Mark ✓ as appropriate)

S/N	Statements	SA	A	U	D	SD
1.	Do you agree that that radio is a means for getting information					
2.	Radio can be used to support awareness on waste management.					
3.	Waste management programmes on radio can influence your attitudes/behaviors towards waste management.					
4.	Waste management awareness programmes on radio help to improve your level of environmental consciousness.					

5.	Waste management awareness programmes on radio will negatively affect residence in Benin City, Edo State.					
6.	Waste management awareness programmes on radio will positively affect residence in Benin City, Edo State.					
7.	More time allotted to programmes on waste management will help to improve on waste management practices in Benin City, Edo State.					
8.	More funding of programmes on waste management will help to improve on waste management practices in Benin City, Edo State.					

***Thank You***