

EXPLORING FACTORS AFFECTING THE USE OF MASS MEDIA IN DISASTER MANAGEMENT BY RURAL COMMUNITIES: THE CASE STUDY OF TRADITIONAL AUTHORITY LIKOSWE, CHIRADZULU DISTRICT

MCLOUD CHILANGIZA

Thyolo, Malawi

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PROPOSAL APPROVED BY:

SUPERVISOR:

Mr, M, Mkandawire Signature: 

ASSESSOR:

Title, Initials, Name Signature: _____

DECLARATION

I Mcloud Chilangiza, declare that this research paper is submitted as part of the fulfillment of the Bachelor of Science in Disaster Risk Management to Ndata school of Climate and Earth sciences at the Malawi University of Science and Technology. I confirm that the work has never been submitted to any Malawian university and is my own effort.

AUTHOR

Mcloud Chilangiza

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ABSTRACT

The project investigated the factors influencing the use of mass media in disaster management within rural communities, specifically in Traditional Authority Likoswe, Chiradzulu District, Malawi. It aimed to determine how rural communities access and utilize mass media, identify barriers hindering its effective use, and evaluate the overall effectiveness of mass media in disaster management. The study addressed the digital divide and social inequalities that affect vulnerable communities' access to vital information during disasters. By employing a mixed-method approach, including surveys and interviews, the research gathered both quantitative and qualitative data to provide comprehensive insights. The findings will inform policymakers, disaster management organizations, and community leaders, ultimately contributing to improved disaster preparedness and response strategies that are inclusive and effective in reducing vulnerabilities and enhancing community resilience.

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LIST OF ACRONYMS

UNDRR	United Nations for Disaster Risk Reduction
GDP	Gross Domestic Product
DoDMA	Department Of Disaster and Management Affairs
NGOs	Non-governmental Organizations

T/A	Traditional Authority
SMS	Short Message Service
DRM	Disaster Risk Management
MGDS 11	Malawi Growth and Development Strategy 11
PSAs	Public Service Announcements
ICT	Information and Communication Technology
CBDRM	Community-Based Disaster Risk Management
NSO	National Statistical Office
SPSS	Statistical Package for Social Sciences
DRMO	Disaster Risk Management Officer
NDRMCS	National Disaster Risk Management Communication Strategy

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CHAPTER ONE: GENERAL INTRODUCTION

1.1. Background

Mass media plays a pivotal role in disaster management by bridging the gap between emergency organizations and the public. It serves as a primary channel for disseminating essential information before, during, and after disasters. Mass media educates the public about disaster preparedness, warns of hazards, gathers and transmits information about affected areas, and facilitates communication among stakeholders (Kapoor, 2015).

Mass media encompasses various communication channels such as newspapers, television, radio, magazines, the internet and social media platforms. Globally, the widespread adoption of the internet and social media has transformed how information is disseminated. According to recent statistics, approximately 64.6% of the global population (5.18 billion individuals) have access to the internet, and 59.9% of them (4.8 billion) are active on social media platforms (Dixon, 2023). In Malawi, as of the beginning of 2023, 24.4% of the population had internet access, with 3.8% (783.8 thousand people) actively using social media such that 57.2% of Malawi's population (11.81 million individuals) had access to mobile connections, (Kemp, 2023).

Disasters are events that disrupt normal community functioning, resulting in widespread human, material, economic, and environmental losses and exceed the affected community's capacity to cope using its own resources (UNDRR, 1999). Natural disasters, in particular, have no geographical, social, or cultural boundaries and impact communities differently based on their geographic location, risk exposure, and lifestyle choices. The frequency and intensity of natural disasters have increased globally, with economic losses estimated at US$7 trillion between 1900 and 2015 such that no country is immune to disasters, emphasizing the need for efficient disaster preparedness and mitigation strategies (World Bank Group, 2022).

In Malawi, the trend of increased disasters is evident, particularly in the form of extreme weather events. Since 1980, more than 50 disasters associated with hydro-meteorological events, including storms, floods, landslides, and droughts, have been reported, affecting millions of people. In the last decade alone, over twenty-five severe rainfall-related disasters, such as floods, landslides, and storms, have occurred, resulting in an incremental rise in the number of affected people. The Malawi Country Climate and Development report projects significant annual gross domestic product (GDP) losses, possibly reaching 20% by 2040 under a business-as-usual scenario. Climate change is likely to exacerbate existing social and economic inequalities, particularly for vulnerable populations (World Bank Group, 2022). In 2021/2022, the national poverty rate in Malawi stood at 50.7%, with 56.6% of the impoverished population residing in rural areas, where inequality levels are high, as indicated by a Gini coefficient of 0.379 in 2019/20. Consequently, livelihood disruptions caused by natural disasters and other factors are expected to widen the gap between the poor and the well-off (DoDMA, 2023).

During the 2015 Malawi floods, media outlets such as Zodiak, Malawi Broadcasting Corporation, and Matindi FM currently called Malawi Nyasa Times played crucial roles in disseminating evacuation instructions, emergency contact information, and real-time updates on flood levels. This led to more effective disaster response efforts and saved lives.

Mass media possesses inherent characteristics that make it advantageous for disaster communication such that it provides easy access to large and diverse audiences, constituting a robust communication system that remains operational even in cases of infrastructure breakdown (Anzur, 2000). Following the information released by the Department of climate and meteorological services about the occurrence of Tropical Cyclone Freddy, several media houses in Malawi, including Times Media Group, Malawi Broadcasting Corporation, and Zodiak, played pivotal roles in enhancing early warning and preparedness by broadcasting information about the impending cyclone during weather forecasting programs. They also shared emergency information, coordinated rescue and relief efforts, and facilitated communication among government agencies, local NGOs, and the international community.

1.2. Problem Statement

Although mass media has been increasingly used as essential communication and collaboration tools for disaster management and relief, not all communities have benefited equally due to social inequality in access and usage of mass media information (Xiao et al., 2015; Adekola et al., 2020). Social inequality leads to a "digital divide," which refers to the gap between groups who have access to information and communication technology and groups who do not (Xiao et al., 2015). According to Karaye (2019), rural communities often have people who do not have access to this technology or face challenges in seeking information with the specific technology. These people are vulnerable. Lower socioeconomic status individuals, people with disabilities, elderly individuals, isolated people, and marginalized groups fall within this vulnerable community category (Karanasios, 2019).

For instance, during the 2019 Tropical Cyclone Idai, it was observed that communities in rural Malawi struggled to receive timely information about the cyclone's impacts, leading to higher casualties and property loss. This digital divide poses a significant challenge to efficient disaster management and response in these areas.

Despite extensive research on mass media in disaster management, a gap exists in understanding how rural or vulnerable communities inefficiently utilize mass media for disaster management. This study aims to explore the factors influencing mass media use for disaster management, specifically addressing the digital divide in T/A Likoswe, Chiradzulu, heavily impacted by Tropical Cyclones Ana, Gombe, Idai, and more recently, Tropical Cyclone Freddy.

1.3. OBJECTIVES

1.3.1. Main objective

The primary objective of this study is to explore the factors affecting the utilization of mass media in disaster management by rural or vulnerable communities.

1.3.2. Specific Objectives

- To determine the extent to which rural access and utilize mass media in disaster management
- To analyze the factors that hinder use of mass media for disaster management in rural communities
- To evaluate the effectiveness of mass media as a disaster management tool.

1.3.3. Research Questions

- How do people in rural and vulnerable communities access and utilize mass media communication in disaster management?
- What factors hinder use of mass media in disaster management in rural communities?
- How effective is mass media in disaster management among rural communities?

1.4. Significance of the Study

This study on exploring factors affecting the use of mass media for disaster management by rural communities holds significant importance for various stakeholders, including policymakers and disaster management groups for both government and non-governmental organizations, and community leaders. The findings of this research will offer valuable insights into the challenges faced by marginalized communities in utilizing mass media during disasters.

1.4.1. Reducing Inequality

The "digital divide" and social inequalities in access to mass media are significant challenges. Study helped to identify specific barriers that hinder vulnerable and rural communities' access and usage of mass media. This knowledge gained helps to drive interventions aimed at reducing these inequalities, ensuring that all segments of the population can benefit from mass media during disasters.

1.4.2. Data-Driven Decision-Making

By providing empirical evidence on the factors influencing mass media usage, the research supports data-driven decision-making in disaster management. It helps to guide resource

allocation, communication strategies, and disaster preparedness efforts to make them more effective and responsive to the needs of rural and vulnerable communities.

1.4.3. Community Involvement

The study underscores the importance of community involvement in disaster management. It highlights the challenges faced by rural communities and will foster a more community-centric approach to disaster risk reduction. This approach will empower local leaders and communities to take an active role in their disaster preparedness.

1.4.4. International Relevance

The lessons learned from the study in Malawi can also be relevant to other countries facing similar challenges. Mass media and communication are universal tools in disaster management and findings may be applicable in different context

1.4.5. Align working with National disaster risk communication Framework

The Malawi National Disaster Communication Framework, which serves as the country's comprehensive guideline for effective disaster communication, recognizes the critical role of effective communication in disaster management. The framework emphasizes the need for timely, accurate, and accessible information dissemination to rural and vulnerable communities during disasters. This research aligns with the framework's objectives, shedding light on the practical challenges and opportunities in implementing communication strategies for rural disaster management.

The National Disaster Risk Management Communication Strategy (2014 – 2018) delineates the communication plans and techniques for managing disaster risks in Malawi. This strategy acknowledges the significant impact that disasters can have on the country's socio-economic progress and its ability to achieve its development goals, as articulated in the Malawi Growth and Development Strategy II (MGDS II). Additionally, the document underscores the importance of assessing the effectiveness of various communication methods and their relevance to vulnerable communities. The strategy also underscores the significance of early warning systems and their dissemination to these vulnerable communities. It identifies a variety of channels for disseminating early warnings, including

national and local radio, email, television, print media, internet websites, regional and national workshops, as well as mobile and landline phones.

These insights can guide the development of targeted interventions and strategies that are consistent with the principles outlined in the Malawi National Disaster Communication Framework. The framework emphasizes community involvement, inclusivity, and the importance of local media in reaching rural populations. By understanding how mass media can be harnessed effectively by rural communities, we can directly address the framework's goals. Furthermore, the study's outcomes can contribute to building more inclusive and resilient disaster management strategies that align with the principles set forth in the Malawi National Disaster Communication Framework. This alignment will be of immense benefit to the most vulnerable segments of the population, as the framework focuses on their specific needs and vulnerabilities. By identifying best practices and potential interventions, this research can help realize the framework's vision of strengthening disaster resilience, reducing vulnerabilities, and ultimately saving lives among rural communities in Malawi.

CHAPTER TWO: LITERATURE REVIEW

2.1. Disaster Management in Malawi

In the context of Malawi, disaster management has gained increasing importance due to the country's vulnerability to various natural disasters, primarily related to hydro-

meteorological events such as floods, storms, and droughts (Malawi Country Climate and Development report, 2023).

2.2. Governmental Structure

The cabinet constituting of the head of the state is the top most seconded by The National Disaster Risk Management committee responsible for implementing and coordinating disaster risk management programmes and is composed of the DoDMA secretariat, principal secretaries and ministers and members of civil society organization and private sectors who advise the ministry on all matters relating to disaster risk management, advise and make recommendations to the president through the minister , on matters relating to declaration of the state of disasters among others.

The National Disaster Risk Management Technical committee provides technical advice and guidance to the national committee relating to the application of DRM Act and any other written law relating to disaster risk management.

The Department of Disaster Management Affairs (DoDMA) is the primary government agency responsible for coordinating disaster risk reduction and response efforts in Malawi. DoDMA works closely with other government ministries, departments, and agencies, as well as non-governmental organizations (NGOs), international partners, and local communities, to implement disaster management strategies and initiatives.

National Disaster Risk Management Technical sub-committee is responsible for advising the national technical committee matters relating to thematic area in all components of disaster risk management and exercise any other powers or perform any other function as stipulated in operational guidelines for disaster risk management or any other regulations made under DRM Act. The technical sub-committees function as clusters during times of disaster preparedness, response and recovery.

The Local authority disaster risk management committees. These include the disaster management office at the district council, head of planning, council executive committees, area and village DRM committees at the traditional authority and village level responsible for disaster risk management activities.

Risk Assessment and Preparedness. Malawi conducts risk assessments to identify areas prone to different types of disasters and assess the vulnerability of communities and infrastructure. Based on these assessments, preparedness measures are implemented, including early warning systems, contingency planning, and capacity building activities aimed at enhancing disaster response capabilities at the local and national levels.

Early Warning Systems. The country has established early warning systems to provide timely alerts and information to communities at risk of disasters. These systems utilize various communication channels, including radio broadcasts, SMS alerts, sirens, and community-based networks, to disseminate warnings and advisories ahead of impending hazards such as floods, storms, and droughts.

Response and Relief Efforts. In the event of a disaster, Malawi activates its emergency response mechanisms to provide immediate assistance to affected populations. This includes search and rescue operations, emergency medical care, distribution of relief supplies (food, water, shelter), and the establishment of temporary shelters for displaced persons.

Recovery and Rehabilitation. Following a disaster, efforts focus on recovery and rehabilitation to restore affected communities and infrastructure to pre-disaster conditions or better. This involves rebuilding homes, repairing infrastructure, restoring livelihoods, and addressing the psychosocial needs of affected individuals and communities.

Community Participation and Capacity Building. Disaster management in Malawi emphasizes the importance of community participation and empowerment. Local communities are actively involved in decision-making processes, risk reduction activities, and response efforts. Capacity building initiatives are conducted to enhance the resilience of communities, including training in first aid, disaster preparedness, and sustainable livelihood practices.

Policy and Legislative Framework. Malawi has developed policy and legislative frameworks to guide disaster management efforts. The Disaster Risk Management Bill, 2023 provides the legal basis for disaster management activities, while the National

Disaster Risk Management Policy outlines the government's approach to disaster risk reduction and resilience-building.

International Cooperation: Malawi collaborates with regional and international partners, including the United Nations, African Union, and donor agencies, to strengthen its disaster management capabilities. This includes receiving technical assistance, financial support, and capacity building initiatives to enhance the country's resilience to disasters and climate change impacts.

2.3. The Role Of mass Media in Disaster Management in Malawi

Mass media plays a crucial role in disaster management in Malawi by facilitating communication, raising awareness, and disseminating vital information before, during, and after disasters. Local media outlets such as radio stations, television channels, newspapers, and online news platforms serve as primary channels for delivering emergency messages, warnings, and updates to the public. Here are some key aspects of mass media's role in disaster management in Malawi.

Dissemination of Early Warnings and Alerts. Mass media platforms are utilized to disseminate early warnings and alerts to communities at risk of disasters. Radio stations broadcast weather forecasts, flood warnings, and other hazard-related information, while television channels and online news platforms display emergency messages and advisories to a wider audience. These early warnings help communities prepare for impending disasters and take necessary precautions to minimize risks.

Emergency Communication during Disaster. During disasters, mass media outlets serve as vital communication channels for delivering emergency messages, evacuation instructions, and updates on the situation to affected populations. Radio stations broadcast live updates, emergency contact details, and information on shelter locations, while television channels provide visual coverage of unfolding events and interviews with emergency responders. Online news platforms and social media networks also play a role in disseminating real-time information to a broader audience.

Public Awareness and Education. Mass media platforms are used to raise public awareness about disaster preparedness, mitigation measures, and response procedures. Radio programs, television documentaries, newspaper articles, and online campaigns educate the public about the risks associated with different types of disasters and provide guidance on how to stay safe during emergencies. Public service announcements (PSAs) and educational materials distributed through mass media channels help empower communities to take proactive steps to protect themselves and their families.

Coordination of Relief Efforts. Mass media outlets facilitate the coordination of relief efforts by serving as communication hubs for government agencies, humanitarian organizations, and volunteers involved in disaster response activities. Radio stations broadcast appeals for donations, volunteer recruitment drives, and information on relief distribution centers, while television channels provide coverage of relief operations and interviews with relief workers. Mass media platforms also help mobilize public support and donations for affected communities.

Community Engagement and Participation. Mass media platforms promote community engagement and participation in disaster management initiatives by providing opportunities for public feedback, discussion, and involvement. Radio call-in shows, televised town hall meetings, and online forums enable community members to share their experiences, express concerns, and contribute ideas for improving disaster preparedness and response efforts. Mass media outlets amplify the voices of local communities and empower them to play an active role in shaping disaster management policies and programs.

Crisis Communication and Public Relations. Mass media outlets play a crucial role in crisis communication and public relations during disasters by providing accurate, timely, and reliable information to the public. Journalists and media professionals work closely with government officials, emergency responders, and subject matter experts to verify facts, counter misinformation, and address rumors circulating in the aftermath of a disaster. Mass media coverage helps build trust, transparency, and accountability in disaster management

efforts, fostering greater public confidence in the authorities' ability to respond effectively to emergencies.

The role of mass media in disaster management in Malawi cannot be underestimated. During past disasters, local media outlets like Zodiak, Malawi Broadcasting Corporation, and Malawi Nyasa Times (formerly Matindi FM) played crucial roles in disseminating timely information. They provided evacuation instructions, emergency contact details, and real-time updates on flood levels, ultimately contributing to more effective disaster response efforts and saving lives (DoDMA, 2023). Furthermore, the Department of Climate and Meteorological Services in Malawi actively collaborates with various media houses to enhance early warning and preparedness. Media organizations like Times Media Group and Zodiak have been instrumental in broadcasting information about impending weather events during weather forecasting programs, aiding in disaster preparedness efforts (Kapoor, 2015).

2.4. Digital Divide and Mass Media Access in Malawi

The digital divide and mass media access in Malawi refer to disparities in access to information and communication technology (ICT), including mass media platforms, among different population groups within the country. These disparities are influenced by factors such as geographic location, socioeconomic status, education level, infrastructure development, and government policies.

Despite the pivotal role of mass media in disaster management, it's essential to acknowledge the existence of a digital divide in Malawi, which affects the equitable access and utilization of mass media information. In 2023, Malawi's internet penetration rate stood at 24.4%, with a relatively small percentage (3.8%) actively using social media platforms. These figures indicate disparities in access to technology, particularly in rural and vulnerable communities (Kemp, 2023). Social inequality leads to the 'digital divide,' where certain groups have limited access to information and communication technology, hindering their ability to use mass media effectively for disaster management. Vulnerable populations, including those with lower socioeconomic status, people with disabilities,

older individuals, isolated communities, and marginalized groups, are disproportionately affected by this divide (Adekola et al., 2020).

2.4.1. Internet Penetration and Connectivity

Malawi has relatively low internet penetration rates compared to other countries, with access primarily concentrated in urban areas. According to data, as of the proposal's writing in 2023, Malawi's internet penetration rate stood at 24.4%. The availability of internet infrastructure, including broadband connections and mobile networks, is limited in rural and remote areas, contributing to disparities in internet access across the country.

2.4.2. Social Media Usage in Malawi

While social media platforms have gained popularity globally, their usage in Malawi remains limited, particularly among rural and less affluent populations. As of 2023, only 3.8% of Malawi's population actively used social media platforms. This low adoption rate can be attributed to factors such as limited internet access, low digital literacy, and cultural preferences for traditional media sources.

2.4.3. Traditional Mass Media

Despite challenges with internet access and social media usage, traditional mass media platforms such as radio, television, and newspapers remain the primary sources of information for many Malawians, especially those in rural areas. Radio, in particular, is widely accessible and serves as a vital communication tool for disseminating news, information, and entertainment to diverse audiences across the country.

2.4.4. Urban-Rural Disparities

There are significant disparities in mass media access between urban and rural areas in Malawi. Urban centers tend to have better infrastructure, including access to electricity and telecommunications networks, which facilitates greater access to mass media platforms. In contrast, rural communities often lack basic infrastructure and face challenges accessing mass media due to limited coverage, affordability issues, and lower levels of digital literacy.

2.4.5. Socioeconomic Factors.

Socioeconomic factors, such as income level, education, and occupation, also influence mass media access in Malawi. Wealthier and more educated individuals are more likely to have access to ICT devices and internet connectivity, enabling them to access a wider range of mass media sources compared to those with lower socioeconomic status.

2.4.6. Government Policies and Initiatives

Government policies and initiatives play a crucial role in addressing the digital divide and promoting mass media access in Malawi. Efforts to expand internet infrastructure, improve digital literacy, and increase affordability of ICT services are essential for bridging the gap between urban and rural areas and ensuring equitable access to mass media platforms for all citizens.

2.4.7. International Perspectives

A study by Smith et al. (2018) examined disaster management practices in Japan, highlighting the country's advanced early warning systems and community resilience initiatives. By comparing Japan's approach to disaster communication with that of Malawi, researchers can draw insights on effective strategies for leveraging mass media in disaster-prone regions with varying socio-economic contexts.

2.4.8. Technological Advancements.

Research by Lee and Kim (2020) explored the use of drones for disaster response and communication in South Korea. The study demonstrated how drone technology can enhance situational awareness and information dissemination during emergencies. By integrating drone technology with mass media platforms, Malawi could improve its disaster communication infrastructure and reach remote communities more effectively.

2.4.9. Community Participation

The Community-Based Disaster Risk Management (CBDRM) program in the Philippines, as studied by Santos et al. (2019), emphasized the importance of community engagement in disaster preparedness and response. By involving local residents in risk assessment, planning, and communication efforts, the program achieved higher levels of community

resilience. Lessons from the CBDRM approach can inform strategies for enhancing community participation in disaster management initiatives in Malawi.

2.5. Studies on Mass Media and Disaster Management in Malawi

Several studies have explored the role of mass media in disaster management within the Malawian context. Ngamassi, Mulongo, and Hamarat (2016) examined the use of mass media in disaster management in Cameroon, providing insights relevant to neighboring countries like Malawi. Additionally, Ramakrishnan, Gopalakrishnan, and Chakraborty (2019) discussed social media's emerging role in disaster management, which is increasingly relevant in Malawi as internet access grows.

Giroux et al.'s 2013 study explored the use of information and communication technology (ICT) and social media in disaster scenarios, highlighting the opportunities and risks for government organizations and individuals involved in disaster management. Their findings showed that these entities leverage existing social networks through social media platforms for acquiring and disseminating vital information for disaster warnings and evacuation planning. Furthermore, Regmi et al.'s 2022 study examined the barriers and enablers of social media usage in disaster management. It identified various challenges, including regulatory, software, physical, authenticity, cultural, and demographic factors that hinder effective social media usage in disaster management.

Overall, the digital divide and mass media access in Malawi pose significant challenges to inclusive communication and information dissemination, particularly in the context of disaster management. Addressing these disparities requires coordinated efforts from government, private sector, civil society, and international partners to promote digital inclusion, expand infrastructure, and enhance access to mass media platforms for all.

However, while existing research offers valuable insights into the subject, there remains a gap in understanding how rural and vulnerable communities in Malawi inefficiently utilize mass media for disaster management, as well as the specific factors influencing mass media usage in these contexts (Ngamassi, Mulongo, & Hamarat, 2016

CHAPTER THREE: METHODOLOGY

3.1. Research Design

This research employed a mixed-methods approach, combining quantitative and qualitative data collection and analysis techniques. The mixed-methods design was chosen

to offer a comprehensive understanding of the factors affecting mass media use in disaster management by rural communities. Quantitative data provided measurable insights into access, usage patterns, and barriers, while qualitative data offered in-depth perspectives from community members and key informants.

3.2. Study Area

The study was conducted in Chiradzulu District, located in the southern region of Malawi. The district has a population of 356,875 people and a population density of 469 people per square kilometer, covering a total area of 767 km². Traditional Authority Likoswe, where the study focused, has a population of 68,321 (NSO, 2018). This area is particularly relevant due to its vulnerability to natural disasters, including Tropical Cyclones Ana, Gombe, Idai, and Freddy, which resulted in significant losses of lives, animals, and properties. The frequent occurrence of these disasters makes T/A Likoswe an ideal location to investigate the factors affecting mass media usage for disaster management in rural communities.

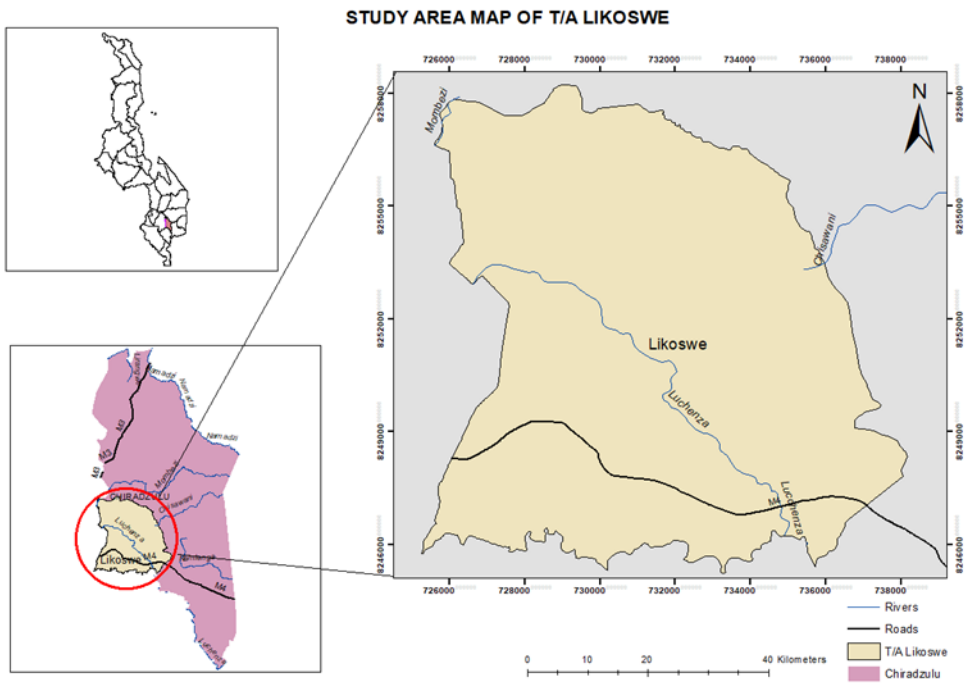


Figure 1: The Map of T/A Likoswe

3.3. Data Collection Methods

3.3.1. Qualitative Data Collection

Semi-structured interviews and key informant interviews were utilized to capture in-depth insights from participants. These methods allowed for the exploration of community perspectives and experiences related to mass media usage during disasters. The semi-structured interviews involved open-ended questions, enabling participants to provide detailed responses and share their personal experiences.

3.3.2. Quantitative Data Collection

A survey questionnaire was administered to residents in the study area. The questionnaire focused on demographic characteristics, mass media access and utilization, barriers to usage, and effectiveness evaluation. It included multiple-choice and open-ended questions to gather comprehensive data. The survey was translated into Chichewa to ensure participants' full understanding and accurate responses

3.3.3. Sampling Strategy

A purposive sampling strategy was employed to select participants for the survey questionnaire and key informant interviews. For the survey, households in the most affected village were selected to ensure a representative sample of the community. By including adults aged 18 and above in the survey, the study targeted individuals with direct experience of the disaster event, enhancing the relevance and reliability of the data collected.

Key informants, including the Desk Officer for Disaster Management and members of the Village Civil Protection Committee, were selected based on their expertise and involvement in disaster response efforts. Their insights provided valuable perspectives on the current state of mass media utilization in disaster management and complemented the data gathered from community members.

Additionally, efforts were made to respect cultural norms and language preferences during data collection, including the translation of survey questions into the local vernacular

language (Chichewa) to facilitate understanding and participation. By upholding ethical standards and prioritizing participant welfare, this study aimed to conduct research that is respectful, transparent, and beneficial to the rural communities involved.

3.3.3.1. Survey questionnaire

A questionnaire was administered to the subjects in Mtauchira, one of the villages that was mostly hit by mudslides influenced by tropical cyclone Freddy. It was answered by 39 adults whose ages were 18 and above, who are likely to be the ones who experienced the disaster from the area under study. While conducting a survey in this area, households were selected using a purposive sampling technique. Only one respondent was picked at random in each household to represent the entire household's members. The questionnaire was made up of four sections, each with a specific topic. There were four sections 1, 2, 3 and 4 which included demographic characteristics, access and utilization of mass media, factors hindering usage of mass media for disaster management and evaluation of the effectiveness of mass media as a tool in disaster management The last three topics are the specific objects of the main objectives of the study, each with corresponding questions aimed at achieving a particular specific objective. Questions were in English and then were translated into our vernacular language (Chichewa) so that people in the study area could easily understand questions and allow them to be flexible when responding to them

3.3.3.2. Key informant interview

Key informants included the Desk Officer for Disaster Management in Chiradzulu District,

Who is also a member of the District Civil Protection Committee (DCPC), Chair

From the Village Civil Protection Committee. Key informants were interviewed for the

Validity of the data. Both online and face-to-face interviews were employed with the key

Informant.

3.3.3.3. Desk study

Existing documents, such as government reports, academic studies, and media coverage of past disaster events, were reviewed to provide background information and contextualize the findings of the study. Document analysis helped validate the survey and interview data, identify trends, and understand the broader socio-economic factors influencing mass media utilization in rural areas.

3.4. Data Analysis

3.4.1. Quantitative Data Analysis

A computation was made of the data collected to establish frequencies and percentages. Then data was presented in tables, pie charts and graphs, and then data was interpreted and described as it has been presented in the section below (results and discussion).

Survey responses were analyzed using descriptive statistics, such as frequencies and percentages, to summarize the data. The analysis was conducted using SPSS to ensure accuracy and reliability. The results were presented in tables and charts to facilitate interpretation and discussion.

3.4.2. Qualitative Data Analysis

Data from semi-structured interviews and key informant interviews were transcribed and coded into specific themes using thematic analysis. This approach involved identifying patterns, trends, and relationships within the data, which provided a deeper understanding of the factors influencing mass media usage in disaster management. Thematic analysis allowed for the integration of qualitative data with quantitative findings, offering a comprehensive view of the research problem

3.5. Ethical Considerations

Ethical considerations were paramount throughout the research process to ensure the well-being and confidentiality of participants. Informed consent was obtained from all individuals involved in the study, with clear explanations provided regarding the purpose of the research and their rights as participants. Confidentiality measures were implemented to protect the anonymity of respondents and key informants, safeguarding their privacy and sensitive information shared during interviews.

3.6. Limitation of the study

The study period both for data collection and analysis was limited as it was meant for undergraduate students to be submitted in partial fulfillment of the undergraduate degree. Another limitation to the study is that there have been few studies done on factors affecting the use of mass media for disaster management by rural communities. The issue is under research, and thus there are only a limited number of scientific sources in this field. The available literature was, however, sufficient to complete this undergraduate dissertation. Insufficient financial resources also affected the processes throughout the entire project.

CHAPTER 4: RESULTS AND DISCUSSION

In the following section, the findings and the analysis of the data collected will be presented in tables, pie charts and graphs. The discussion will be in line with the objectives set forth in the previous sections (introduction). However, the first part to be addressed is the demographic characteristics, which is not part of specific objectives but so relevant to the study.

DEMOGRAPHIC CHARACTERISTICS

Demographic characteristics of the respondents were assessed in the study area. Findings revealed that demographic characteristics of the respondents varied across households and individuals in the study area.

4.1.1. Gender

A question on gender was included, in order to determine the ratio of participation in the Study, according to gender.

Table 1: Gender distribution

Gender of the Respondents	Frequency	Percent (%)
Male	14	35.9
Female	25	64.1
Total	39	100.0

Source: Primary data

An average of 64.1% (n = 25) and 35.9% (n = 14) of the responders were women and men, respectively. The fact that the survey was done during the daytime, while men were at their respective workplaces, may have contributed to this scenario's occurrence through chance as well as the other explanation. The higher representation of females among respondents underscores the importance of considering gender-specific needs and preferences in disaster management communication strategies

4.1.2. Age

As for age, 38.5% of the respondents were between 18–30 years old, 38.5% were aged between 31-45 years old, 17.9% of the respondents were 46–60 years old, and 5.1% were over 60 years old. This demographic skew towards younger age groups could indicate a higher level of technological literacy and receptivity to mass media channels as it has been summarized in the graph below,

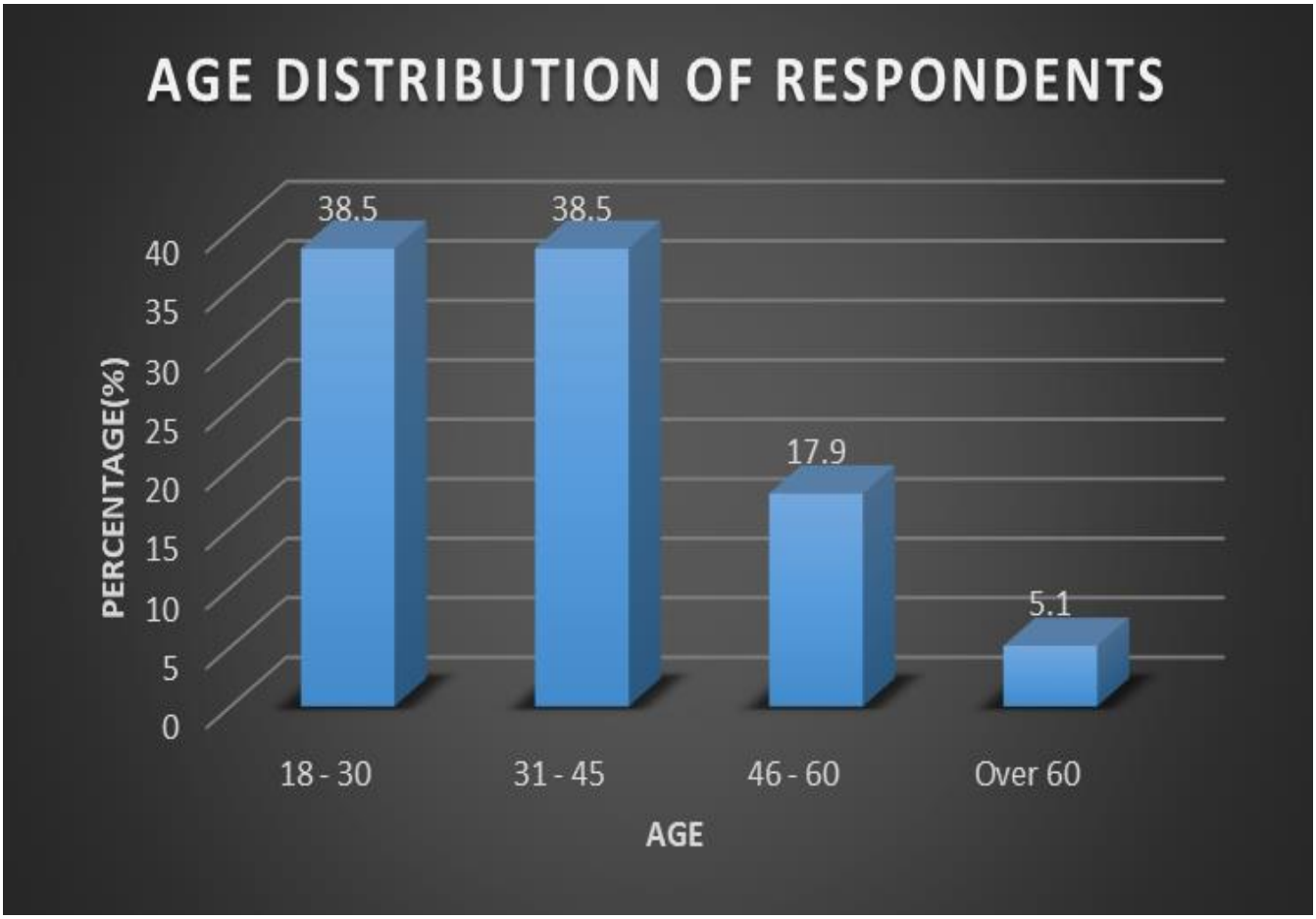


Figure 2 is a graph of gender distribution

Source: primary data

4.1.3. Level of Education

A question on education background was included to establish the educational level of the respondents in the study. Information on education was relevant because the level of education of participants has an impact on the rate at which awareness programmes on mitigation, preparedness and post-disaster strategies are incorporated into reducing the vulnerability of affected individuals and communities (Maferetlhane, 2012). Therefore with reference to education, 53.8% of the respondents had gone up to primary education, implying little literacy level, particularly on issues demanding broad understanding and for critical analysis. 5.1% of the respondents never attended school; this indicated very poor literacy level. 33.3% had attended secondary while only 7.7% had attended tertiary education, as indicated in figure 3 below.

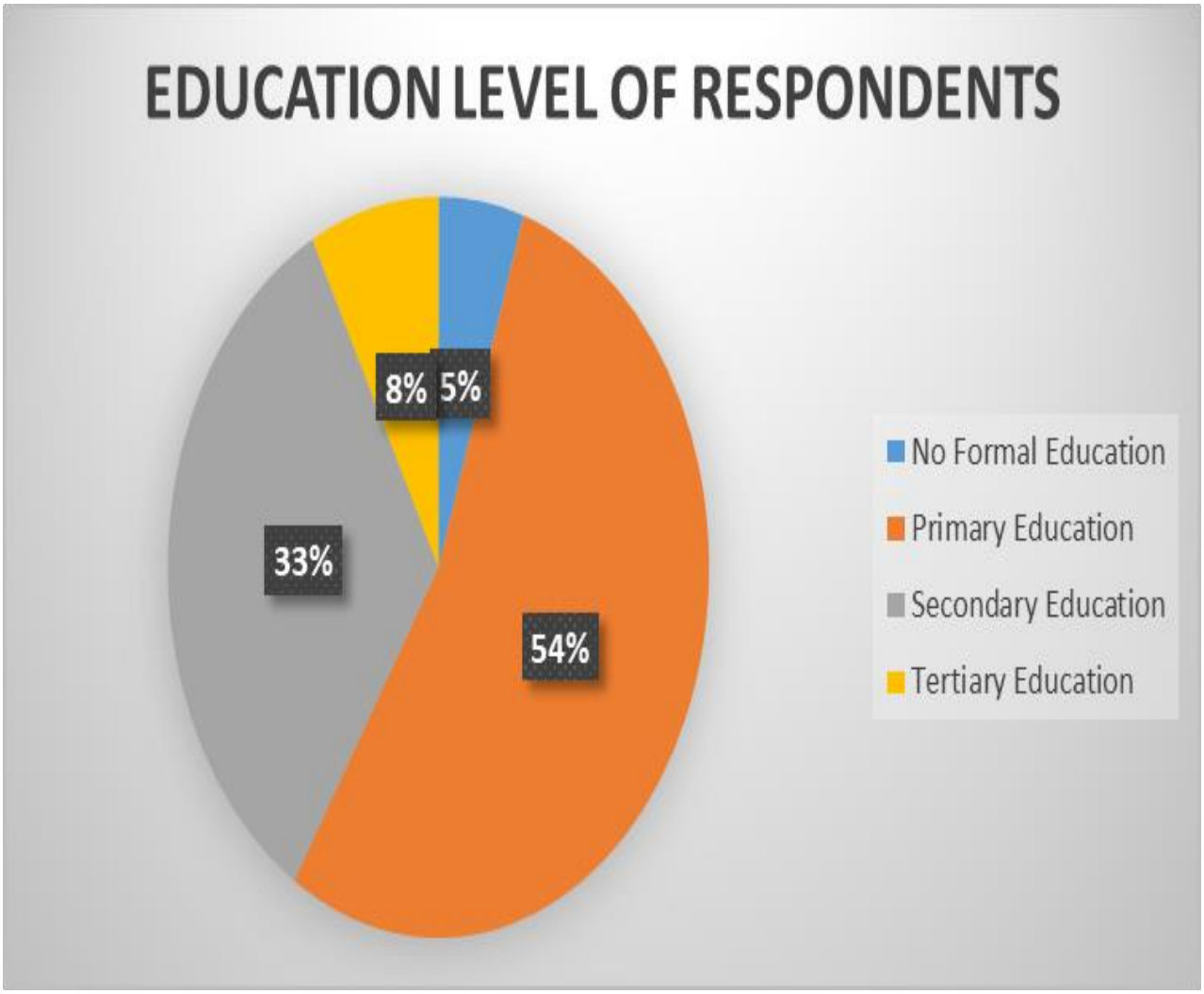


Figure 3 is a pie chart of level of education of the respondent

Source: primary data

According to Ngailo et al. (2007), having a high level of education is important for someone trying to end poverty since they can more easily use it to start other forms of employment than someone with a low level of education. In light of this perspective, the study area has a low literacy rate, which suggests that people value education but have insufficient access to education and find it more challenging to understand and interpret disaster-related messages. The low level of education was also cited by the district disaster risk management officer (DRMO) of Chiradzulu district as a contributory factor to the low appreciation of disaster issues and some of the decisions taken by communities in the event

of a disaster. The prevalence of respondents with primary and secondary education levels highlights the need for communication approaches that cater to varying literacy levels within rural communities. However, the presence of respondents with tertiary education suggests potential pockets of higher literacy and perhaps greater access to information

4.1.4. Occupation of the Respondents

As for occupation, 7.7% respondents were employed, 28.2% were unemployed, 17.9% were farmers, 2.6% were students and 43.6% indicated others as shown in the table below.

Table 2: Occupation of respondents

Occupation of the Respondents	Frequency	Percent (%)
Employed	3	7.7
Unemployed	11	28.2
Farmer	7	17.9
Student	1	2.6
Others	17	43.6
Total	39	100.0

Source: Primary data

Employed respondents likely include individuals with regular access to formal communication channels due to their employment status. They may have access to workplace communication tools or may be more inclined to seek information through mainstream media outlets. Employed individuals might prioritize efficiency and reliability in accessing disaster management information. They may prefer concise and readily available information sources that align with their work schedules. Unemployed respondents may rely more heavily on mass media for disaster management information due to potentially limited access to other sources. However, financial constraints could still

impact their ability to access certain media channels or technologies. Despite having more time available, unemployed individuals may face barriers such as affordability of internet or electricity, which can affect their engagement with mass media for disaster management. Farmers constitute a significant portion of rural communities and may have specific information needs related to agricultural practices during disasters, such as weather forecasts, crop protection measures, and market conditions. Given their reliance on weather-dependent activities and potential vulnerability to natural disasters, farmers may actively seek out information through mass media channels that offer relevant agricultural advice and disaster preparedness tips. Students may engage with mass media platforms for various purposes, including academic, social, and informational needs. Their media consumption patterns may be influenced by factors such as academic requirements, peer influence, and personal interest. While students may not represent a significant portion of the workforce, their media usage habits can provide insights into emerging trends in information consumption and preferences among younger demographics within rural communities. Others (43.6%), this category encompasses a diverse range of occupations or statuses not explicitly mentioned in the provided data. It could include small business owners, homemakers, retirees, or individuals engaged in informal sector activities. The wide-ranging nature of this category suggests a heterogeneity of information needs and preferences within rural communities. Understanding the specific occupational contexts and lifestyle factors of these individuals is essential for tailoring communication strategies effectively.

4.1.5. Monthly Income of the Respondents

Among the respondents, 56.4% have a monthly income of below k10, 000. 30.8% an income ranging from k10, 000 to k50, 000. 5.1% an income ranging from k50, 000 to k100, 000 and 7.7% an income ranging from k100, 000 to k500, 000.Income level directly impacts individuals' affordability and access to media technologies, as well as the quality and diversity of information sources they can access. The figure 4 below shows the monthly income level of the respondents.

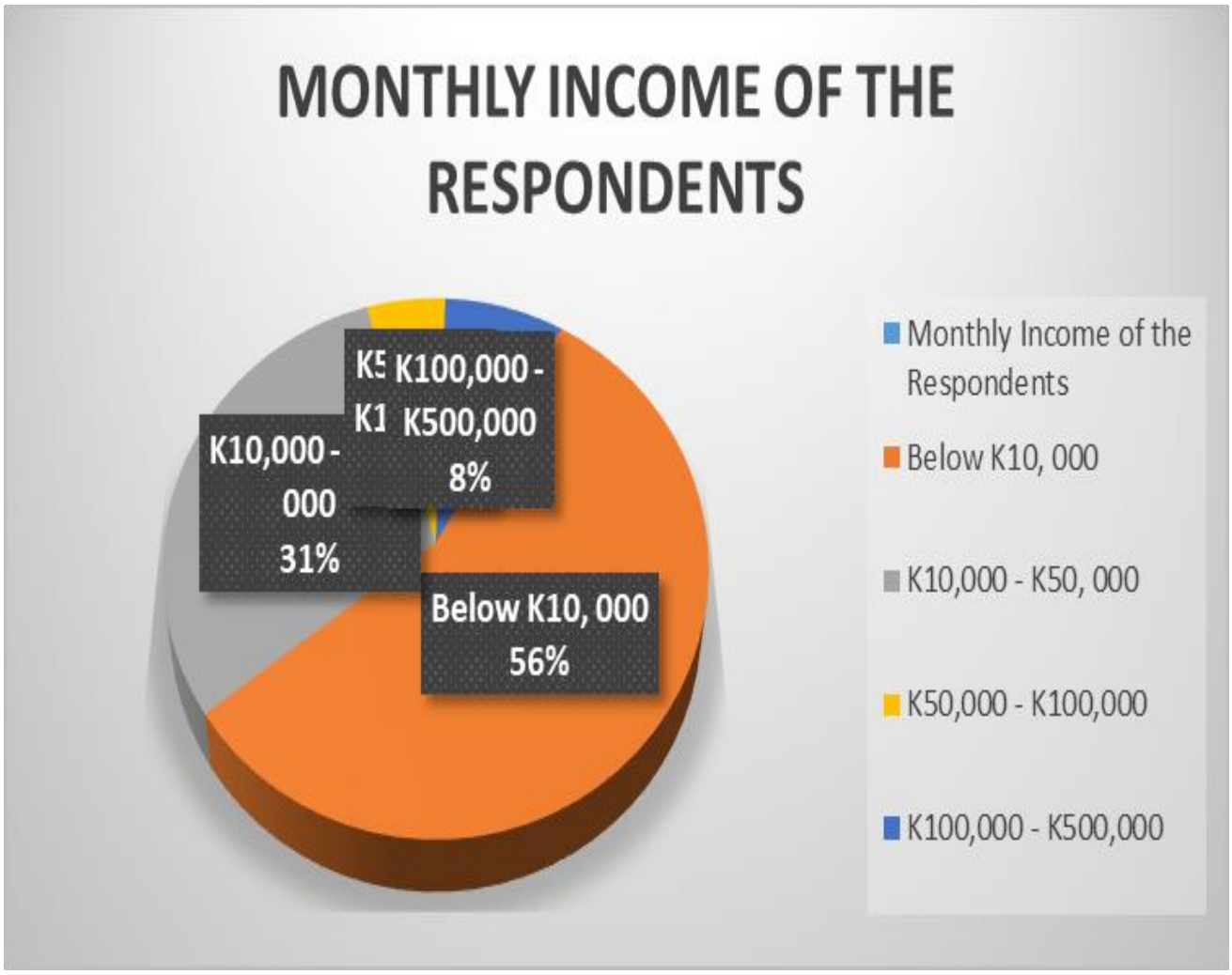


Figure 4 is a pie chart of level of monthly income of the respondents

Source: primary data

56.4% of the respondents have a monthly income level below k10, 000.The majority of respondents fall into this income bracket, indicating a prevalent lower socioeconomic status within the Mtauchira village. Individuals in this income range face significant financial constraints, affecting their ability to afford certain media technologies or access paid information sources. Media platforms that are free or low-cost, such as radio broadcasts or community newspapers, may be more widely accessed among this demographic. However, limitations in infrastructure and connectivity could still pose barriers to information access.

30.8% of the respondents have a monthly income range from K10, 000 to K50 000. This income bracket represents a slightly higher socioeconomic status compared to the lowest income group. Individuals in this range may have relatively better access to media technologies and may allocate a portion of their budget to information consumption. While affordability constraints may still exist, individuals in this income range may have more flexibility in choosing media channels and accessing a wider range of information sources compared to those in the lowest income bracket.

5.1% represents a smaller segment with slightly higher disposable income levels ranging from k50, 000 to k100, 000.They may have greater access to digital media platforms and may prioritize quality and reliability in the information they consume. Individuals in this income bracket may be more inclined to invest in technologies such as smartphones or internet subscriptions, expanding their access to online news sources and social media platforms for disaster management information.

7.7% represents a relatively affluent segment within the Mtauchira population. Individuals in this group likely have better access to a variety of media channels and may prioritize convenience and customization in their information consumption habits. Higher-income individuals may rely on a mix of traditional and digital media sources for disaster management information, including television, internet-based news platforms, and subscription services. They may also have greater access to specialized information sources or disaster management apps.

4.2. ACCESS AND UTILIZATION OF MASS MEDIA

4.2.1. Access to Mass Media

The majority of respondents (74.4%) reported having access to mass media, while 25.6% indicated otherwise as shown below in the table.

Table 3: Respondents who have Access to Mass Media

Respondents who have Access to Mass Media	Frequency	Percent (%)
Yes	29	74.4
No	10	25.6
Total	39	100.0

Source: primary data

The majority of respondents (74.4%) having access to mass media aligns with the increasing penetration of communication technologies, particularly mobile phones, even in rural areas. This accessibility lays a foundation for leveraging mass media platforms for disseminating disaster-related information.

4.2.2. Channels of Mass Media Accessed

Among those with access, 77.7% accessed radios, 22.2% accessed phones and 0.1% accessed the internet as shown in the table below.

Table 4: The Kind of Mass Media Accessed by the Respondents

The Kind of Mass Media Accessed by the Respondents	Frequency	Percent (%)
Radio	28	77.7
Phone	8	22.2
Internet	3	0.1
Total	39	100.0

Source: primary data

The popularity of mobile phones as a mass media channel indicates the potential for leveraging mobile-based communication tools, such as SMS alerts and mobile applications, for disaster management purposes. However, the significant reliance on radio highlights its enduring relevance as a reliable communication tool in rural settings, likely due to its accessibility and low cost.

4.2.3. Frequency of Accessing Mass Media Channels in a Week

61.5% of respondents' access mass media channels daily, 7.7% access once a week, 7.7% access rarely and 23.1% never access mass media channels as shown in the table below.

Table 5: The frequency of the Respondents to Access Mass Media Channels in a Week

The frequency of the Respondents to Access Mass Media Channels in a Week	Frequency	Percent (%)
Daily	24	61.5
Once in a Week	3	7.7
Rarely	3	7.7
Never	9	23.1
Total	39	100.0

Source: primary data

The frequent usage of mass media channels, particularly on a daily basis, suggests that rural communities are accustomed to incorporating mass media into their daily routines. However, the variation in usage duration underscores the importance of concise and impactful messaging, considering potential attention spans and competing demands on individuals' time. The fact that a significant portion of respondents (61.5%) access mass media channels daily indicates that these channels are frequently utilized and this usage can be leveraged for timely dissemination of disaster-related information and updates.

4.2.4. Mass Media Relied Upon During Disasters

Among respondents, the reliance on various mass media during disasters showed 2.6% relies on television, 12.8% relies on Social Media Platforms, 48.7% relies on Radio and : 5.1% relies on internet while 30.8% indicated to rely on other channels as shown in the table below.

Table 6: Mass Media Relied by the Respondents during Disasters to get Information

Mass Media Relied by the Respondents During Disasters to get Information	Frequency	Percent (%)
Television	1	2.6
Social Media Platforms	5	12.8
Radio	19	48.7
Internet	2	5.1
Others	12	30.8
Total	39	100.0

Source: primary data

Radio emerges as the most relied-upon mass media during disasters (48.7%), followed by social media platforms (12.8%). This suggests that traditional media channels like radio continue to hold significance in disaster communication efforts. The preference for radio during disasters emphasizes its role as a trusted source of real-time information, especially in situations where other communication infrastructures may be compromised.

4.2.5. Frequency of Mass Media Usage in the Past

The frequency of mass media usage in the past among respondents showed that 41.0% used it from zero to 2 times, 10.3% from 3 to 5, 12.8% 6 to 10 times and 35.9% More than 10 Times, the table below shows the information.

Table 7: The Number of Times in which Respondents Used Mass Media in the Past

The Number of Times in which Respondents Used Mass Media in the Past	Frequency	Percent (%)
0 - 2 Times	16	41.0
3 - 5 Times	4	10.3
6 - 10 Times	5	12.8
More than 10 Times	14	35.9
Total	39	100.0

Source: primary data

A considerable portion of respondents (35.9%) reported using mass media more than 10 times in the past. This indicates a proactive approach to seeking information during disaster situations.

4.3. FACTORS THAT HINDER THE USAGE OF MASS MEDIA FOR DISASTER MANAGEMENT

Various socio-economic factors hinder the use of mass media for disaster management in rural communities. Among the respondents 33.3% indicated lack of electricity, 20.5% indicated language barriers, 5.1% indicated poor internet connectivity and 41.0% indicated financial constraints as shown in the graph below.

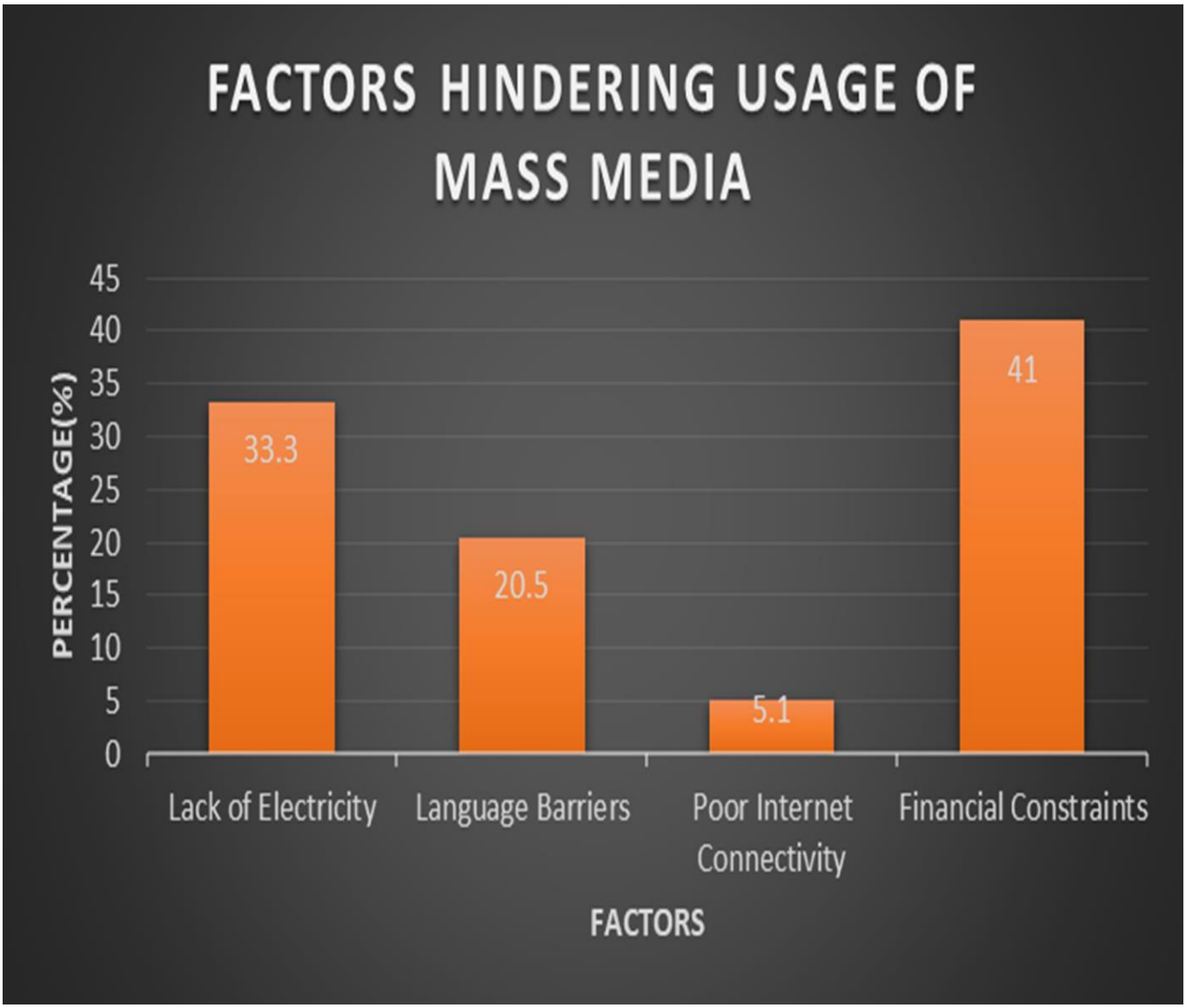


Figure 5 is a graph showing factors hindering usage of mass media in disaster management by the people of Mtauchira community

Source: primary data

4.3.1. Lack of Electricity

The significant percentage (33.3%) of respondents citing lack of electricity as a hindrance underscores a critical infrastructure challenge. This suggests that without reliable electricity access, rural communities' struggles to access mass media platforms during disasters, limiting their ability to receive timely information and updates.

4.3.2. Language Barriers

Another notable barrier (20.5%) identified is language. This implies that there may be a mismatch between the language used in mass media communications and the languages spoken within rural communities. Addressing language barriers could involve providing information in local languages or implementing translation services to ensure effective communication to all dialects.

4.3.3. Poor Internet Connectivity

Although a smaller percentage (5.1%), poor internet connectivity remains a notable challenge. This indicates that even when electricity is available, the lack of reliable internet access poses a barrier to utilizing online mass media resources for disaster management.

4.3.4. Financial Constraints

The highest percentage (41.0%) of respondents reporting financial constraints suggests that economic factors significantly impact the ability of rural communities to access and utilize mass media for disaster management. This highlights the importance of considering affordability and access to resources when implementing disaster communication strategies.

4.3.5. Awareness of Information Availability

A majority of respondents (66.7%) indicated a lack of awareness about the availability of disaster-related information through mass media as shown below in the figure

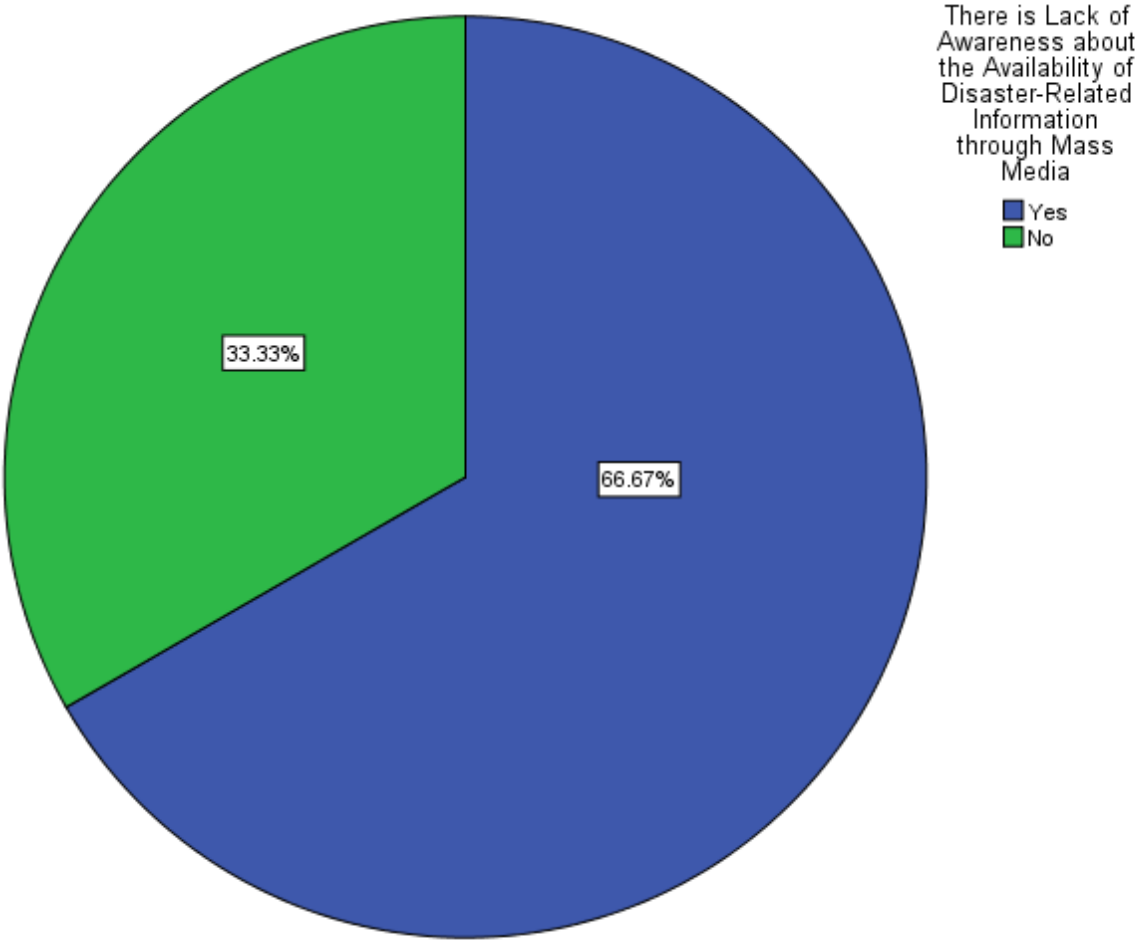


Figure 6 is a pie chart showing awareness about the availability of the disaster-related information through mass media

Source: primary data

The majority of respondents (66.7%) indicating awareness of disaster-related information through mass media is promising. However, the significant percentage (33.3%) unaware of this information highlights an awareness gap that needs to be addressed. Ensuring that rural communities are informed about the availability of disaster-related information through mass media is crucial for effective disaster preparedness and response.

EVALUATION OF THE EFFECTIVENESS OF MASS MEDIA AS A TOOL IN DISASTER MANAGEMENT

Perception of timeliness of Information provided by mass Media during disaster

Respondents' perception of the timeliness of information provided by mass media during disasters varied. A significant portion perceived the information to be somewhat timely (38.5%), while 17.9% found it to be very timely. However, a considerable portion (28.2%) considered the information not timely. The table below shows the results.

Table 8: How Respondents perceive the timeliness of Information Provided by Mass Media during Disaster

How Respondents Perceive the Information Provided by Mass Media During Disaster	Frequency	Percent (%)
Very Timely	7	17.9
Timely	6	15.4
Somewhat Timely	15	38.5
Not Timely	11	28.2
Total	39	100.0

Source: primary data

A significant portion of respondents viewed the information provided by mass media during disasters as somewhat timely. This suggests that while mass media channels are delivering information, there may be room for improvement in ensuring timely updates during critical situations. The fact that a notable percentage considered the information not timely indicates a potential gap in communication effectiveness.

4.3.6. Encounter with Misinformation or Rumors Spread Through Mass Media during Disasters

Nearly half of the respondents (53.8%) reported encountering misinformation or rumors spread through mass media during disasters, indicating a potential challenge in the accuracy of information dissemination during such events. The table below shows the results.

Table 9: The Respondents Encountering Misinformation or Rumors Spread Through Mass Media during Disasters

Respondents Encountering Misinformation or Rumors Spread Through Mass Media During Disasters	Frequency	Percent (%)
Yes	18	53.8
No	21	46.2
Total	39	100.0

Source: primary data

The high percentage of respondents reporting encountering misinformation or rumors through mass media during disasters raises concerns about the reliability of information dissemination. This highlights the importance of ensuring accuracy and credibility in the information shared by media outlets, as misinformation can lead to confusion and undermine disaster response efforts.

4.3.7. Belief in Mass Media's Role in Raising Awareness about Disaster Preparedness

The extent to which respondents believed that mass media helps in raising awareness about disaster preparedness varied. A notable portion (33.3%) believed it to a great extent, while 41.0% believed it to a little extent. The table below shows the results.

Table 10: The Extent of Believing that Mass Media Helps in Raising Awareness about Disaster Preparedness

The Extent of Believing that Mass Media Helps in Raising Awareness about Disaster Preparedness	Frequency	Percent (%)
To a Great Extent	13	33.3
To Some Extent	10	25.6
To a Little Extent	16	41.0
Total	39	100.0

Source: primary data

While there is a belief among some respondents that mass media plays a significant role in raising awareness about disaster preparedness, a substantial portion holds a more skeptical view. This suggests that there may be varying levels of trust in mass media as a source of information on disaster preparedness, indicating a need for strategies to enhance credibility and effectiveness in delivering educational messages.

4.3.8. Reaction on Disaster-Related Information Received Through Mass Media

A significant portion of respondents (56.4%) reported taking some form of action based on disaster-related information received through mass media, suggesting a level of responsiveness to the information disseminated while 43.6% did not take actions. The table below shows the results.

Table 11: Respondents who reacted Based on Disaster-Related Information Received through Mass Media

Respondents Who reacted Based on Disaster-Related Information Received Through Mass Media	Frequency	Percent (%)
Yes	22	56.4
No	17	43.6
Total	39	100.0

Source: primary data

The fact that a considerable number of respondents reported taking action based on disaster-related information received through mass media indicates that these channels do influence decision-making and behavior during disasters. This underscores the importance of providing accurate and actionable information through mass media platforms to empower communities to take appropriate measures to mitigate risks and respond to disasters.

4.3.9. Overall Effectiveness of Mass Media as a Tool in Disaster Management

Opinions on the overall effectiveness of mass media as a tool in disaster management varied among respondents. While a considerable portion (28.2%) considered it highly effective, a similar percentage (43.6%) deemed it not very effective. The table below shows the results.

Table 12: Rate of Overall Effectiveness of Mass Media as a Tool in Disaster Management

Rate of Overall Effectiveness of Mass Media as a Tool in Disaster Ma	Frequency	Percent (%)
Not Effective at All	4	10.3
Not Very Effective	17	43.6
Somewhat Effective	7	17.9
Highly Effective	11	28.2
Total	39	100.0

Source: primary data

While there is some recognition of the effectiveness of mass media in disaster management, a significant proportion of respondents perceive it as not very effective. This suggests that there may be challenges or limitations in how mass media channels are currently utilized in disaster communication efforts. Identifying and addressing these challenges can help enhance the overall effectiveness of mass media in supporting disaster management initiatives

4.3.10.Comparison of Mass Media with Other Communication Channels

Respondents' views on the effectiveness of mass media compared to other communication channels were mixed. While a majority (46.2%) considered it equally effective, a significant portion (30.8%) expressed uncertainty, indicating a need for further investigation or clarification. The table below shows the results.

Table 13: Comparison of Mass Media with local Communication Channels

Comparison of Mass Media with local Communication Channels	Frequency	Percent (%)
More Effective	2	5.1
Equally Effective	18	46.2
Less Effective	7	17.9
Not Sure	12	30.8
Total	39	100.0

Source: primary data

The perception that mass media is equally effective as other local communication channels, including beating drums, ringing bells and whistling coupled with a significant proportion expressing uncertainty, indicates a need for further examination of the unique strengths and limitations of mass media in disaster communication. Understanding how mass media complements or differs from other channels can inform more comprehensive communication strategies for disaster preparedness and response.

4.3.11. Feedback Provided to Mass Media Organizations Regarding Coverage of Disaster Events

Only a small fraction of respondents (5.1%) reported providing feedback to mass media organizations regarding their coverage of disaster events while 94.9% did not provide feedback suggesting a potential gap in communication between the affected communities and media entities. The table below shows the results.

Table 14: Respondents who provided Feedback to Mass Media Organizations Regarding their Coverage of Disaster Events

Respondents who Provided Feedback to Mass Media Organizations Regarding their Coverage of Disaster Events	Frequency	Percent (%)
Yes	2	5.1
No	37	94.9
Total	39	100.0

Source: primary data

The low percentage of respondents providing feedback to mass media organizations suggests a lack of active engagement and dialogue between communities and media outlets regarding disaster coverage. Encouraging feedback and fostering two-way communication channels can help improve the responsiveness of mass media to the needs and concerns of affected communities during disasters. These findings provide insights into the perceptions and experiences of rural communities regarding the use of mass media in disaster management, highlighting both strengths and areas for improvement in communication strategies during disasters.

CHAPTER 5: CONCLUSION AND RECOMMENDATION

5.1. Conclusion

The study on factors affecting the use of mass media in disaster management by rural communities in Malawi, specifically in Traditional Authority Likoswe, has provided valuable insights into the challenges and opportunities faced in communication during disasters. Through a combination of data collection methods, including semi-structured interviews, questionnaires, and desk studies, the research has highlighted the importance of effective communication strategies in disaster risk management.

Key findings indicate that while a significant portion of the community has access to mass media, barriers such as lack of electricity, language barriers, poor internet connectivity, and financial constraints hinder its effective use. The study also revealed a considerable reliance on traditional media, such as radio, during disasters, emphasizing its role as a trusted source of information. However, the presence of misinformation and varying perceptions of the timeliness and effectiveness of mass media highlight areas that need improvement.

5.2. Recommendations

Based on the findings of this study, several recommendations can be made to enhance the use of mass media in disaster management for rural communities in Malawi:

5.2.1. Improve Access and Utilization

- Community Radio Programs: Implement community radio programs that broadcast in local languages to ensure accessibility and understanding.
- Mobile Phone-Based Communication: Utilize mobile phones for disseminating disaster alerts and information through SMS and mobile applications. This approach leverages the high penetration of mobile phones in rural areas.

5.2.2. Capacity Building

- Media Literacy Training: Conduct training programs to enhance the media literacy of rural communities. This will empower them to effectively utilize mass media for disaster preparedness, response, and recovery.

- Community Workshops: Organize workshops to educate community members on how to access and interpret disaster-related information from various media sources.

5.2.3. Community Engagement

- Establish Local Committees: Form Village Civil Protection Committees that involve community members in disaster management initiatives. These committees can serve as intermediaries between the community and mass media organizations.
- Feedback Mechanisms: Create channels for community members to provide feedback to media organizations regarding their coverage of disaster events. This will help improve the responsiveness and relevance of media content.

5.2.4. Language Considerations

- Multilingual Broadcasts: Ensure that disaster-related information is available in multiple local languages. Media organizations should employ translators and local experts to facilitate this.
- Translation Services: Provide translation services for emergency broadcasts and printed materials to cater to diverse linguistic groups within the community.

5.2.5. Infrastructure Development

- Electricity Access: Work with government and non-governmental organizations to improve electricity access in rural areas. Solar-powered radios and mobile charging stations can be provided as interim solutions
- Internet Connectivity: Advocate for better internet infrastructure in rural areas to enhance access to online information sources.

5.2.6. Combating Misinformation

- Verification Processes: Media organizations should establish verification processes to ensure the accuracy of information before dissemination. Collaborating with local authorities can enhance the credibility of the information.
- Public Awareness Campaigns: Launch campaigns to educate the public on how to identify and avoid misinformation. This can include tips on verifying sources and cross-checking information.

5.2.7. Continuous Research

- Monitoring and Evaluation: Conduct regular assessments to monitor the effectiveness of mass media in disaster management. Use these findings to adapt and improve communication strategies.
- Longitudinal Studies: Undertake longitudinal studies to track changes in mass media usage and effectiveness over time. This will provide deeper insights into evolving community needs and preferences.

By implementing these recommendations, stakeholders can work towards building resilient rural communities that are better equipped to respond to disasters through effective mass media communication strategies. These actions will not only enhance disaster preparedness and response but also contribute to reducing social inequalities and improving overall community resilience.

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APPENDIX

Consent letter Good morning/afternoon, I am **Mcloud Chilangiza** and am from Malawi University of science and technology (MUST). Am in the fourth year of my study pursuing a Bachelor of Science in disaster risk management. I am working on a project titled exploring factors affecting the use of mass media in disaster management by rural communities in Mtauchira village, Chiradzulu.

Have you understood the purpose of my visit? Thank you. Do you have any questions before we start? (Answer questions). Participant number……Village name…… Date……

Instructions

- Your names will not be written or identity of any kind on any paper including the Answer sheet.
- I will be asking very simple questions and you will be required to give answers Based on the question
- Some questions are in form of multiple choice therefore you will be required to Pick the best answer
- ask for clarification if you have not understood the question
- participation in the research is voluntary and one is not forced to participate

And you free to decline to take part, and you can withdraw your participation Point.

THE QUESTIONNAIRE

A. Demographic profile

1. Name of Respondent

2. Age:

- Under 18
- 18-30
- 31-45
- 46-60
- Over 60

3. Gender:

- Male
- Female
- Other-specify

4. District

5. Traditional Authority

6. Group Village

7. Village Name

8. Education Level:

- No formal education
- Primary education
- Secondary education
- Tertiary education

9. Occupation

- Employed
- Unemployed
- Farmer
- Student

- Others

Specify

10. Income Level (monthly household income):

- Below K10, 000
- K10, 000-K50, 000
- K50, 000-K100, 000
- K100, 000-K500, 000
- K500, 000-1000, 000
- Above k1000, 000

B. ACCESS AND UTILIZATION OF MASS MEDIA

11. Do you access mass media?

- Yes
- No

13. How often do you access mass media channels (e.g., TV, radio, and internet) in a typical week?

- Daily
- 2-3 times a week
- Once a week
- Rarely
- Never
- Other

15. During disasters or emergencies, which source(s) of mass media do you rely on for information? (Check all that apply)

- [ ] Television
- [ ] Social media platforms (e.g., Facebook, Twitter)
- [ ] Radio
- [ ] Internet
- [ ] Mobile apps

- [ ] Others

16. In the past year, how many times have you used mass media to seek information during a disaster event?

- ○ 0-2 times
- ○ 3-5 times
- ○ 6-10 times
- ○ More than 10 times

17. Which types of mass media do you find most effective in providing disaster-related information?

- ○ Television
- ○ Radio
- ○ Internet
- ○ Social media platforms
- ○ Mobile apps
- ○ Others

18. How would you rate the effectiveness of mass media channels in disseminating disaster-related information to rural communities?

- ○ Very effective
- ○ Somewhat effective
- ○ Neutral
- ○ Not very effective
- ○ Not effective at all

19. What are the main challenges you face in accessing mass media during disasters? (Open-ended)

C. FACTORS HINDERING USAGE OF MASS MEDIA FOR DISASTER MANAGEMENT

20. Which socio-economic factors do you believe hinder the usage of mass media for disaster management in your community? (Check all that

- [ ] Lack of electricity
- [ ] Cultural factors
- [ ] Language barrier
- [ ] Poor internet connectivity

- [ ] Trust issues with media sources
- [ ] Financial constraint
- [ ] Accessibility issues
- [ ] Others

21. What are the main challenges you face in accessing mass media during disasters? (Open-ended) specify

22. Do you think there is a lack of awareness about the availability of disaster-related information through mass media in your community?

- ○ Yes
- ○ No

23. Please elaborate on any specific challenges you face regarding the usage of mass media for disaster management. (Open-ended)

- ○ Yes
- ○ No

If yes, clarify

D. EVALUATION OF THE EFFECTIVENESS OF MASS MEDIA AS A TOOL IN DISASTER MANAGEMENT

24. How timely do you perceive the information provided by mass media during disasters?

- ○ a. Very timely
- ◉ b. Timely56tg
- ○ c. Somewhat timely
- ○ d. Not timely

25. Have you ever encountered misinformation or rumors spread through mass media during disasters?

- ○ Yes
- ○ No

26. To what extent do you believe mass media helps in raising awareness about disaster preparedness in rural communities?

- ○ a.To a great extent
- ○ b. To some extent

- C. To a little extent
- d. To a little extent

27. Have you ever taken any action based on disaster-related information received through mass media?

- a. Yes,
- b. No

28. On a scale of 1 to 5, how would you rate the overall effectiveness of mass media as a tool in disaster management in your rural community?

- Not effective at al
- l Not very effective
- Not very effective
- Somewhat effective
- Highly effective

29. In your opinion, how does mass media compare with other communication channels (e.g., word-of-mouth, community leaders) in providing disaster-related information?

- More effective
- Equally effective
- Less effective
- Not sure

30. Have you ever provided feedback to mass media organizations regarding their coverage of disaster events?

-) Yes
- b) No

31. What suggestions do you have for improving the role of mass media in disaster management for rural communities?