

Title

**EVALUATING THE EFFECTIVENESS OF COMMUNITY BASED DISASTER  
PREPAREDNESS PROGRAMS IN MANDOTA VILLAGE CHIRAZULU DISTRICT**

Author

**WASI SUWEDI**

Co-Author

**MR JUSTIN MAKAMO**



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## ABSTRACT

This study assessed the effectiveness of community based disaster preparedness (CBDP) programs in Mandota Village, Chiradzulu District, using a qualitative research approach. A total sample of 50 participants were involved, comprising 40 villagers, 2 NGO representatives, and 8 members of the Village Civil Protection Committee (VCPC). Data was collected through interviews and observations, and analyzed thematically to capture participants' perceptions and experiences.

Findings reveal that community awareness of common disasters particularly floods, strong winds, and dry spells has improved due to awareness campaigns, community meetings, and the involvement of local leaders. Villagers acknowledged that CBDP initiatives have enhanced their preparedness especially through training, early warning information and formation of community structures such as VCPCs. However, the study also identified key challenges, including inadequate resources, limited technical capacity, irregular training sessions and over-reliance on NGOs for support (*UNDRR, 2019 IFRC, 2020*). Previous studies in Malawi have similarly shown that participatory awareness activities enhance community understanding of disaster risks and response measures (*Chavula, 2019*).

NGO representatives and VCPC members highlighted progress in community mobilization and information dissemination but emphasized the need for stronger coordination and sustainable capacity-

building mechanisms. Overall, the study concludes that while CBDP programs in Mandota Village have had a positive impact on disaster awareness and preparedness, their overall effectiveness remains constrained by resource limitations, inconsistent support, and low community participation levels (*UNDRR, 2019*).

**Keywords:** Community-based disaster preparedness, disaster risk reduction, Chiradzulu District, Malawi, awareness, training, participation, resilience, early warning systems

## INTRODUCTION

The government alone cannot and will not be able to manage and handle all types of disasters with its machinery without active participation by the people in their respective communities. This research evaluated the effectiveness of community based disaster preparedness programs. It focused on what must be done in our communities in order to improve the preparedness before and after the disasters. The chapter delves into the Background of the Study, articulates the Problem Statement, outlines the Research Objectives and Questions, underscores the Significance of the Study, and provides a condensed overview of the chapter's contents.

### Background of the Study

Globally, over the last 10 years, disasters have continued to exact a heavy toll, as a result the well-being and safety of

individuals, communities and countries as a whole have been affected (UN 2015). According to *MFERP (2017)*, it is estimated that over 700 thousand people have lost their lives, over 1.4 million have been injured and approximately 23 million have been made homeless as a result of disasters. Overall, more than 1.5 billion people have been affected by disasters in various ways, with women, children and people in vulnerable situations disproportionately affected. Malawi faces significant risks from climate-induced disasters, with recent years marked by multiple cyclones and floods severely impacting livelihoods and infrastructure.

According to a report by the *Department of Disaster Management Affairs (DoDMA) Operation Guidelines (2016)*, Malawi is exposed to a number of natural and human induced hazards. Such disasters include floods, drought, stormy rains, strong winds, hailstorms, landslides, earthquakes, pest infestations, disease outbreaks, fire and accidents. The impact, frequency and scope of natural hazard induced disasters in Malawi have intensified in the past two decades and are likely to worsen with climate change, compounded by other factors such as population growth and environmental degradation (*DoDMA & UNDP Mapping of Disaster Preparedness Actions, 2016*). Although most of the hazards can occur in all 28 districts of the country, 15 of these are more prone than others and were classified as the most disaster-prone districts by DoDMA. Though Chiradzulu district is not among the 15 districts, it is imperative to know that it has recently been experiencing some of the disasters hence the need to study the

effectiveness of such programs. In Malawi, due to the increasing frequency and intensity of disaster events during the past two decades, it increasingly became evident that these occurrences should no longer be considered as emergencies because they are quite predictable. Additionally, experience had clearly shown that ‘single dose’ interventions usually planned in an emergency have failed to produce lasting solutions to these problems (*DoDMA, 2019*). This situation is compounded by the ever increasing list of hazards, of which some have occurred as direct or indirect impacts of climate change.

Evidence indicates that exposure of persons and assets in all countries to disaster has increased faster due to steady rise in disaster related losses, with a significant economic, social, health, cultural and environmental impact in the short, medium and long term, especially at the local and community levels (UN, 2015). The Government of Malawi recognizes the huge impact that disasters have in the socio economic development of the country and in attaining the development aspirations of the country as outlined in the *Malawi Growth and Development Strategy II (MGDS II)*. Recurring small scale disasters and slow-onset disasters particularly affect communities, households and small and medium-sized enterprises, constituting a high percentage of all losses. Unless measures are found to address these disaster risks, the Malawi Government, its development partners and other stakeholders will continue spending resources that would have otherwise been spent on productive sectors of the economy.

It is to this effect that Malawi as a nation, established weather related early warning systems for floods, strong winds, and drought, among others. At present a range of dissemination methods for early warning are used. These include, but are not limited to, radio (national and local), email, television, print media, internet websites, regional and national workshops and mobile and fixed phones. There is, however, limited understanding of the effectiveness of these methods in terms of relevance, impact and appropriateness for vulnerable communities. In addition, although there exist a lot of indigenous early warning systems, practices and beliefs by the community, these have not been studied and documented in detail.

### **Statement of the Problem**

Over the past five decades, Malawi has experienced more than 19 major floods and 7 droughts, with varying frequencies, magnitude and scope over the years. For example, the Tropical Cyclone Idai of 2019 heavily affected Chikwawa, Nsanje, Phalombe, Zomba and part of Chiradzulu districts according to *WHO (2023)*, 11,194 households were affected and 15,000 livestock of different species destroyed. Cyclone Freddy hit the Southern region of Malawi in March 2023, bringing strong winds and torrential rains and causing substantial flooding and mudslides. The extent of damage was substantial and widespread across many districts in the south including Chiradzulu. These impacts are intensified by factors such as environmental degradation, rapid

urbanization, high population density, weak institutional systems, and inadequate disaster preparedness.

Although national and international disaster management frameworks exist, there are concerns about whether these policies are effectively implemented at the community level. Despite extensive disaster research in Malawi, there remains limited information on household level preparedness, resilience and the effectiveness of community-based programs in Mandota Chiradzulu. This gap in knowledge highlights the need to evaluate how well community-based disaster preparedness initiatives are functioning in Mandota Village.

### **RESEARCH OBJECTIVES**

#### **Main Objective**

The main objective of this study was to evaluate the effectiveness of community based disaster preparedness programs in Mandota village Chiradzulu district.

#### **Specific Objectives**

The specific objectives of this study were:

- To assess the level of community awareness, training and participation in disaster preparedness Programs in Mandota village Chiradzulu district.
- To evaluate the impact of community based programs on reducing disaster-related losses.
- To identify the strengths and weaknesses of current community-

based disaster preparedness initiatives.

- To provide recommendations for improving the design and management of community based disaster preparedness programs.

## **Research Questions**

The research questions guiding this study were:

- What is the level of knowledge and training of community regarding the community based preparedness programs?
- What coordination mechanisms are currently in place among community leaders, development workers, government agencies, and non-profit organizations to ensure the sustainability of disaster preparedness programs in Mandota village?
- What are the challenges and barriers being faced when implementing the disaster preparedness programs?
- What recommendations can be made to improve the design and management of community based disaster preparedness programs?

## **Significance of the Study**

The findings of this study provide data on the effectiveness of disaster preparedness programs in Chiradzulu district which will be used to identify areas of improvement in

preparing for future disasters at local community level.

The study also enhanced community resilience which will help understand how well these programs prepare communities for disasters (natural or man-made) and help identify strengths and weaknesses. In addition, more effective programs will enable communities to be able to withstand and recover from emergencies.

Moreover, the study provide policy and funding decisions. The government, non-governmental organizations (NGOs) and donors will obtain evidence to allocate resources wisely. This will help justify continued or increased funding, or highlight the need for changes.

The research also highlights areas where VCPCMs are performing well such as community mobilization and early warning dissemination and exposes gaps such as limited training, inadequate resources, or low community participation. This helps committee members understand where improvements are needed.

Not only that, the study also promotes community engagement and trust. When the communities see that programs are evaluated and improved based on their input, it can boost trust and participation.

Lastly, the findings contributes to academic and practical knowledge as it will add to the body of literature in disaster management, public health and community development. Subsequently, the results can also be used for training future professionals and guiding new initiatives.

## LITERATURE REVIEW

This chapter aims at reviewing the existing information which provide an understanding on disaster preparedness at international, nation and community level. It emphasizes on the effectiveness of community based disaster preparedness programs. The research focuses on Mandota village in Chirazulu district. The chapter covers the clarification of terms; a review aligned with specific objectives, the theoretical framework, and concludes with a summary of the chapter

### Definition of Terms

- **Disaster**

Refers to a serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the effected community or society to cope using its own resources (*UNDRR, 2009*).

- **Cyclones**

Refers to large scale air mass system that around a strong center low atmospheric pressure associated with strong winds, thunderstorms and heavy precipitation (*Wallace, 2006*).

- **Disaster preparedness**

Refers to the knowledge and capacities developed by governments, professionals responsible and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely imminent or current hazard events (*UNISDR, 2009*).

- **Community based disaster preparedness**

Refers to the process where communities are actively engaged in the identification of hazards, vulnerabilities and resources and in planning and implementing activities to reduce disaster risk (*Twigg, 2004*).

- **Community resilience**

Refers to an ability of a community to anticipate, absorb, adapt to and recover from a hazardous event in a timely and efficient manner (*Cutter, 2008*).

- **Early Warning System (EWS)**

A set of capacities needed to generate and disseminate timely and meaningful warning information, enabling people to reduce disaster risk (*WMO, 2018*).

### Empirical evidence

- **Community Awareness, Training, and Participation on disaster preparedness**

In order for every program to be efficient, people's awareness, training and participation are the most crucial elements for the successful implementation of particular programs. It has been proved that countries where communities are aware and participate in disaster preparedness activities, their losses due to disasters events are low. This assessment on awareness, training and participation on community based preparedness programs in Mandota village will help to identify the strength of having knowledge and trainings on disasters. This involves evaluating their familiarity with best practices, current research and evolving methodologies.

Disaster preparedness must be supported by public education campaigns, training of response teams and rehearsals of emergency response scenarios. The aim of public awareness and education programs is to promote an informed, alert and self-reliant community, capable of playing its full part in support of and in co-operation with government officials and others responsible for disaster management activities. An essential part of a disaster preparedness plan is the education of those who may be threatened by a disaster. Although television, radio and printed media will never replace the impact of direct instruction, sensitively designed and projected messages can provide a useful supplement to the overall process (*IFRCs, 2000*).

Community awareness is the cornerstone of disaster preparedness. According to *UNDP (2017)*, knowledge and training reduce vulnerability and increase community

responsiveness. In Bangladesh, community volunteers trained in evacuation and first aid played a crucial role in saving lives during Cyclone Sidr (*Paul & Rahman, 2006*).

In Malawi, the Department of Disaster Management Affairs (DoDMA) has set up Village Civil Protection Committees (VCPCs), but these often suffer from inadequate training, irregular meetings, and poor funding (*Phiri, 2020*). Many communities depend on indigenous knowledge or are unaware of government protocols.

In Mozambique, regular cyclone threats have led to a well established early warning system and community involvement programs through the National Institute for Disaster Management (INGD). Community radio and mobile messaging are widely used to disseminate alerts (*UNDP, 2015*).

Zambia integrates CDBP into national development plans through its Disaster Management and Mitigation Unit (DMMU), focusing on participatory risk mapping and school-based DRR education (*Phiri, 2021*).

In Tanzania, community awareness programs under the Tanzania Meteorological Authority (TMA) and Red Cross have enhanced preparedness in coastal regions (*IFRC, 2018*).

Zimbabwe has established community DRR programs focusing on flood and drought risk, especially in Chimanimani and Chiredzi, although these face implementation challenges due to limited resources and political instability (*Chikoto & Sadiq, 2013*).

- **Impact of Community Based Programs on Reducing Disaster Losses**

Evidence from multiple contexts demonstrates that Community-Based Disaster Preparedness (CBDP) has contributed to reduced casualties and economic losses when communities are actively involved in disaster risk reduction planning and response. CBDP enhances early warning dissemination, evacuation readiness, and coordinated local action, which are critical in minimizing disaster impacts (UNDRR, 2019). Shaw (2012) reports that in Nepal, participatory disaster planning, community mapping, and regular simulation drills significantly reduced injuries and loss of life during the 2015 earthquake, as communities were better prepared to respond immediately before external assistance arrived. These participatory tools allow disaster responses to be tailored to local hazards, settlement patterns, and social structures, thereby increasing effectiveness (Gaillard & Mercer, 2013).

In Mozambique, CBDP initiatives implemented prior to Cyclone Idai in 2019 helped reduce casualties in communities with well-established local disaster committees, functional early warning systems, and strong social networks (IFRC, 2019). Communities that had conducted evacuation drills and risk mapping were able to mobilize quickly, leading to fewer deaths and reduced damage to household assets. However, the same study highlights stark contrasts in remote and marginalized areas where awareness was low and community

structures were weak, resulting in significantly higher casualties and economic losses. This disparity underscores the importance of consistent community engagement and inclusive capacity building in CBDP implementation (Manyena et al, 2019).

In the Malawian, CBDP has shown positive outcomes in flood prone districts. Chiweza (2018) found that in Nsanje and Chikwawa districts, Village Civil Protection Committees (VCPCs) played a crucial role in early warning dissemination, evacuation coordination, and relief mobilization during flooding events, leading to faster response times and reduced loss of life. Similar findings are reported by Chinsinga and Chasukwa (2017), who note that community-based structures improved household preparedness and reduced recovery time after flood events in the Lower Shire Valley. Nonetheless, the effectiveness of CBDP in Malawi is not uniform. Several districts, such as Chiradzulu, remain under-researched.

- **Strengths and Weaknesses of Current Community Based Programs**

The strengths of Community-Based Disaster Preparedness (CBDP) lie primarily in its emphasis on local ownership, the integration of indigenous knowledge, and long-term sustainability. CBDP empowers communities to identify their own risks, vulnerabilities, and capacities, thereby enhancing relevance and acceptance of disaster risk reduction (DRR) interventions



(Maskrey, 2011). Twigg (2007) asserts that when communities actively participate in risk assessments, contingency planning, and early warning systems, disaster resilience and response effectiveness significantly improve. Similarly, Shaw (2012) notes that indigenous knowledge such as traditional flood indicators, crop diversification practices, and settlement patterns plays a critical role in reducing disaster losses, particularly in rural African contexts. Community participation also strengthens social cohesion and collective action, which are essential for coping with and recovering from disasters (Aldrich, 2012). Furthermore, CBDP promotes sustainability by reducing dependence on external actors and fostering locally driven solutions that can be maintained beyond project lifespans (UNDRR, 2019).

Despite these strengths, CBDP faces several limitations that hinder its effectiveness. A major weakness is the lack of adequate technical expertise at the community level, particularly in areas such as hazard mapping, climate forecasting, and infrastructure planning (Twigg, 2015). Inconsistent and short-term funding further undermines continuity, as many CBDP initiatives rely heavily on donor support. In Malawi, Village Civil Protection Committees (VCPCs) often become inactive once external funding ends, reflecting limited institutional support and weak integration into district development planning structures (Mvula, 2021). Poor documentation and record keeping also constrain knowledge transfer and institutional memory, making it difficult to replicate successful practices or

evaluate long-term impacts (Mercer *et al.*, 2010).

Evidence from Zambia and Zimbabwe shows that CBDP and DRR programs tend to succeed mainly in areas with sustained NGO involvement; where such support is withdrawn, community capacity and leadership alone are frequently insufficient to maintain preparedness activities (Chikoto & Sadiq, 2013). Weak coordination between community structures and district or national authorities further reduces effectiveness, leading to delays in early warning dissemination and emergency response (Manyena, 2014). These challenges highlight the need for stronger linkages between community initiatives and formal disaster management systems to ensure durability and scalability of CBDP efforts.

- **Recommendations for Improving CBDP Programs**

Studies recommend integrating traditional knowledge with scientific systems, consistent funding, youth and women participation, and investment in local capacity (UNDRR, 2020).

According to Twigg (2015), establishing strong monitoring and evaluation frameworks helps track preparedness outcomes, identify gaps, and improve CBDP program performance over time.

In Kenya and Tanzania, the use of mobile platforms and local radios for early warnings has improved disaster communication (HFA Review, 2013).

In Malawi, *Chavula (2019)* recommends decentralizing training programs for VCPCs and institutionalizing simulation drills to strengthen preparedness culture.

## METHODOLOGY

### Research design

This study adopted a descriptive survey design using a qualitative data collection techniques. This design allows for a comprehensive understanding of the community's disaster preparedness by collecting and exploring experiences and perceptions (qualitative).

### Research methods

- **Qualitative Method**

This method focused on systematic collection and analysis of non-numerical data. The aim of this method is to understand human behavior, experience and social context before, during and after disasters. In addition to that, the qualitative component captured deeper insights into leadership roles, program challenges, and recommendations through interviews and observations (*Bryman, 2016*).

### Research Setting

The study was conducted in Mandota Village, located in the Traditional Authority (T.A.) Kadewere in Chiradzulu District, Southern Malawi. The area was selected due

to its exposure to floods and strong winds and the presence of Village Civil Protection Committees (VCPCs) under Malawi's disaster risk management framework.

Mandota represents a typical rural Malawian setting with limited infrastructure, low-income households and strong traditional leadership structures, making it a relevant site for evaluating community-based disaster preparedness.

### Target Population

The target population includes all community members of Mandota Village who are eligible to participate (18 years and above) in community-based disaster preparedness programs. This population specifically comprised:

- Members of the Village Civil Protection Committee (VCPC),
- Villagers
- Officials from the District Civil Protection Committee (DCPC) and NGOs operating in the area.

The estimated population size is approximately 150 residents.

### Sampling Technique

The study used a purposive sampling technique when selecting key informants such as VCPC members, and NGOs officials. This method was used because these individuals possess specific knowledge and experience related to disaster preparedness in the village (*Trochim, 2006*).

For community members, a simple random sampling technique was used to ensure that each household has an equal chance of being included in the study. A village household register assisted in creating a sampling frame.

### **Sample Size**

The total sample size was 50 participants. This sample size was selected after considering the objectives of the research and the targeted groups in the area. The sample size has successfully presented the whole population and has come up with rich and balanced information within Mandota Village.

The sample size for this study was calculated using Slovin's formula. This formula is commonly used when the population is small and is suitable for social science research so that it determine a sample size from a given population with a specified margin of error

Therefore a population of 100 individuals required a sample size of 50 people according to Slovin's formula.

### **Research Instruments**

This study used different research instruments in order to achieve the stated objectives

- **Interview Guide**

The use of interview guide facilitated a deeper exploration of VCPC members, NGOs representatives and community's perspectives and experiences on disaster preparedness. The in depth interviews allows rapport building and flexibility which enables the participants to be open and honesty which led to more authentic responses. This approach is valuable to explore the roles, challenges, perceptions, emotions and suggestions for improvement (*Lewis, 2019*).

- **Observations**

The use of observation helped to gain firsthand, accurate and unbiased information about how community based disaster preparedness programs are implemented in Mandota Village. Through direct observation, it was easy to assess real behaviors, participation levels, availability of disaster preparedness resources and the actual functioning of preparedness activities, which may not always be fully captured through interviews or questionnaires. Observation was used to verify whether the community follows training guidelines, engages in preparedness drills and maintains essential structures such as evacuation routes and early warning systems. According to *Creswell (2014)*, observation provides rich, contextual data by studying actions as they naturally occur, while *Patton (2015)* emphasizes that it helps to uncover gaps between reported practices and actual behaviour. Therefore, observation strengthens the credibility and validity of the findings by providing direct evidence of the

effectiveness of disaster preparedness programs.

### Data Collection Procedure

Data was collected through face-to-face interviews and observations. Interviews were recorded, transcribed and then analysed using thematic analysis.

### Pilot Study

A pilot study was conducted in a nearby village (Likhubula) that shares similar demographic and environmental characteristics with Mandota but is not part of the main study. The aim was to test the clarity, reliability, and appropriateness of the research instruments. Feedback from the pilot led to:

- Refinement of ambiguous questionnaire items,
- Adjustment of interview questions for better cultural relevance, The pilot also ensured the translation from English to Chichewa retained the intended meanings.

### Data Analysis

Qualitative data from interviews and observation were analysed using thematic content analysis. Transcripts were read, coded and categorized into emerging themes related to awareness, participation, challenges and recommendations. This

combination allowed for a rich and robust interpretation of findings.

### Ethical Considerations

This study adhered to the highest standards and principles of ethical research. The study also considered informed Consent of the participants. All participants were briefed about the study's purpose, procedure, benefits and their rights. Informed consent is a cornerstone of ethical research, it ensures that participants voluntarily choose whether or not to be part of the research which enhances the provision of authentic information. For the children and persons with disability the consent was obtained from their legal guardians. This helped to avoid future conflicts after this study (*Beauchamp, 2019*).

This study also considered cultural Sensitivity and the data collection was conducted with respect to local customs, language and norms (*Resnik, 2018*).

By following the above ethical standards this research produced credible and valid results as well as maintained professionalism, public trust and compliance with the legal and institutional requirements.

## RESULTS

### Response Rate

Out of the targeted 50 respondents, 48 participants took part in the study, representing a response rate of 96%.

These included:

- 38 villagers, 8 members of the Village Civil Protection Committee

(VCPC), and 2 representatives from NGOs operating in Mandota Village, Chiradzulu District.

## Presentation of Research Findings

This section presents responses that emerged from observations and interviews with the village members, Village Civil Protection Committee and NGOs representatives. The responses have been grouped into three key themes based on the study objectives.

- **Theme 1: Community Awareness, Training, and Participation in Disaster Preparedness.**

Findings show that some villagers know nothing about these programs because of their refusal to attend sensitization meetings but generally there is an increasing in levels of awareness among community members. The majority of the Villagers reported that they are aware of disasters commonly affecting Mandota Village, such as floods, strong winds and dry spells. Many attributed their knowledge to community meetings, word of mouth, and occasional awareness campaigns conducted by NGOs. One member said, *“Awareness has improved compared some years ago. We now know the common risks although some underestimate the seriousness of recurring hazards.”* VCPC members stated that they usually conduct basic sensitization sessions, especially during the rainy season. They explained that their role includes informing

households about early warning signs, evacuation procedures and safe areas. However, they acknowledged that attendance is inconsistent because some people only come when the disaster has already happened. The chairwoman for the committee said, *“People are well aware of the risks, some still choose not to follow the preparedness measures we teach.”* And added that the participation turn out improved after the cyclone Freddy in 2023.

NGO representatives indicated that they have provided training sessions on early warning systems, emergency first aid and safe shelter construction, though they admitted that coverage is still limited due to resource constraints. They also noted that training uptake is higher among youth and women’s groups.

Despite these efforts, many villagers mentioned that training opportunities are not frequent, and some said they only hear about disaster preparedness during emergencies. One representative lamented, *“The biggest challenge is sustaining community interests when there are no active disasters.”*

- **Theme 2: Impact of Community-Based Programs on Reducing Disaster Related Losses**

The majority of respondent groups, showed that community based programs have

contributed to some reduction in disaster related losses, though the impact varies.

Villagers noted that early warnings and improved awareness have helped them protect household items, reinforce their homes, and evacuate earlier than in previous years. By observing many people have belt their houses in safe areas and they are planting trees in their home yards as well as along river banks to control strong winds, floods as well as to control gully erosion.

One villager said, *“We now keep small emergency kits apart from ensuring that our roofs and drainage systems are improved before the rainy season.”*

VCPC members highlighted that improved coordination and communication through handheld radios, mobile phones, posters and community meetings have reduced response delays.

*“We have observed that the number of households severely affected by floods has slightly decreased, especially in areas where NGOs introduced tree planting and soil conservation measures as well as the receiving of information is easy since some members of the VCPC and villagers received radios and mobile phones for communication across the village”,* the Secretary said.

NGOs reported measurable progress in promoting disaster risk reduction practices, such as establishing evacuation routes and improving community shelters though facing some challenges. One member said, *“Our early warning education has*

*significantly minimized loss of life and property.”*

*“However, we face challenges such as limited funding, climate change unpredictability, and inadequate coverage of training programs which continue to reduce the overall effectiveness”,* Member said.

### • **Theme 3: Strengths and Weaknesses of Current Community Based Programs**

Villagers appreciated that programs have created awareness and encouraged them to participate in communal activities.

VCPC members reported strong community cohesion, which helps mobilize people during emergencies.

NGOs highlighted that Mandota Village has dedicated local leaders, making it easier to coordinate programs and the receiving of mobile phones and radios to easily get warnings and information.

However, villagers often cited irregular training, lack of materials, and insufficient updates on disaster risks. *“Poverty remains a significant barrier. People know what to do but they can’t afford to implement it”,* the Chief said.

VCPC members mentioned limited resources, such as lack of transport, equipment, and protective gear needed during rescue operations as well as maximum cooperation with community members. A member of the committee said, *“Sometimes people expect handouts and*

*when there are none, they do not attend trainings.”*

Another said, *“We rely too much on NGOs, we have no budget of our own.”*

One NGO representative said, *“The village leadership is committed and that makes our work easier.”* However, they emphasized funding limitations, which restrict the frequency and depth of training programs and community drills.

- **Theme 4: Recommendations for Improving Community-Based Disaster Preparedness Programs**

Villagers suggested regular training sessions, more resources, and better communication channels.

VCPC members recommended increased funding, government support, and community contributions.

NGOs suggested stronger partnerships with government, improved monitoring, and inclusive approaches.

## **DISCUSSION**

### **Community Awareness, Training, and Participation in Disaster Preparedness**

The findings align with *UNDP (2017)*, which highlights that awareness and training are critical for reducing vulnerability. The moderate awareness in Mandota Village reflects similar trends in Malawi, where VCPCs have improved community knowledge but face challenges in

consistency (*Phiri, 2020*). Participation is uneven, consistent with global literature showing that competing livelihood demands reduce engagement in rural areas (*Twigg, 2015*). The increase in participation post Cyclone Freddy demonstrates how recent disasters can motivate involvement, as noted in post-disaster studies (*Shaw, 2012*). Overall, while awareness has improved, low frequency of training limits preparedness, echoing challenges in neighboring countries like Mozambique (*UNDP, 2015*).

### **Impact of Community Based Programs on Reducing Disaster Losses**

The moderate impact of CBDP in Mandota Village is consistent with studies showing that early warnings and community drills reduce losses when consistently implemented (*UNDRR, 2019*). The reduction in injuries and crop damage aligns with findings from Malawi’s flood-prone districts, where VCPCs have enhanced response times (*Chiweza, 2018*). However, resource constraints limit broader impact, as seen in Zambia and Zimbabwe, where funding shortages undermine sustainability (*Chikoto & Sadiq, 2013*). Environmental practices like tree planting have contributed to resilience, supporting *Gaillard and Mercer (2013)* on integrating local knowledge. Despite progress, Mandota’s vulnerabilities persist due to inadequate equipment and funding, highlighting the need for better resource allocation.

## **Strengths and Weaknesses of Current Community Based Programs**

The strengths of Mandota's CBDP, such as strong local leadership and community cohesion, align with *Twigg (2007)*, who emphasizes that active participation enhances resilience. NGO involvement has been key, as in Tanzania (*IFRC, 2018*), but weaknesses like irregular training and resource shortages mirror Malawi's broader challenges (*Mvula, 2021*). Low participation from vulnerable groups reflects exclusion issues noted in global literature (*Aldrich, 2012*). These findings underscore the importance of sustained funding and inclusive approaches to overcome limitations, as recommended by *UNDRR (2019)*.

## **Recommendations for Improving CBDP Programs**

The recommendations from participants align with *UNISDR (2015)* and *Twigg (2015)*, who advocate for regular drills, better communication, and monitoring frameworks. Suggestions for resource provision and coordination support *Chavula (2019)* in Malawi, emphasizing decentralization. Inclusive engagement of youth and vulnerable groups addresses gaps identified in *Manyena (2014)*. These recommendations provide a practical pathway for enhancing CBDP in Mandota and similar rural areas.

## **CONCLUSION**

The study concludes that community based disaster preparedness efforts in Mandota Village have contributed positively to improving awareness, participation, and reduction of disaster related losses, but their overall effectiveness remains moderate. Community awareness of disaster risks exists, yet knowledge of specific preparedness actions is uneven due to irregular and short-term training programs. While participation levels are generally encouraging particularly among women, the limited involvement of men, along with competing livelihood activities, weakens sustained engagement.

Community based programs have demonstrated tangible benefits, including improved early warning dissemination through the provision of phones and radios, safer evacuation practices and reduced injuries and crop losses during disasters. However, these gains are constrained by persistent challenges such as inadequate resources, insufficient emergency equipment, weak communication systems, and limited financial capacity to strengthen household resilience.

Although Mandota Village benefits from strong local leadership, active VCPCs and cooperation with NGOs, gaps remain in inclusive participation, consistent training, and coordination. Addressing these weaknesses through sustained capacity building, improved resource allocation, and inclusive engagement of vulnerable groups is essential to strengthen the long-term effectiveness of community based disaster preparedness initiatives.



## RECOMMENDATIONS OF THE STUDY

The study proposes the following recommendations:

- The Village Civil Protection Committee (VCPC), with support from NGOs and the District Civil Protection Committee, should organize regular training sessions and simulation drills at village level.
- The VCPC, traditional leaders, NGOs and district authorities should strengthen communication by using village meetings, mobile phone messages, whistles, drums, and local messengers to ensure early warning information reaches everyone on time.
- NGOs, the District Council, and the Department of Disaster Management Affairs (DoDMA) should provide resources such as first aid kits, life jackets, transport, and evacuation tools. These resources should be distributed through the VCPC and used during emergencies and training activities
- The District Council and DoDMA should facilitate regular coordination meetings, joint planning sessions, and information sharing to ensure all stakeholders work together and avoid duplication of efforts.
- The Forestry Department, Environmental Affairs Department, NGOs, and community leaders should facilitate tree planting, gully control, and soil conservation

activities through community work programs and awareness campaigns.

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