Pre-disaster preparedness and post-disaster response measures in the District Councils of Southern Malawi

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Key Messages

- Our results show that district councils rely on weather updates from the Department of Climate Change and Meteorological Services for their disaster early warning systems.
- Although the district councils depend on weather information from the Department of Climate Change and Metrological Services for their Disaster Early Warning Preparedness, the councils primarily disseminate the information to local structures and grassroots through word of mouth.
- Key challenges in early warning systems include resource constraints, equipment loss due to flooding, poor coordination among organizations, outdated beneficiary databases, technical capacity gaps, and communities not taking the early warning messages seriously.
- Effectiveness of the transmission of early warning messages is hindered by network limitations, road inaccessibility, and high volunteer turnover.
- Key recommendations include strengthening of disaster preparedness policies, increase in community awareness, household resilience building, and infrastructure rehabilitation.

Introduction

Malawi is highly vulnerable to impacts of climate-induced disasters. Between the 2015/16 and 2022/23 seasons, a succession of one El Niño, four cyclones (Idai, Gombe, Anna and Freddy), and major floods have resulted in significant loss of life, property and livelihoods for the already fragile economy[1]. In 2023, the whole of the Southern region of Malawi, consisting of 11 district councils, 2 town councils, and 2 municipalities, was hit by Cyclone Freddy, which affected 2.3 million people, leaving 1.6 million severely food insecure, with over 650,000 people displaced and causing at least 600 deaths[2]. The increased frequency and severity of weather-related shocks has necessitated various interventions implemented by government and humanitarian organizations to mitigate the impact of disasters, support affected communities, and foster resilience. With the aim of improving interventions and addressing critical challenges and gaps in social protection and post-disaster response, the study seeks to:

1. Analyze weather-related emergency early warning systems, pre-disaster preparedness and post-disaster response.
2. Understand the critical challenges to social protection and post-disaster response.

The study findings provide valuable insights that can inform policy making, resource allocation, and the development of effective interventions.

Methodology

The study collected qualitative data through Key Informant Interviews from stakeholders in Southern region district councils, town councils and municipalities, namely Balaka, Blantyre, Blantyre city, Chikwawa, Chiradzulu, Machinga, Mangochi, Mulanje, Mwanza, Neno, Nsanje, Phalombe, Thyolo, Zomba, and Zomba city. The Southern region was selected due to its status as the region most heavily impacted by recurrent weather shocks in Malawi. A checklist was developed that guided the data collection from key informants and we collected data on early warning systems, disaster preparedness, post-disaster response, existing programmes, and future plans/recommendations. Table 1 shows a distribution of the key stakeholders that were consulted.

Table 1: Distribution of the key stakeholders

| Type of stakeholder	Frequency
City councils	2
District councils	11
Town municipal	2

Source: The authors

In addition, opinions were sought from experts and practitioners who shared their views on how best to improve disaster response, preparedness and social protection. These included officials from the Ministry of Finance and Economic Affairs, the Ministry of Local Government, the National Local Government Finance Committee, the Department of Disaster Management Affairs, the Ministry of Gender, the Department of Climate Change and Meteorological Services.

Early warning systems

All councils have at least some disaster early warning systems in place. Most of the early warning systems rely on weather updates from the Department of Climate Change and Meteorological Services (reported by 10 councils; Figure 1). Followed by river gauges (9 councils), seasonal weather forecasts (7 councils). Few councils use rain gauges (3) or automatic water readers (2).

**Figure 1: Types of early warning systems used (N=15)**
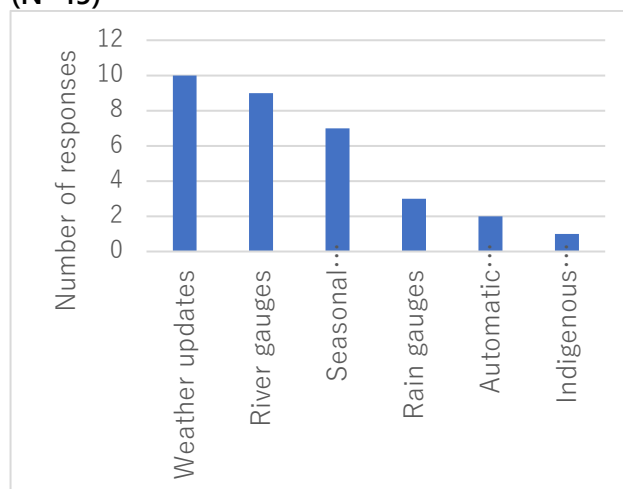
Source: Key Informants

Dissemination and effectiveness of early warning systems and how information is disseminated

In terms of early warning messages dissemination, most councils use word of mouth through existing community structures to disseminate their messages. About six councils reported using radios, whereas five councils conducted trainings and distributed leaflets or flyers to disseminate information. Only a few councils used other channels included social media (WhatsApp), SMS (text messages) and weather warnings (Figure 2).

Figure 2: How the early warning systems are disseminated (N=15)
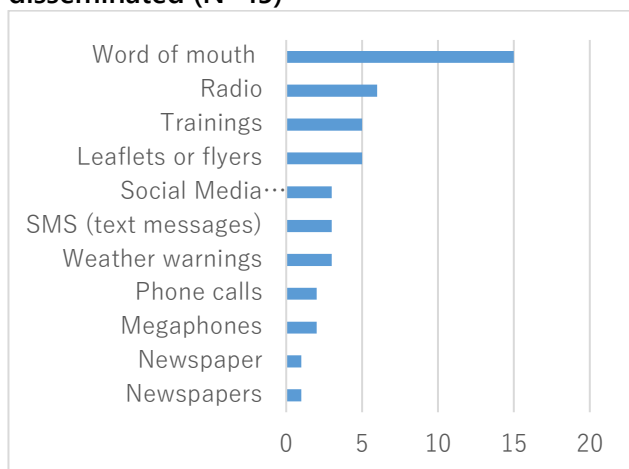
Source: Key Informants

It is important to note that the councils have structures that act as information blocks through which word of mouth is passed from the council to the villages. It was noted that in all councils, a civil protection committee exists that spearheads the coordination of early warning systems at the district level. This committee is supported by an area protection committee and a village protection committee, which coordinates the flow of information at the traditional authority and village level, respectively (Figure 3). It is through these committees that information is disseminated to individuals. The district civil protection committee informs the area committee which informs the village committee. The village committees inform volunteers in the village who announces the information in the village. When asked about whether the dissemination messages reach the beneficiaries, only 64% of the district respondents indicated that the messages do reach all of the intended recipients. Some challenges included lack of network, impassable roads, high voluntary turn-over due to lack of incentives, and lack of

resources. These challenges were reported to affect the effectiveness of the early warning systems.

**Figure 3: Disaster Risk Management Institutional Structure at district level**

Source: Key Informants

Priority areas in disaster preparedness

Beyond understanding the types of early warning systems and their associated dissemination techniques, we collected information on priorities for disaster preparedness (see Figure 4).

**Figure 4: Disaster preparedness priorities (N=15)**
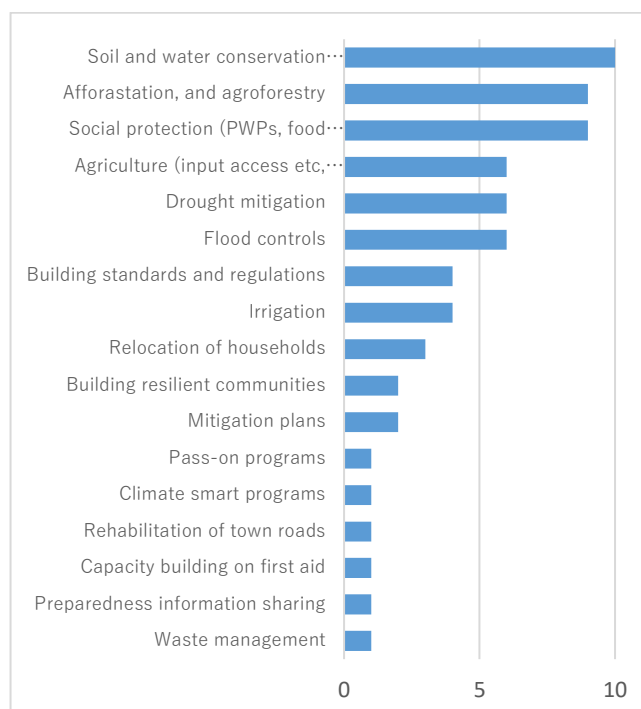
Source: Key Informants

A majority of the councils have prioritised environmental conservation as part of their disaster preparedness. Our analysis shows that a majority of the councils prioritise soil and conservation measures followed by afforestation or agroforestry and social protection programmes.

Social protection and disaster response beneficiary targeting systems in place

In addition to the early warning systems, we collected information on disaster response and social projection targeting systems for beneficiaries (see Figure 5).

Figure 5: Social protection and disaster response beneficiary targeting systems (N=15)
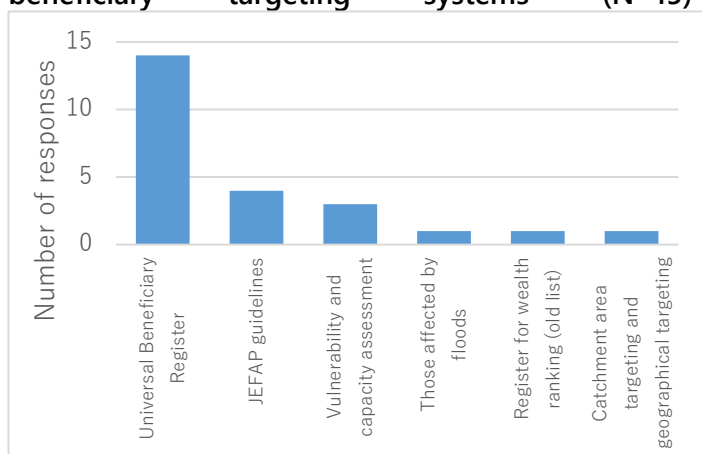
Source: Key Informants

We observed that councils employ various methods to identify beneficiaries for disaster response interventions. While the Unified Beneficial Registry (UBR)[3], Malawi's integrated social registry, is widely utilised, some districts have yet to adopt it despite its development by the Government and key partners as a solution to addressing issues such as duplication of benefits and improving targeting accuracy. The UBR, was introduced in 2015 and officially launched in 2017. Besides UBR, other tools and guidelines used for beneficiary

selection include the Joint Emergency Food Assistance Programme (JEFAP) guidelines, catchment area and geographical targeting, wealth ranking from older district registers, and lists of households affected by disasters identified by communities.

Challenges and priority areas with post-disaster response and social protection

Challenges faced with early warning systems

Key challenges related to early warning systems highlighted during the discussions include lack of resources including early warning systems equipment (such as river gauges, automatic water readers, solar panels) and the human resources to manage them, insufficient funding to the councils for early warning activities, and loss of early warning equipment such as river gauges washed away by floods.

Table 2: Challenges faced with early warning systems (N=15)

Challenges of early warning systems	Frequency
Resource constraints	13
Some river gauges washed away by floods	8
Poor coordination, communication, and technical capacity	6
Inaccuracy of indigenous early warning systems	1
Corruption	1
People take messages for granted	1

Source: Key Informants

Programme implementation challenges between 2021 and 2023

Between 2021 and 2023 when Malawi was affected by two consecutive weather-related disasters, the

districts reported major challenges in programme implementation including lack of coordination amongst the various organizations/government ministries working on relief, use of outdated database for beneficiary targeting (in some districts it was indicated the database was last updated in 2013), inadequate funding and limited human resource capacity.

Table 3: Programme implementation challenges (2021- 2023) (N=15)

Response	Frequency
Poor coordination amongst stakeholder	13
Poor targeting (UBR outdated)	8
Lack of funding	4
Lack of human and technical capacity	2
Political bias towards some locations	1
High voluntary turnover	1
Lack of proper early warning systems	1
Negligence of urban poverty	1

Source: Key Informants

Policy recommendations

A number of policy recommendations emerge from the study findings. First, there is need to strengthen disaster preparedness, including updating beneficiary databases, and improving coordination among relevant organizations. This should include addressing technical capacity gaps through training programmes and campaigns to educate communities about the importance of early warning messages and disaster preparedness. Furthermore, instead of relying on word of mouth as the primary method of dissemination of messages, multiple channels such as radio broadcasts, training sessions, and community meetings should be utilised to ensure information reaches a wide audience. Second, interventions that build household resilience to disasters should also be prioritised. The stakeholders interviewed proposed a number of asset-creation interventions which included crop pass-on programmes (sweet potato, banana vines, etc.), livestock pass-on programmes (goats and chickens), and forest development activities (tree planting, afforestation). While some of these are being implemented already, it was noted that these are not enough. Third, district and city councils should also be empowered through adequate funding for strengthening their disaster preparedness and response efforts. Recognising the impact of infrastructure damage on early warning systems, there is a need to rehabilitate damaged infrastructure such as roads, bridges, communication networks, and weather monitoring equipment.

References

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