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“This one caught us unaware’: Disaster politics and institutions during Cyclone Freddy in Malawi

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ABSTRACT

Global debates around increased frequency and intensity of flood disasters habitually return to questions around the responsibility of national states. The visibility of disaster politics and understanding of the policies and legal tools used by different actors during disasters is minimal, serving disaster risk reduction poorly. We examine these elements through a study of disaster responses by state and non-state actors in Malawi, drawing from 25 interviews with actors central to disaster responses, and 10 individual storytelling activities in affected communities. Results show disaster actors are not a homogenous category, and actors deploy different tools during emergencies. Disaster politics and coordination converge around the Department of Disaster Management Affairs and donors, but formal processes are ‘caught unaware’ and descend into chaos when disaster landscapes change. Meanwhile, tools and processes relied upon by stakeholders in flood disaster responses are narrow, incomplete and insufficiently account for national and local particularities and place-based vulnerabilities in disaster communities. This research shows that disaster responses should account for the nature of disaster politics, including the different policy and legal tools activated during disasters and processes relied upon and what this means for impacted communities caught in between. Actors emphasise socio-cultural and socio-political dimensions of disaster institutions to be better understood alongside fiscal-economic and legislative and regulatory elements. This paper advances an approach that accounts for *‘disaster scapes’* – as interdisciplinary, cross-sectional and holistic formulation of a whole variety of disaster outcomes beyond floodwaters to encapsulate the effects of sediment movement.

1. Introduction

The global debates around the climate crisis and increased frequency and intensity of flood disasters habitually return to processes and tools relied upon in disaster management, including the centrality of institutions ([1]; 2012; [2]). Scholars have proceeded from earlier framings that artificially bifurcated hazards from socio-cultural systems [3,4] to conceptualising disasters through political, economic, and cultural frameworks important in configuring risks, vulnerability and resilience [3,5,6]. Beyond climate-centric attribution of harms to flood disasters, place-based vulnerability-centric flood disasters attribution centres the role and importance of national state and non-state actors in disaster management including processes, coordination mechanisms and communication modalities relied upon in disaster management. However, at a national level, what policy and non-policy elements are activated during and after disasters, and with which actors (and level), including how they play out within prevailing disaster politics, remains an active area of research. Disasters and disaster states are a prime empirical site for understanding disaster politics and how institutions playout. Previous studies reveal divergences in post-disaster reconstruction, leading to conflicts and lack of local participation in decision-making [7]. Others reveal deficits in policy and legal frameworks as lacking mechanisms for incorporating climate change information in planning and decision-making, and failure to strengthen human capacity and agency [8]. Scholars such as [9] focus on

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how practices reflect various frameworks for managing floods and disasters, identifying institutional traps, whilst Thompson et al. [10] explored institutional factors influencing disaster risk in the context of glacial lake outburst floods. Policy and legal tools relied upon and activated during disasters are rarely studied, and even where these are studied, they are seldomly interrogated in the wider context of disaster politics. National level systems and disaster politics that underpin DRR and how they play out during major disasters remains an interesting area of research.

Central features of disaster politics point to pre-disaster conditions, political visions and how they shape responses, structure and organisation of governments [5]. Global governance decision texts such as the Sendai Framework for Disaster Risk Reduction (2015–2030) aim to strengthen disaster risk governance, including national platforms and stakeholder partnerships. A sharp reminder is that ‘each state has the primary responsibility to prevent and reduce disaster risk’ within the context of multi-level (multi--stakeholder/multi-sector) partnerships enhanced through the provision of sustainable international cooperation ([11]:13). While negative consequences of climate change impacts are unequally distributed both internationally and within individual societies and low-income countries have contributed least to the destabilisation of the earth systems will bear the brunt of the climate change impacts (IPCC 2022), global leadership and governance frameworks continue to place responsibility of reducing disaster risks on disaster states. What disaster politics emerge during disasters and what policy and legal tools and institutions are activated, and what this means for disaster risk governance continues to be a significant area of intellectual inquiry. Disaster impacts are likely to worsen unless disaster politics, institutions and policies aimed at managing and reducing risks and their underlying drivers are aligned and implemented effectively [8]. Specifically, disaster risk management for individuals as well as household risks being advanced without appropriate support systems that can guide actions/responses (Croswelller and Tschakert 2019; 2021; [12]).

Floods represent a major hazard in Africa, causing human and environmental damage (Tramblya 2020; UNDRR 2015), and casting a spotlight on disaster politics and institutions. Across the sub-Saharan Africa, floods pose a significant threat to society due to their predominantly agrarian economies. Impacts on lives, infrastructure and livelihoods magnify the relevance of disasters and the extent to which they inform decisions around climate adaptation and resilience [13]. Less surprising are questions about how geography, socio-economic and institutional features of cities as well as perception of climate change hazards affect scope of disaster adaptation agendas [14]. Specifically, how scope for urban adaptation agendas for adaptive urban governance could effectively be expanded in view of changing climate remains an important question (Birkmann et al., 2010). Whereas DRR strategies are a central feature to the management of climate change risks at global level, how national policy responses play out and the extent to which they are effective in major disasters such as Tropical Cyclone Freddy (Freddy) remain less understood. Some of this relates to the fact that Disaster Risk Reduction (DRR) efforts including prevention and mitigation have frequently been met with underlying socio-economic and political challenges, restricting policy effectiveness [8]. Thus, whereas general climate extreme events are sometimes predicted, allowing windows of preparedness and prepositioning, responses themselves have often been misaligned with relevant political commitment and adaptation actions [15]. Frequently, the balance between the technical (professionals) and the non-technical (community) remains problematic [7].

Questions about the *(in)effectiveness* of early warning systems, and budget constraints for such systems mean that disaster strategies often are poorly linked to scientific/citizen science ([16]; see also [17]). Some of these relate to how the institutional context interacts with vulnerability dimensions – physical, economic, social, environmental and cultural. This raises the need for a better understanding of distinct institutional vulnerability contexts that can help to identify options for resilience building. Institutions are place-specific, but how robust these institutions are to deal with disasters is a function of context, understanding, partnerships and wider support [5]. Policies that address increased susceptibility to potential impacts from hazards (vulnerability) are crucial to DRR efforts, but their application can be challenging [8,18–20]. Specifically, national level systems and disaster politics that underpin DRR and how they play out during major disasters such as Freddy remain under researched [21,22].

From this perspective, this paper draws on the recent historic Tropical Cyclone Freddy disaster (Freddy) in Malawi to examine disaster politics, and processes relied upon by stakeholders in responding to flood disasters and implications for disaster risk management. With sixteen major flooding events since 2010 [23], Malawi falls into the category of a disaster state, with state and non-state actors frequently grappling with disaster impacts. Studies interested in disaster politics, tools relied upon during disasters and what this means for the governance of disasters can greatly benefit from the changing nature of disasters and responses such as in Malawi. Specifically, the study asks: What are the national policy and legal tools and coordinating structures relied upon during disaster responses, and what disaster politics enable stakeholders to do or not do? How and in what ways are these tools and coordinating structures effective in shaping flood disaster response, and what are the related institutional vulnerabilities? How can flood disaster management be structured and organised to reduce institutional vulnerability and what disaster politics are needed to enhance disaster risk reduction in poor countries like Malawi? We address these questions through a qualitative research approach applied to the test case of Malawi. We combine documentary evidence, multi-level/multi-stakeholder interviews with state and non-state actors involved in disaster response, including story-telling interviews with disaster victims. Through transect walks in affected communities, we also observed post-disaster reconstruction in disaster affected areas. We show how understanding policy and legal tools activated and relied upon during emergencies can be important for agency and decision-making for state and non-state actors including communities. We demonstrate how this can integrally shape the basis for disaster investments and development decisions.

2. Situating institutions in flood disaster risk management

Research interested in analysing flood disaster risks frequently returns to questions of institutions, vulnerability including drivers to explain distinct governance contexts within which disasters situate [24]. Institutions directly/indirectly impact disaster management and capacity to respond to hazardous events. They impact choices, decisions, and behaviour of actors [25]. Institutions relate to prescriptions that humans use to organise all forms of repetitive and structured interactions, including within families, neighbourhoods and governments at all scales ([26]: 23). Institutions are place specific, embedded in contexts. Formal institutions point to official regulations and plans, and informal institutions are customs, traditions and unwritten laws [27]. Whilst research has variously shown how informal institutions play a central role across sub-Saharan Africa (van Klinken 2024), how and why this might be the case during disasters is seldom analysed. Actors in disaster situations take decisions about investment and response strategies based on rule structures, with consequences on others in local spaces. These choices are negotiated politically within institutional contexts and are based on various underpinning factors such as information, and perceived risks of situations [24]. How institutions perceive and frame disasters, as well as decide on response pathways is a function of disaster politics. However, within the wider context, institutions can be vulnerable – lack the existence and robustness to deal with disaster situations (Hochrainer 2006:18). Vulnerability also relates to *"the combination of the weaknesses embedded in institutions that reduce the capacity to resist/withstand/cope or recover from the impact of a hazardous event"* (Papathoma-Köhle et al., 2021:3). These weaknesses are a function of the institutional context within which flood DRM situates – disaster politics.

Recent studies such as Papathoma-Köhle et al. (2021:3) identify four pillars of institutional vulnerability, including the drivers. First is the *socio-cultural pillar* that centre on formal and informal rules, including societal patterns of behaviours, customs and traditions. This is driven by participation – local people's involvement in decision-making processes, which can help increase societal resilience to floods. Inadequate involvement of local people in intervention related decision-making can produce ineffective flood disaster risk management (FDRM), leading to more vulnerable societies [28]. This relates to *risk perception* – how local communities perceive the threat of flood disaster. How reliable are local authorities and experts including disaster managers in government, and the role of historical disaster experiences shapes risk perceptions. Risk perception is a function of engagement with communities which can help generate context-relevant and context-appropriate interventions, resonating with socio-cultural world views [17]. A focus on socio-cultural worldviews brings into a sharp spotlight the role and importance of traditional and local knowledge (third driver) – the practice of customs and beliefs particular to a society relied upon in community disaster preparedness, response, recovery, management and mitigation for emergencies [29]. However, how this knowledge system feeds into policy tools remains challenging for policy [17].

Second is the *socio-political pillar* – society's political status relating to accountability, democracy, transparency, and political stability. This pillar raises questions about disaster politics but also institutional capacity and responsibilities around sharing of risks and responsibilities of FDRM among actors, stakeholders, and citizens. A lack of sufficient accountability for specific actions among government actors can increase material costs and disaster casualties [30]. There are questions about openness in how information is made available, shared, accessed and utilised by stakeholders in disaster management (*transparency)* [30]. Open flow of accurate and timely information and robust communication networks from national to community spaces is crucial in shaping early warnings, including evacuations. Communities can exercise agency in their own response pathways. Disaster politics including political governance integrally influences stakeholder interactions, transparency and accountability.

Third is l*egislative and regulatory pillar* – of laws and regulatory tools related to FDRM. These tools can influence investments in the built environment and society to withstand impacts of flood disasters. Drivers include land use planning (e.g., land allocation, land management in flood-prone zones, building regulations), building codes (and their enforcements), environmental legislation (e.g., deforestation, land degradation), and insurance (e.g., protection against flood damages/losses [27,31]. In the context of disasters, legislative and regulatory elements form part of disaster politics.

The final pillar is the *fiscal economic pillar* – financing mechanisms for disaster management at different levels. National disaster investments are important in building community and local flood resilience, and households' ability to withstand shocks depends on ability to bounce back – often a function of financial capital [28]. Competing priorities for national governments, including fiscal limitations mean that governments face challenges in sustainable investments in disaster resilience infrastructure and strategies [24]. International actors such as the UN become important sources of disaster investments in spaces where insurance covers are almost inexistence [11], but actual disbursement of donor funds is also a function of the politics surrounding disasters.

Here we draw on these frames to examine how institutions playout during disasters. We interrogate disaster politics in the context of policy and legal tools and institutional processes relied upon by disaster actors and what this means for disaster affected communities specifically and DRR more broadly. We reflect on decision making and mobilisation and distribution of resources. As with Zaidi [32], we use FDRM concepts as sensitising concepts to give a sense of reference, guidance and direction in our approach to the empirical case.

3. Research design and methodology

3.1. Researching flood disasters in Malawi – historical account of flood disasters in Malawi

Malawi is a landlocked country in sub-Saharan Africa with a population size of about 19 million people with 9.2 million men and 9.8 women (GoM2021). It is predominantly agricultural, with about 80 % of the population living in rural areas (IMF 2020). The country is highly vulnerable to climate change, ranked 163/182 countries on the 2020 Notre Dame Global Adaptation Index on Vulnerability. Climate-related disasters are already increasing in frequency and severity, heightening economic/non-economic losses [33]. The country is one of the disaster-prone countries in Africa, recording sixteen flooding events, one rainfall-related landslide, five storm-related disasters, and two severe droughts since 2010 [23]. Torrential rains caused by Cyclones Ellin (2000), Japheth (2003), Idai (2019) and Freddy (2023) have caused serious socio-economic damage in Malawi [34]. Malawi geographically lies in a complex transitional zone where precipitation variability is driven by both tropical and extratropical extra-tropical processes. These influence regional climatic patterns of both Eastern and Southern Africa [13]. The transitional nature of Malawi's geographical position amplifies the climate complexity at local level. There are reports that Malawi will continue to experience increased flooding due to heightened risk and exposure to ElNino and La Nina events (Malawi Government, 2018). One key feature of the disasters of the past in Malawi is their rurality, concentrated on the Lower Shire, including Chikwawa. Historically, flooding in Malawi has been largely fluvial and rural. In recent years, fluvial flooding in cities is a common occurrence but never culminated into a disaster. Freddy was unprecedented in the history of disasters in Malawi across scale, impact, geographical location and form. The Post Disaster Needs Assessment (PDNA) reveals Freddy total recovery needs for the physical damages and economic losses are estimated at $680.4 million [35], with over 1.2 million deaths registered for the 2023 – compared to 278 and 60 for the 2015 Anna and 2019 Idai respectively (Fig. 1).

The city of Blantyre was one of the hardest hit. In Blantyre's Soche Hill for instance, floods were more than floodwaters. Mudflows washed away and buried houses and people, destroying any infrastructures in their way. The localised mudflows from hill slopes and the resulting flooding on the foot of the hills in Blantyre, Chiradzulu, Mulanje and Phalombe in the Southern region of Malawi were unprecedented [35]. Consequently, rather than floodwater (inundation), a great number of the fatalities following Freddy were due to landslides in the Southern Highlands and in the urban space of Blantyre specifically poor informal residential spaces of Sochi Hills. Here Freddy placed a spotlight on disaster politics in Malawi, including institutional processes of state and non-state actors, and how they are activated and playout at different levels.

3.2. *Methods*

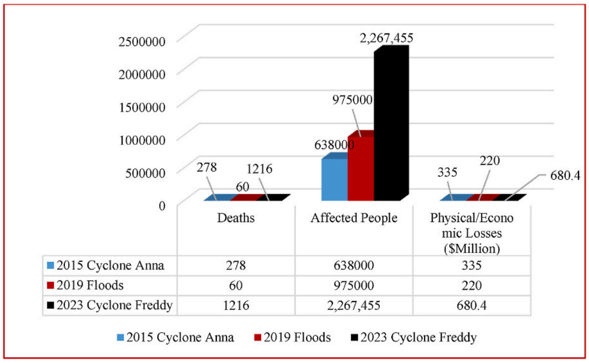
Data collection was conducted between July and September 2023. We collected data through: a) documentary analysis, b) multi-level/multi-stakeholder interviews, c) storytelling, and d) observations.

3.2.1. *Document analysis*

We selected policy and legal frameworks, strategies and plans related to disaster risk reduction for thematic analysis. We prioritised public documents that address flood risks management directly and from an emergency management standpoint [8]. Specifically, we found policy documents through internet search (e.g., flood, Malawi) and through recommendations from key informant interviews. We excluded policy documents that relate to livelihoods and social protection more broadly as these did not fit into the FDRM. Overall, six public documents were subject to thematic analysis, surfacing important and frequently referred to concepts. Policy and legal documents included: 1) National Climate Change Policy 2016 - NCCP, 2) National Disaster Risk Management Policy 2015 0 - NDRMP; 3) National Environmental Policy 2014 - NEP; 4) Local Government Act 1998 - LGA; 5: Malawi Vision 2063 - MV, 2020; and 6) Malawi Environmental Management Act 2017 - MEMA. We then conducted a content analysis to identify thematic areas. We then used NVivo to map out codes to make visible emphasised elements, including thematic areas related to principles of DRR. We focused how policy documents shaped tools for disaster risk management, and what this means for actors and affected communities.

3.2.2. *Multi-level interviews*

We conducted interviews with different stakeholders, state and non-state actors. Stakeholder participants involved in the study were selected through purposive sampling, focusing on state and non-state actors. The sampling technique was informed by an initial stakeholder mapping through a literature review. This included formalised (state department, UN agencies), and non-formalised (e.g, FBOs) organisations. We identified key informant interviews (e.g., academic, state and non-state interviews) and approached these purposively based on their links to DoDMA and their knowledge of flood disasters. This was accompanied by snowballing technique, where interviewees recommended people who know people working in the disaster space. We interviewed state actors ($n = 3$, Department of Climate Change and Meteorological Services Department (DCCMS), DoDMA, DWR), donors ($n = 6$), academics ($n = 2$) and faith-based organisations ($n = 4$) (see supplementary material). At national level, we asked about policy tools underpinning disaster responses, collaborations between and among state and non-state actors. We also asked about resource mobilisation and decision-making around disaster resources. Interviews also focused on NGO responses, perceptions of DRM in crisis times, and views



	Deaths	Affected People	Physical/Economic Losses ($Million)
🟦 2015 Cyclone Anna	278	638000	335
🟥 2019 Floods	60	975000	220
⬛ 2023 Cyclone Freddy	1216	2,267,455	680.4

Fig. 1. Estimates for CF included confirmed deaths and those missing (Author compilation from various sources).

on missing elements. We also focused on key actors and institutional processes underpinning DRM.

Informal storytelling interviews were also conducted with victims of the Freddy in Soche Hill ($n = 10$). We purposively approached victims based on their direct experience of the Freddy, with the majority selected based on snowballing technique. Here we asked questions about local experiences of Freddy, participation, factors that contribute to flood risks/disasters, local response strategies, and challenges. Questions also focused on the extent of the impacts of Freddy, disaster relief responses and their focus, and the role of the local city council (BCC). We asked about local perception of what a future direction might be in terms of appropriate and sustainable disaster tools and responses, including the nature of disaster politics required.

3.2.3. Non-participant observations

We used non-participant observations in and around Soche Hill to understand impact and recovery activities. Through transect walk with our community contacts ($n = 2$) we observed livelihood activities and how survivors were rebuilding their lives.

In what follows, draw on selected interview quotes to show elements that participants frequently returned to in different conversations, offering a congruence between the perspective that informs the research questions, and the research methods. We make visible synthesised description and interpretations of participants' accounts, to highlight as close as possible placed-based realities and experiences [36]. By so doing, we expose the state of play of institutions during and after Freddy.

There are three limitations to this study. First is the snapshot nature of the study, which means that it could miss out on the longitudinal experiences and the changing views. The second relates to the reliance on perceptions as evidence [37]. The final is the deteriorating political and economic climate in Malawi, which could have possibly influenced perceptions of the disaster and related responses. Our objective to draw on grounded disaster insights means that our results are reliable and robust in explaining the way institutions respond to disasters, tools activated and relied upon during disasters and how local communities are implicated.

4. Results

4.1. Disaster policy and legal tools

We analysed seven policy and legal tools frequently relied upon by state actors in responding to disasters (Table 1). Analysis reveals several disaster aspects. Decision texts emphasise identification and assistance in disaster risks (NCCP 2016, NDRM 2015, LGA 1998); building and strengthening Early Warning Systems (NDRMP 2015); and stakeholder partnerships (NDRMP, NCCP) 2016. Other tools focus on protecting loss of lives, property and livelihoods (NDRMP 2015, LGA 1998); and flood risk reduction (NEP 2014, MEMA 2017). A focus on enhanced allocation and efficiency of resources appears in the NCCP 2016, NDRMP 2015, and the LGA. Interviews reveal most of these elements have not been actualised, due to several reasons, including risk perceptions linked to information/information sharing (socio-cultural, and legislative and fiscal economic). Meanwhile, interviewees frequently referred to the National Disaster Risk and Management Act as a comprehensive decision text in that it spells out disasters in a holistic manner. How regional and international frameworks such as the Sendai Framework (UNDRR 2015) are picked up and fed into decision texts nationally is clear (including applying the definition of disasters from the UNDRR). However, whereas national policy tools reveal clear links to international and regional frameworks in their framing (vertical links), horizontal links are lacking, including how national and local hierarchies of knowledge are integrated in decisions which affects cross-country learning (Section 3.4).

Although the NDRMP and the NCCP encapsulate several thematic areas (Table 1), majority interviewees expressed opinions that

Table 1
Policy and legal frameworks in Malawi and their related thematic focus (Key: *Teal = Emphasised, Orange = Not Emphasised; White = Missing)*.

	Malawi						
Broad thematic areas	Local Govern. Act 1998 (LGA 1998)	Nat. Environ. Policy 2014 (NEP 2014)	Nat. Disaster Risk Mgt. Policy 2015 (NDRMP 2015)	Nat. Climate Change Policy 2016 (NCCP 2016)	Environ. Mgt. Act 2017 (EMA 2017)	Vision 2063 (2020) (V2030)	Disaster Risk Management Act 2023 (DRMA 2023)
Identification and assistance of disaster risk.			🟧	🟧			🟦
Building an early warning system.			🟦				🟦
Stakeholder partnership			🟦	🟦			🟧
Protecting loss of lives, property and livelihoods	🟧		🟦	🟧		🟦	🟧
Cross-cutting issues (Gender, youth).				🟦			🟧
Flood risk reduction							🟧
Enhancing allocation and efficiency of financial resources			🟦		🟦		🟧
Community based Disaster Risk Management			🟦	🟦		🟦	🟧

these were insufficient and did not provide adequate scope for state actors to comprehensively decide and respond to disasters. For instance, disaster relocations do not feature prominently across the tools yet interviews with the BCC expressed strong opinions in favour of relocations as a legal response pathway. Some interviewees adjudged *"people should live with floods"* but that specific socio-cultural support mechanisms for doing so are missing (CIs:07.2023). Analysis reveals Malawi flood disaster policies and strategies narrowly focus on riverine and general floods – the problem of floodwaters, but Freddy experiences show that this can be problematic. Although the DRM Act 2023 expands scope for local action to respond to disasters, socio-political and fiscal economic issues remain pressing concerns. Whereas DRM falls under the office of the Vice President (Cabinet Office), the 2023 DRM Act allows for the formation of the National DRM Committee, integrating donor and non-donor actors. Besides socio-political challenges, disaster politics can decisions by local authorities such as on possible relocations of people from fragile disaster-prone areas. Here formal and informal processes permeate disaster spaces, affecting risk perceptions, and limiting what local authorities can do within existing tools. Whereas state actors and some international NGOs advance formal processes (e.g., UNICEF, UN Women), other NGOs including FBOs were more likely to advance informal processes even within temporal disaster relocation camps. Analysis reveals policy and legal tools relied upon during disasters are narrow, and insufficiently support decision-making by actors. This is exacerbated by actors, institutional processes and coordinating structures.

4.2. Actors, institutions and coordinating structures

Actors, institutions and coordinating mechanisms crucially determine FDRM, including robustness/reliability of response strategies. Different state and non-state actors work in disaster spaces in Malawi, but how they interact and collaborate in disaster situations limit possibilities. First are multi-level government actors. Department of Climate Change and Meteorological Services Department (DCCMS) provides meteorological forecasts, enabling contingency plans, and anticipatory actions. We found strong links between DCCMS, Department of Water Resources and DoDMA, but horizontal and vertical links between and among stakeholders remain weak. Coordinating structures for state and non-state actors involved in flood disasters revolve around several national level clusters but centre on DoDMA (the national coordinating arm under the Office of the Vice President) and DCCMS. Prominent disaster clusters include the Humanitarian Country Team, a platform for information co-chaired by DoDMA and the UN. Others include those focused on WASH, Food Security, and Protection (Fig. 2). There is also the national disaster risk reduction and management steering committee, also led by DoDMA. DCCMS generates and shares climate information with stakeholders (e.g., level/intensity of flood disaster), but reliability and quality of the information remains problematic. Meanwhile, the Malawi Defence Force also plays an important role, supporting search and rescue missions (e.g., offering information on which areas are impassable, and identifying additional threats?). However, the defence force lacks adequate equipment (e.g., appropriate helicopters) for air rescue (fiscal/economic). During Freddy, air rescue helicopters came albeit late as bilateral assistance from Zambia and Tanzania. One responded added that, *"only now has budgetary allocation been made to procure helicopters for the Defence Force"* (M3:13.06.2023). There are other departments such as the Environmental Affairs, and the Geological Surveys Department who ordinarily would be crucial in disaster strategies (e.g., perceptions of risks, information sharing, anticipatory actions), but these have been peripheral to disaster management responses (socio-political). Only after Freddy are stakeholders talking about making the role of the Geological Survey Department visible in DRM. The argument among government/donor actors was that Freddy impacts could have been lessened if the Geological Survey Department were involved as this could have expanded the scope of responses, and knowledge of the possible disaster outcomes from floodwaters to mudslides.

UN Agencies such as the UN Women and other international NGOs such as World Vision, Action Aid and WFP also play active roles in disaster responses (e.g., resource provision, agenda setting). There is a considerable number of NGO networks in Malawi working

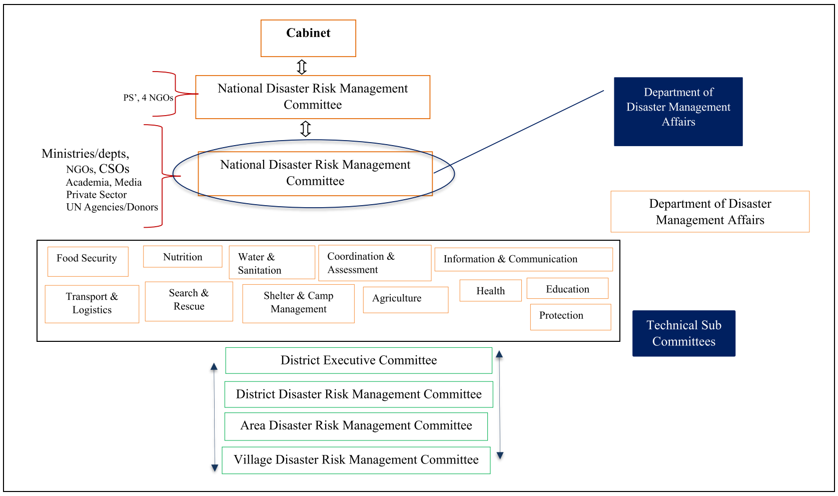

Cabinet
PS', 4 NGOs
National Disaster Risk Management Committee
Department of Disaster Management Affairs
Ministries/depts,
NGOs, CSOs
Academia, Media
Private Sector
UN Agencies/Donors
National Disaster Risk Management Committee
Department of Disaster Management Affairs
Food Security
Nutrition
Water & Sanitation
Coordination & Assessment
Information & Communication
Transport & Logistics
Search & Rescue
Shelter & Camp Management
Agriculture
Health
Education
Protection
Technical Sub Committees
District Executive Committee
District Disaster Risk Management Committee
Area Disaster Risk Management Committee
Village Disaster Risk Management Committee

Fig. 2. Disaster risk management structure in Malawi.

around flood disasters, but these are relief oriented. There are civil society led collaborative structures such as the Civil Society Network on Climate Change, working around emergency preparedness response, providing transport, shelter, and treatment units (e.g., National Preparedness Office). Faith-based Organisations such as Churches Action in Relief and Development also provides humanitarian assistance and advocacy initiatives being undertaken by the alliance (LNGO3:06.06.2023). However, NGOs including FBOs are also poorly organised and insufficiently linked to climate services with some often working in isolation and with informalised processes. In some cases, some of these expressed strong opinions that wider disaster politics in Malawi tends to marginalise actors operating outside DoDMA and that this was problematic.

Meanwhile, District level structures include the Local District Authorities, working with District Civil Protection Committees, and Village Civil Safeguarding Committees. There are District Civil Protection Committees under DoDMA, which allow collaborations with NGO actors. Iin terms of implementation of disaster strategies, however, participants agreed there is low capacity in districts in dealing with flood emergency preparedness and response. Analysis reveals vulnerabilities across the socio-cultural pillar (e.g, participation, perceptions of risks and marginalisation of local knowledge). Majority of the respondents argued DoDMA's on ground structures lack resources (also transparency/accountability/socio-political/fiscal economic). Meanwhile, these structures exist in selected regions only, and work largely with district Heads of Departments, and rarely with communities (socio-cultural).

Stakeholders were divided on the robustness of nation institutions to deal with disasters. Some expressed optimism that national processes were becoming robust (capacity, leadership and coordination) with each passing disaster and that *"the frameworks are adequate*" (INGO1:23.05.2023). Others commended EWSs, that at least communities/citizens were informed about Freddy a week before (INGO1:23.05.2023) and that the DCCMS was effective in disseminating Freddy information. However, DCCMS and DoDMA acknowledged forecasting *"did not anticipate mudslides but focussed on heavy rains to mudslides"* (M1:15.06.2023). *"This one [mudslides) caught us unaware,"* one respondent added. Consequently, EWSs did not translate into proactive planning and anticipatory actions (A1:08.06.2023). Thus, rather than *"strategic thinking,"* coordinating structures prioritised information sharing (INGO1:23.05.2023). Disaster politics and despite the long history of floods in Malawi, clusters continue to be reactionary: *"when disasters hit that is when we start meetings, including committees driven by donors themselves discussing what is needed"* (INGO6:7.05.2023). We find that disaster committees including those at district and community level centre on relief distribution as opposed to disaster management. During Freddy, formal structures frequently emphasised resource mobilisation and logistics, influencing disaster discourse. This affected the swiftness as well as the territorial reach of responses.

Community interviews with Freddy victims in Blantyre's Soche Hill reveal poor state response to the disaster. Whereas responding actors had withdrawn from disaster zones, *"victims remain in camps with little* support*, traumatised, and in need"* (CIs:07.2023). A focus on material provisioning neglected psychological trauma among residents: "*I am here, but who would want to live here after what happened? I am still traumatised and afraid,"* explained one female victim at Soche Hill. In response, the BCC reveals policies/instruments such as relocation are there to provide response efforts (M3:25.08.23), but these have been undermined by lack of political will to put effective measures for intended communities (socio-political, and fiscal-economic challenges. Here the blame is on disaster politics that did not genuinely commit to budgetary appropriations for disaster mitigation and support towards activation of relocation tools by local authorities.

4.3. Stakeholder perception of freddy responses in Malawi

4.3.1. Perceptions of what went well

We interrogated perceptions of risks and the effectiveness of disaster responses. Stakeholders frequently returned to two elements that arguably worked effectively during Freddy. The first is forecasting and early warning by DCCMS. The argument was that awareness of the forecasts and warnings during Freddy was high. And that few messages had good lead time (days) and were well monitored in terms of intensity and trajectory of the disaster. Respondents frequently argued, *"DCCMS forecasted well and gave ample warning"* (INGO1:23.05.2023); *"MET was excellent"* (M3:13.06.2023); and that *"forecasting is improving with each disaster"* (LNGO3:06.06.2023). However, EWSs did not translate into improved resource coordination/mobilisation. And the forecasting itself was not geographically precise, failing to encapsulate mudslides.

Second is widened citizen/stakeholder participation in the humanitarian responses. This specifically relates to prepositioning of support and the *"unprecedented public response"* to Freddy, including provisioning of resources (money, in-kind, land/air transportation). Actors in the humanitarian assistance expressed opinions that DoDMA's involvement mean that " *…. disaster responses are more organised"* (INGO1:23.05.2023), but that FBOs and private citizens ignored formal structures. There are arguments that the increased role of citizens in humanitarian assistance means that *"people realise that they can no longer leave disasters to donors alone"* (INGO5:22.06.2023). Different organisations/churches offered humanitarian assistance, but these were informalised. Although unquantified and marred with logistical challenges, the overall level of resource outlay towards response was arguably unprecedented. However, analysis revealed stakeholder participation did not stem from any specific government policy level action. This default position and high private citizen response was shaped by three elements: 1) the magnitude and the impact of Freddy, and 2) the urban nature/dynamic of Freddy, and 3) a general donor fatigue and the need for locally driven solutions (ownership). Overall, heightened citizen participation was followed by uncoordinated relief support, with reports of duplication of efforts ins elected areas.

The third relates to policy and legal framework on DRM. Stakeholders view policy and legal frameworks on disaster management in Malawi including allied policies and Acts as adequate and supportive (Table 1). The enactment of the DRM Bill into an Act (2023) further raised optimism among actors about possibilities for effectively planning and generating long-term disaster investments (M3:13.06.2023). How this will playout in reality is a function of disaster politics, and this is yet to be seen.

4.3.2. Perception of the bad and the ugly during Freddy

In the context of Freddy, results reveal seven factors that bear on disaster responses and outcomes and show vulnerabilities at different action levels.

a Challenges of Resource Mobilisation

Analysis reveals slow levels of resource mobilisation for evacuation, search and rescue at all levels. |We find low levels of awareness/knowledge and capacity about disasters that altogether limit disaster responses. To some NGO actors, *"about 70 % of the disaster budget in Malawi is* supported *by donors,* adding that this *"highlights inadequate political will"* (A1:08.06.2023). The argument is that rather than take a leading role in disaster resource mobilisation (fiscal economic), the government waits for unpredictable donor resources to act (INGO6:7.05.2023). As a result, actors were broadly reactive, failing to mobilise resources in time to respond to disasters. We find short-termism in interventions, focusing on *"water, food, and shelter"* as recovery (INGO2:07.06.2023) as opposed to long-term infrastructure building. Non-governmental and donor organisations do not always prioritise disasters, as *"our [donor] budgets change as we go"* (LNGO3:06.06.2023). This affects investments in long-term disaster strategies. One consequence is that whilst the complexity, intensity and geography of disasters have evolved, the country continues to deploy the same tools and logic (INGO2:07.06.2023). This 'business as usual' approach to DRM has proceeded whilst affecting the sustainability of disaster responses and resilience of institutional practices.

Both state and non-state actors highlight gross limitations in funding DRM in times of humanitarian need and for long-term risk mitigation. DoDMA complained about erratic/untimely funding from the government in the face of missing direct parliamentary appropriations. This affects disaster prepositioning. For instance, in-country capacity for aerial rescue was missing: *"We did not have helicopters with the capacity to airlift cargo in the Malawi Defence Force"* remarked one respondent (M3:13.06.2023). Meanwhile, donor organisations complained about the pressure of having to deal with numerous funding requests during disasters all framed around relief response (INGO3:16.06.2023). In most cases, poor coordination donors are unsure what they are funding (INGO3:16.06.2023).

b Donor Politics

Disaster politics including DRM in Malawi relates to donor politics. A lean financing landscape that is heavily reliant on donors reveals three-quarters of disaster budgets are externally sourced. Actors including donors do not always designate funding for DRM. One donor participant remarked, *"DRR is not* funded *well until disasters hit"* (M2:17.07.2023), with DoDMA reporting about how they are often unable to secure separate budget lines for mitigation, construction and relief from donors or government (M3:13.06.2023). Only the national budget, development partner aid and NGO aid were mentioned as disaster financing instruments, which is in sharp contrast to the different sources registered in other sectors. As a result, DRM in Malawi remains donor-centric(A1:08.06.2023). Whilst donors lead on resource disbursements, state actors raise questions about effectiveness: "*there is not much coming out of donor resources"* (M3:13.06.2023). Actors at national level described donors as preoccupied with disaster responses as opposed to investing in structural (engineering) measures (e.g., dykes, river training etc) for long-term resilience building. One respondent expressed disappointment that: *"[h]otels were full in Blantyre with responders, but two weeks later, the hotels were empty. Yet victims were still people in camps. We see* grants *being used to secure tents as opposed to materials for reconstruction"* (M3:13.06.2023). Commenting on quick withdrawal of support, one responded remarked *"there are no donors after disasters"* (INGO1:23.05.2023). Over and above support for humanitarian response, state and NGO actors as implementers complained about strict disaster grant conditionalities, that they provided little flexibility on what initiatives could be funded (INGO7:25.05.2023).

Seen holistically through the lens of DRM in general, analysis reveals a lack of investment in underlying structural factors that cripple risk management. There are two elements to consider. First is the form of DRM that is relief-oriented neglecting reconstruction and long-term resilience building. DoDMA is active in disaster responses but generally silent on preparedness. There are critical opinions that development programs should aim for rebuilding the resilience of people. Donor interest towards long-term interventions is lacking across the disaster risk management spectrum. Second and linked to the first is the nature and the implementation of local level DRM programs and mitigation measures. Within the broad risk mitigation spectrum, the argument is that the implementation of flood interventions was sub-optimal, narrow, short term, poorly resourced and uncomprehensive at all levels. As a result, institutions frequently return to default positions of chaos during disasters, part of which points to disaster politics.

c Weak Vertical and Horizontal Collaborations

Disaster responses are characterised by weak vertical and horizontal collaboration between and among state actors and between state actors and non-state actors, affecting proactiveness. In the context of Freddy, *"institutions emphasised responses rather than preparations* (M1:15.06.2023); and that "*others did not respond until the disaster struck to start recovery* (LNGO1:29.05.2023) (M1:15.06.2023). Meanwhile, the BCC described relief coordination around Soche Hill and Blantyre in general as chaotic. Others argued DoDMA responses were narrow: *"DoDMA should go beyond response to examine the entire flood disaster chain"* (A1:08.06.2023). Despite early warnings, Freddy *"preparedness was not good,"* and *"last mile communities were not reached* (INGO4:22.06.2023). Some of this relates to lack of clarity on humanitarian standards to follow during disasters. Specifically, most actors have no standard operating procedures – lack knowledge on disaster landscape, what to do and when (M1:15.06.2023). As a result, places like Blantyre were oversupplied with relief assistance, leading to duplication of efforts while rural areas were deprived. However, media attention and increased number of relief responders did not translate to coordinated support (INGO5:22.06.2023). The argument is that private citizens, some donors and FBOs disregarded structures and bypassed DoDMA, with non-victims exploiting this lacuna to receive assistance. We find divergences between and among actors. For instance, one NGO representative explained, "*after Freddy, we implemented a 'running back to school campaign' but other actors felt this was too early and decided not to* support" (INGO7:25.05.2023). Meanwhile, the UN Office for the Coordination of Humanitarian Affairs (UN OCHA) cluster system plays a critical role in the coordination of collaborations of humanitarian aid, but the system itself prioritised information sharing, leading to systemic deficiencies, and a serious lack of vertical and horizontal collaboration. Overall, clusters are disjointed and ineffective, some of which hardly meet periodically.

d Tensions, Contestations and Divergences

Analysis reveals Freddy responses were characterised by tensions, contestations and divergences between and among actors. For instance, whereas the department of water resources is mandated to issue flood disaster, DCCMS itself is limited to flash floods (15.06.2023; 2: 17.07.2023), raising challenges of coordination. Some departments felt left out. Flood disaster financing remains a crucial issue, and actors are divided on the increasing reliance on donors (agenda setting), which affects agenda setting and ownership. Meanwhile, there are tensions and divergences on transparency and accountability of disaster resource allocations and decision-making. Reports of accusation against some NGOs were heard reporting that: *"private individuals raised* funds *through online campaigns but did a lot more than NGOs, and "their actions were more accountable*" (M3:13.06.2023). While FBOs crowd sourced funds, how much was raised and how it was utilised remains a pressing topic nationally. Some NGOs blamed philanthropic FBOs and private citizens for the chaotic disaster response, arguing that they bypassed coordination structures, and created imbalances in the way support was rendered.

Meanwhile, majority respondent bemoaned the heterogeneity of state actors on the one hand and political actors on the other – as being driven by different motivations and voices. State actors themselves respond differently to disaster early warnings. This affects mandates, including who does what, how and when. Soche Hill community residents built in illegal spaces but went further to obtain an injunction against forced relocation using political support. The BCC argued "[t]*he area where the Government received an injunction not to move people is the same area where we lost most people due to Freddy"* (A1:08.06.2023). Whereas the BCC reportedly secured alternative land for relocations, interviews in Soche Hill reveal local people are unaware. The BCC insists people in Soche Hills should relocate, but are unclear on modalities, including which policy and legal tools to deploy when faced with legal encumbrances.

Some of this relates to political interference in councils. Some respondents expressed opinions the injunction against the BCC raises the need to explore and revisit the role and importance of legal frameworks, including the judiciary. Remarking on this, one state actor adjudged that in disaster mitigation efforts, the *"involvement of the Judiciary in disaster strategies is crucial since there are land, and human rights issues involved. The tragedy in the Soche Hill taught us that judicial decisions should consider these realities. Currently, judicial decisions appear delinked from disaster realities"* (M3: 25.08.2023). The BCC acknowledged that overtime these realities have however not been dealt with politically and economically, and that the council itself has failed to successfully discourage settlement in the fragile areas. Highlighting the blame game, the BCC believed that utility companies specifically those on water and electricity are equally to blame for taking their services to fragile areas such as Soche Hill, adding that this facilitated settlements.

e Sluggish and reactive responses

We have previously argued that Freddy responses were sluggish and reactive, with a concentrated focus on relief as opposed to preparedness. Stakeholders expressed disappointments that *"systems meant to serve people are not effective"* (LNGO2:29.05.2023). We have argued that flood responses were reactionary, focussed on recovery. Stakeholders agreed that engineering solutions including hard infrastructure are needed, but that low interest from donors affects resource mobilisation. Frequently cited flood disaster interventions have been non-structural measures, including afforestation. But many respondents argued that Freddy showed that these are 'tried and failed strategies', raising the need for new approaches. While DoDMA activated response units before Freddy landed, prepositioning and sending out early warning messages, actual responses and coordination were limited by a lack of on-ground presence.

Meanwhile, rescue operations were hindered by the lack of specificity of early warning messages, the quality of response plans and limited resources/equipment. Analysis reveals Malawi did not have an evacuation plan and people were not encouraged to relocate. Specifically, airlifting evacuation was missing with belated responses targeting traditional disaster areas and not the full-scale analysis of Freddy impacts. Flood disasters in Malawi have predominantly been rural and around the Lower Shire. Interviewees revealed anticipatory actions in Lower Shire were established than in Blantyre. Few reports reveal that the lower Shire had well prepositioned search and rescue and resources, but Phalombe was not prepared, leading to delays. In some cases, *"responders touched the ground 3–4 days late, and helicopters came several days after the impact, delaying rescues and evacuations"* (WFP, 2023). NGO reports reveal *"the government responded several days after Freddy impact"* (LNGO2:29.05.2023). Elsewhere, the government did not reach cut off areas, causing further delays in assistance (A1:08.06.2023). Interviews with DoDMA reveals *"… we knew villages such as in Mulanje would be hit, but even with this information we offered nothing until it was too late"* (M3:13.06.2023). During Freddy, emergency response operating centres were activated 5–7 days before Freddy landed. However, actual prepositioning of responses was at national rather than regional/community levels. The actual response and realities revealed fundamental gaps in coordination and support (A1:08.06.2023). Some of this relates to a lack of devolution, affecting capacity at local level. Remarking on local capacity, DoDMA explained that:

> *"We see a lack of local capacity and poor interventions. In Karonga, about 10 houses had their roofs blown off. Instead of mobilising own support to assist and respond, the districts requested assistance from Lilongwe. This is time consuming and costly for DoDMA"* (DoDMA2023).

This also points to differential disaster capacity across districts. In Soche Hill, residents were left unaware of Freddy impacts and pathways for responding – relying on guidance from a local Chief. Ultimately, this calls for effective coordination and better preparedness in rural and flood-prone districts.

Table 2
Stakeholder perception of the future direction on Disaster response in Malawi.

Factors/What future toolS should enable state actors to do	Level of Emphasis (E = Emphasised, M = Medium-level emphasis, N=Not emphasised)	Comment	Event related pathways to Action/ Policy Change/Disaster Risk Management
Sensitisation on flood disaster and emergencies	E	- We need simulations for people to understand disaster impacts– social ecology of disasters	- Mitigation/Preparedness (socio-cultural)
Locally driven flood disaster agendas, including disaster planning	E	- Need for a multisector agenda driven by community perspectives - Role of communities beyond knowledge contribution in vulnerability assessments - Improve community engagement in flood disaster-	
Event related policy learning	N	- Need a new thinking and definition of flood disasters in mapping/responses - Disaster thinking should be holistic beyond traditional/rural geographical framings of flood disaster - Disaster thinking should be built in school systems to generate an organised response (school curriculum)-	
Long-term/broad-based thinking	M	- Take a holistic view of disaster development, including resilient roads, hospitals, schools etc	- Mitigation (Disaster-scapes) - Socio-cultural, socio-political, fiscal economic and legislative and regulatory
Building strong country ownership	N	- Reduce reliance on donors - Need a clear national leadership on DRR - Disaster tools should enable contingency plans at all levels-	
Build progressive and active multi-level collaborations	E	- Need active networks at different levels. - Strong collaborations in relief distribution to ensure equity/fairness and at different levels - DCCMS to strengthen collaborations with the Geology department-	
Progressive political will/ support	E	- Government should play a leading role in long term disaster investments	- Prevention/Mitigation (socio-political)
Strengthen regional cooperation and collaborations	N	- Strengthen cooperation/collaboration with other countries particularly Mozambique and Madagascar-	
Address cultural factors and challenges	N	- Clarity on what citizens can do or not do during disasters - Clarity on how communities contribute to flood risks	■ Socio-cultural ■ Socio-political
Building capacity at local level	E	■ Village Protection Area Committees need capacity to forecast and mobilise communities. ■ Build structures to allow people to live with these disasters (e.g., evacuation centres, EW systems) ■ Decentralisation f disaster coordination	
Transparency and accountability	E	- Effective planning and proper transparency/ implementation of plans - Build confidence among cooperating partners through transparency/accountability - Prudent management of resources	- Socio-political - Legislative and regulatory
Address bureaucratic challenges before, during and after disasters	E	- Reduce bureaucratic procedures in procurement during emergences	
Invest in hard solutions) infrastructure)	E	- Infrastructure investments can save us future resources. - Build resilient evacuation centres. People run to schools for shelter which are also prone to disasters	- Prevention/Mitigation - Fiscal economic

f Inadequate/Incomplete Flood Disaster Forecasting Information

In Malawi, the centrality of flood risk management points to poor disaster forecasting and communication of risks. Stakeholders frequently expressed frustrations that the exact time and geographical location of Freddy impact were too general. Whereas DCCMS forecasted floodwaters only and in traditional disaster areas such as the Lower Shire Districts of Mulanje, and tailored the early warning messages accordingly, *"we got other surprises such as mudslides and in areas we did not anticipate,"* explained DoDMA (M1:15.06.2023). Incomplete and inadequate disaster information led to poor responses. Players in the humanitarian space narrowly prepositioned themselves around Chikwawa and Nsanje, neglecting other vulnerable areas. One NGO actor explained that *"DCCMS give a vast region as an impact area and ask people to contact them for further (specific) information. However, poor people and people in disasters cannot afford to do this"* (INGO3:16.06.2023). Non-state actors agreed that forecasting by DCCMS was vague and insufficient and that more needed to be done (INGO2:07.06.2023; INGO4:22.06.2023); with DCCMS acknowledging, *"we indeed did not forecast mudslides"* (M1:15.06.2023). The broad nature of forecasting induced a lag in the flow of information (INGO3:16.06.2023). Evidentially, not all stakeholders respond in a similar way and with a similar level of motivation and urgency. Whilst some respond immediately and with confidence, others wait to be pushed. Interestingly, this includes state departments that are supposedly closely linked to the disaster coordinating agency (M3:13.06.2023). One Government Officer explained that in the context of Freddy, DCCMS issued the forecast, and the DoDMA started preparations to respond to our warning – activating sector specific groups. However, responses from state actors were slow. As a result, *"we specifically targeted and nudged institutions such as the Ministry of Education after seeing that they were not responding to our warnings"* (M1:15.06.2023). The DCCMs explained that it was only after this nudge that the MoE issued a statement to close schools. Meanwhile, interview data reveal most NGOs contingency plans were drawn in isolation and were poorly linked to forecasting information. DoDMA confirmed that many actors in Malawi prepare contingency plans without their input, making strategies poorly informed.

g Disaster Politics and Politics of Decentralisation

Actors working in flood disaster and humanitarian assistance were pessimistic about the national government being willing and able to invest in evacuation and relocation initiatives. They raised questions of politics (lack of political will), governance and application of human rights as important challenges. Some interviewees view the government as deliberately inert against enforcement of regulations that would facilitate relocations away from disaster-prone areas. Whereas some of these are framed under narratives of human rights, others see this as state failure to take responsibilities in the wider deteriorating economy. To some stakeholders, the only reason evacuations in local areas were difficult was because *"they touch on votes."* Malawi experienced partial decentralisation in some institutions, which according to stakeholders, has had a bearing on operations and effectiveness of DRM. Specifically, whilst a devolution plan does exist, some mandates including distribution of resources are not fully devolved. As a result, there is lack of proper devolvement and decision-making processes are still centralized (INGO2:07.06.2023). There were arguments that institutions such as DoDMA that have staff in some rural communities use these as weather data collectors as opposed to being genuine disaster responders. And that failure of politics of decentralisation means capacity challenges for local institutions and a serious lack of guidance to communities during disasters.

4.4. *How can flood disaster management be structured and organised to enhance disaster risk reduction in low-income countries like Malawi?*

Understanding how disaster management can be structured and organised is important because actors have agency and can make decisions to enhance DRR. Post-disaster politics in Malawi show distortions and failures of DRM at multiple levels. All stakeholders expressed frustrations at the current level, structure and organisation of disaster responses in Malawi. Specifically, stakeholders called for a change in the framing of national flood disasters. For instance, one respondent argued that *"In 2019 people used to say floods hitting urban areas of Lilongwe or Blantyre was an anomaly"* (INGO4:22.06.2023). Yet, a key moment of policy reflection with Freddy was that climate risks are not always rural, and not always floodwaters and that vulnerability cuts across geography and socio-economic realities. Loss of lives during Freddy was linked to informal settlements that have, over the years, encroached both protected and marginal lands in the city of Blantyre. Our analysis reveals thirteen possible policy action areas in Malawi (Table 2).

Meanwhile, results reveal prospects for relocation are narrow and do not feature prominently in disaster politics. Some stakeholders argued that whereas *"relocation is possible and practical; it must be supported with adequate services"* (M3: 25.08.2023). Others however argued that although possible under the law, forced relocation cannot work without community engagement and accountability (INGO4:22.06.2023).

5. Discussion

This paper set out to explore and understand processes relied upon by stakeholders in flood disaster responses, their outcomes and implications for DRM. Throughout this study, we frequently returned to disaster politics and how actors and institutions behave during crisis times. We have demonstrated tensions and contradictions in processes relied upon between and among stakeholders, leading to poor coordination arrangements. We have shown that policy and legal tools relied upon are poorly linked to local realities, including climate information. Whilst forecasting seems to have improved, more still needs to be done in terms of the accuracy and flow of information to activate actions at different levels including within government structures. Finally, we showed flood disasters are not just about floodwaters but also sediment movements, raising different possibilities for 'disaster-scapes.' Overall, these playout within disaster politics that constrain resource appropriation, disaster tools and alternative solution proposition. Our study shows that the complexity of the post-disaster context offers an opportunity to explore how actors and institutions behave during emergencies.

Improvements in general forecasting do not always translate into systematic steps that can activate/enact anticipatory steps and different forms of recovery. This calls for deliberate and systematic action. In disasters, availability and access to relevant climate information, including the role of media/social is important [38]. Our study shows how communities were left unaware of the actual Freddy impacts, affecting flood risk awareness and perception [39]. This points to challenges of flood risk communication and management. A focus on unchecked urbanisation and environmental degradation related to unplanned settlements reflect the role of inequalities and injustice that altogether shape vulnerability (Creteny 2019; Demerrit and Nobert 2014). However, our study shows how power and contestations and different forms of reconstruction can emerge when institutions descend into chaos. Tensions and contradictions between and among stakeholders, and related poor coordination arrangements are a function of disaster politics.

Flood response and relief remain a prominent feature in low-income countries such as Malawi. Political leadership is crucial for domestic mobilisation of resources which can address challenges of relief-oriented approaches and donor dependency/reliance which remains a central feature in DRM and in low-income countries (Trogrlić et al., 2018; [40]). As with Nathaniel et al. (2019) in Nigeria, mechanisms for disaster responses in Malawi are inadequate. This reality emerges when policy and legal tools relied upon are insufficient and poorly funded linked to local realities. Our study reveals regional, district and community capacity to respond is important but wider institutional support and investments in infrastructure such as evacuation centres also matter. Vulnerability of poor community infrastructure remains a pressing issue in flood disasters, but this is reflective of socio-economic vulnerabilities [41]. Our study finds victims were rebuilding their housing structures with similar building materials, creating vicious cycle of flood vulnerability.

There are questions of governance systems and their effectiveness, including how responses account for conditions of the at-risk population in urban settings (Alvalá et al., 2019). Our study shows that the conditions of the flood risk population should be clear and linked to place-based vulnerabilities. However, post-disaster contexts can be complex and processes of recovery fraught with tensions, conflict and competing priorities (Rozario 2005). Our study shows that institutions can easily be 'caught unaware' and descend into chaos during emergencies. Framing disasters as facing blocked pathways and with impossibility of action can often mask political responsibilities and disaster politics. This can distance political actors from societal and political factors that contribute to underlying determinants of vulnerability and risks – framing disasters as unexpected, unprecedented or unusual [5]. Social and political and economic vulnerability in the Soche Hill reflects failure of development planning and inaction, forcing people into unsafe zones. Our study surfaces important development challenges, including poor urban planning, poor environmental altitude leading to deforestation and impacts of hydro-meteorological extremes [42]. Some of this relates to disaster politics that facilitate non-enforcement of standards, e.g., injunction against people in *Blantyre vs Chimila.* Understanding the political nature of disasters can help improve equity in community resilience, coordination and collaborations of efforts and equitable forms of recovery [43].

Some of this relates to the extent to which local communities are made visible in flood management – their agency and power. In this study, disaster politics and their management can render local communities invisible, eroding local human capacity for adaptation [44]. This means community groups cannot self-organise, prepare and mobilise in response to flood disaster outside centralised structures. Here, policy making can greatly benefit from participatory and inclusive policy development consultations and processes. There are important questions on the need to integrate disaster learning in formal education to enhance community awareness and buy-in [45]. How communities can be galvanised and identify possible interventions is an important policy concern in current policy implementation efforts [46], but one that must be supported by disaster politics.

Disaster risk reduction strengthens resilience – ability of systems, community and societies to resist and absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner ([47]; see also [48]). The study shows that disaster politics including allocation of resources should consider realities of disasters, framings of disasters in policy and legal tools, and practices of disaster responses. This necessitates a focus on long term strategic planning for different geographical spaces and disaster hotspots. A long-term thinking can help address the underlying vulnerabilities that accompany climate disasters. However, a focus on humanitarian assistance by state/non-state organisations means that disaster institutions tend to be visible only during disaster events and remain invisible for the rest of the disaster cycle, affecting sustainability of disaster responses. There are questions of management and coordination of flood disasters at multiple levels [49]. In disaster politics, the structure of centralised governments matter for efficient execution of post-disaster rehabilitation. Our study shows that this is not always the case as there can be challenges of coordination, planning and execution of DRR in complex disaster context.

Meanwhile, socio-cultural elements raise questions of affordability of housing services in Blantyre, including aspects of access to land in the area fraught with high demand for land by the government, foreign and local business actors. In Malawi legal contestations over land for settlement and relocation affect not only disaster investments but also the extent to which policy and legal tools for local development can be deployed. Ultimately, this contributes to vulnerabilities (Wani and Malik 2023). Risk communication can drive paradigm shifts from engineering-based flood defence to more integrated risk-based management [50].[1] Structural dimensions of vulnerability can implicate demands placed on communities (empowerment) and what the government is able to do to protect vulnerable groups. This can also implicate how the government can be held to account (responsibility) [16]. However, stakeholders must support long-term investments beyond immediate recovery efforts. More widely, mapping possible flood related future hazards, integrating other actors such as the Geological Survey Department would be crucial – clarifying roles and responsibilities and mandates at all levels. System as well regulatory and legal frameworks must clearly define roles and responsibilities for all participating agencies. Some of this relates to the need for "a multi-hazard early warning systems – one that can integrate different stakeholders, including the people/communities at risk [51].

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[1] " …. the flow of information and risk evaluations back and forth between academic experts, regulatory practitioners, interest groups, and the general public" (Leiss 1966, p.86).

The internal logics of disasters should go beyond floodwaters to include sediment movements [52]. Generating people-centric approaches that are co-produced and account for differentiated vulnerabilities, capacities and needs of the at-risk populations should be an active area of policy and action [53,54]. Ultimately, we see an important space for *'disaster scapes'* logic in formulating disaster management as interdisciplinary, cross-sectional and holistic formulation of a whole variety of disasters and possible outcomes and response. We argue while it is important to have mature disaster risk reduction policies (and there is still a lot to gain there if there cross-country learning happens), this is only useful when properly implemented – of effective coordination mechanisms and sustainable resource expenditure – that protects institutions from descending into chaos during crisis.

6. Conclusion

This study frequently returned to how actors and institutions behave during disasters, including policy and legal tools relied upon in responding to disasters within the wider context of disaster politics. The paper also asked how flood disaster responses could be structured and organised to enhance risk reduction in low-income country contexts such as Malawi. The study showed how complex disaster landscapes can generate a gravitational force for disaster actors and institutions to descend into chaos during disasters and be 'caught unaware,' revealing fragilities at the centre of disaster responses, but these are not entirely new. What policy and legal tools are relied upon, and which institutions are activated, how and when during disasters is important, but these processes interface with informality and disaster politics that can constrain responses. Narrow forecasting and framings of disasters around floodwaters limit response pathways, and actors are unclear on what tools to draw on in different disaster situations. Consequently, disaster information is poorly linked to government ministries and departments, whilst disaster standards are missing among state and non-state actors – who express elements of tensions and contradictions in their actions and mandates. Robustness of institutions to deal with disasters, including capacity to withstand or recover from disasters is weakened by multilevel factors in the socio-cultural, socio-political, legislative and regulatory, and fiscal economic domains, which affects participation, resource mobilisation, prepositioning, and information communication. Whereas the DCCMS offered timely early warning forecasting, forecasting itself narrowly focused on floodwaters as opposed to a comprehensive account of different possible disaster outcomes that could include mudslides. Specifically, early warning systems appear in isolation with poor to no response from some stakeholders, reflective of weaken horizontal and vertical collaborations. This study showed the need for capacity across responsible entities to identify and communicate climate change hazards at all levels and expand the scope of disaster agendas. Central to this is the nature of disaster politics that shape decision-making, policy and legal frameworks and what they can possibly do. Overall, this article encourages us to rethink horizontal and vertical linkages/collaborations between information services, preparedness, and response across various entities. This includes the need to formulate disaster management around *'disaster scapes'* – interdisciplinary, cross-sectional and holistic formulation of a whole variety of disasters and possible outcomes and responses from a socio-cultural and socio-political perspective.

CRediT authorship contribution statement

Simon Manda: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Tione Taweni Mumbo Thindwa:** Writing – review & editing, Writing – original draft, Visualization, Validation, Project administration, Investigation, Formal analysis.

Declaration of competing interest

We have no interest to declare.

Appendix ASupplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijdrr.2024.105144.

Data availability

Data will be made available on request.

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