

Evaluation of Governance, Institutional, and Policy Dimensions of Rainfall-Induced Landslide Risk in Malawi

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Abstract

The Sendai Framework for Disaster Risk Reduction 2015–2030 prioritizes strengthening disaster risk governance as a pathway to reducing risk. This paper examines how Malawi’s multi-level disaster risk governance system addresses rainfall-induced landslides, focusing on the roles, relationships and accountability of government agencies, NGOs and communities. Drawing on eight months of qualitative fieldwork (semi-structured interviews, participant observation, workshops, and document analysis) and guided by multi-level and network governance theory together with Jones et al.’s (2016) landscape governance framework, the study finds that central government capacity and presence at community level remain limited. NGOs deliver the majority of disaster risk management (DRM) services, yet gaps in coordination, political capture of resources, and weak local government capacity undermine progress. Decentralization of DRM is advancing before local institutions have developed adequate capacity, risking the reproduction of governance failures at the local level. The paper questions the rationale for accelerating decentralisation without first addressing structural weaknesses in local government and argues for a more balanced state–NGO relationship that combines network flexibility with visible state leadership. The findings have relevance for other low-capacity settings facing climate-related hazards.

1. Introduction

Rainfall induced landslides are increasing in frequency and intensity, driven by natural factors such as tectonic activity, soil composition, and rainfall variability, alongside anthropogenic pressures including deforestation, poor land use, rapid urbanization, and climate change (Rababa et al., 2026; Wang et al., 2025). Recent scholarship highlights their growing complexity, with events becoming more deadly, costly, and uncertain across diverse scales (Okunola, 2025; Pescaroli et al., 2024). Evidence demonstrates that geophysical conditions and human activities interact to exacerbate slope instability, disproportionately affecting vulnerable populations. Crucially, vulnerability is shaped less by hazard exposure than by governance effectiveness, with weak or fragmented systems decisive in disaster outcomes (Özbilgin et al., 2026; Maskrey et al., 2023; Mitra & Shaw, 2023; Li et al., 2021).

The Sendai Framework for Disaster Risk Reduction 2015–2030 advances coherence by linking disaster risk reduction with sustainable development and climate adaptation, identifying governance as a central priority (UNISDR, 2015; Donkor et al., 2022). Effective governance reduces exposure, while fragmentation and siloed approaches undermine coordination (Becker, 2020; Badi, 2023; Triyanti et al., 2023). Adaptive governance models emphasizing accountability, iterative learning, and participation strengthen resilience (Holley et al., 2011; Pahl Wostl, 2009; Folke et al., 2005). Yet risk governance remains most visible during crises and rarely embedded in routine structures such as land use planning or fiscal management (Sparkes et al., 2025; Weitz et al., 2017).

Africa, the most climate vulnerable region, receives only 20% of global adaptation finance, with Malawi historically channeling limited aid toward climate change and DRM, largely through non state actors (Germanwatch, 2023; Global Centre for Adaptation, 2024; FCDO, 2022; Sinkula, 2026). While recent progress includes adoption of Cat DDO, participation in ARC, and operationalization of the 2019 DRM Financing Strategy, disaster response financing remains donor dependent (World Bank, 2025). Malawi’s high ranking in the 2017 Climate Risk Index underscores its exposure and low coping capacity (Irish Aid, 2018). Weak decentralization, fiscal constraints, and accountability distortions undermine local institutions (Kayuni & Tambulasi, 2011; Chasukwa & Chinsinga, 2013; O’Neil et al., 2014; Chiweza, 2015). Although the DRM Act (2023) devolves responsibilities to local committees, implementation is constrained by inadequate resources and political interference (Manda & Thindwa, 2025; Gloppen et al., 2022).

Cyclones Idai (2019) and Freddy (2023) triggered devastating rainfall-induced landslides across southern Malawi, particularly around Soche Hill in Blantyre and rural communities in Phalombe District. These events destroyed homes, disrupted livelihoods, and exposed the limits of existing institutional arrangements. Although rural and peri-urban landslides are recognized as a significant challenge, the governance dimensions shaping exposure and response remain insufficiently understood (Msilimba, 2007; Manda, 2014; Niyokwiringirwa et al., 2024). Limited attention has been given to the interplay of hydrological, socio-economic, and institutional factors under climate variability and change, highlighting the need for integrated, multi-level governance that embeds resilience into everyday structures.

This paper critically examines Malawi's disaster risk governance architecture and its role in shaping disaster risk management outcomes, with a specific focus on rainfall-induced landslides. It explores how the actions and inactions of key actors and institutions either facilitate effective risk reduction or create barriers to successful management. By analyzing enabling practices and governance gaps, the study highlights the extent to which Malawi's institutional arrangements contribute to resilience or exacerbate vulnerability, situating these findings within broader debates on adaptive, accountable and context-sensitive governance in the face of climate variability and change. Four interrelated questions guide the analysis:

1. Who are the principal actors and at what scales do they operate in the management of rainfall-induced landslides?
2. To what extent do stakeholders and institutions collaborate, and what incentives and disincentives shape their interaction?
3. How feasible is decentralized disaster risk governance under current local government capacity constraints?
4. How effective and accountable are the institutions and stakeholders involved?

To address these questions, the paper adopts a theoretical framework grounded in multi-level governance and network governance theories. Multi-level governance emphasizes the interplay between local, national and international actors and the vertical and horizontal coordination required to close policy gaps (Ahola et al., 2014; OECD, 2010; Bulkeley, 2010). Network governance highlights the importance of collaborative, cross-sectoral relationships, trust and accountability in managing complex risks (Provan & Milward, 2001; Ansell & Gash, 2008; George et al., 2024). These perspectives are operationalized through Jones et al. (2016) landscape governance framework which examines three interrelated contexts - stakeholders, institutions and incentives- thereby providing a structured lens for assessing both enabling practices and governance gaps.

The remainder of the paper is organized as follows: Section 2 situates the study areas and explains case selection. Section 3 outlines the qualitative methodology. Section 4 presents findings organised around network actors and institutions, incentives and disincentives, and accountability. Section 5 discusses implications for policy and practice and concludes.

1.1 Theoretical framing: multi-level and network governance

Disaster risk governance increasingly draws on multi-level governance theory, which explains the interplay among actors, scales of government, and sectors in addressing complex "wicked" problems such as climate change and disasters (Ahola et al., 2014). It emphasizes vertical and horizontal cooperation to close policy gaps across jurisdictions (Vedeld et al., 2015; Braun & Sydow, 2019). Outcomes depend not only on governance structures but also on bureaucratic capacity, interagency coordination, and adaptive learning (Putera et al., 2026; Kelman et al., 2023; Pescaroli et al., 2024). Within this framework, network governance is critical, requiring collaboration among

government agencies, civil society, the private sector, and communities (Provan & Milward, 2001; Goldsmith & Eggers, 2004; Bulkeley, 2010).

Effective collaboration hinges on trust, accountability, and incentives, distinguishing networked systems from hierarchical models reliant on centralized authority (Ansell & Gash, 2008; George et al., 2024; Moch, 2025). Adaptive, multi actor systems are increasingly recognized as essential for resilience, as governance failures often stem from fragmented mandates and weak coordination (Kelman et al., 2023; Pescaroli et al., 2024). While hierarchical governance provides clarity, it lacks flexibility to address dynamic hazards such as rainfall induced landslides (Alam & Bennet, 2023). By contrast, networked and multi-level approaches enable cross sectoral learning and integration, embedding risk management into routine governance and strengthening resilience under climate variability and change.

In Malawi, network governance offers a critical lens for disaster risk management. The complexity of rainfall induced hazards demands collaboration across government, civil society, private sector, and communities, moving beyond siloed interventions (Dewa et al., 2021; Kelman et al., 2023; Pescaroli et al., 2024). Effective collaboration depends on accountability and incentives, while hierarchical models often fail to adapt to dynamic risks (George et al., 2022; Moch, 2025; Ansell & Gash, 2008).

1.2 Disaster risk governance and rainfall-induced landslides

Disaster risk governance encompasses the norms, actors, and practices designed to minimize disaster impacts (Valenzuela, 2021). It relies on legal frameworks, accountability mechanisms, and community participation that shape preparedness, response, and recovery (Tierney, 2012). Strong governance is particularly critical for rainfall-induced landslides, which demand multi-sectoral coordination across geotechnical engineering, urban planning, and environmental management to address physical drivers such as deforestation, poor drainage, and soil instability, alongside social vulnerabilities including poverty, informal settlements, and weak institutions (GoM, 2023). Resilience emerges when local institutions and public capacities effectively reduce vulnerability (Normandin et al., 2018; Mwalwimba, 2023; Werg et al., 2013). This requires coherent policies, empowered communities, and accountability mechanisms that embed risk management into routine governance rather than reactive responses (Valenzuela, 2021).

Decentralisation has been promoted as a pathway to resilience, enabling local ownership, accountability, and context-specific responses (Allen, 2006; Manyena, 2006; Parthasarathy, 2016; Rumbach, 2016). Yet evidence shows persistent challenges, including elite capture and weak legitimacy of local institutions (Garschagen et al., 2016; Mustafa & Wrathall, 2011; Marks & Lebel, 2016; Djalante et al., 2012; Bang, 2014; Blackburn, 2014). In Malawi, decentralisation faces reluctance of the central government to devolve authority, inadequate funding, limited local capacity, and declining political will (Gloppen et al., 2022). Scholars describe the process as a “black box” (O’Neil, 2014; Garschagen et al., 2016; Marks & Lebel, 2016) or even “chaos” (Kayuni & Tambulasi, 2011). These challenges reflect persistent principal–agent problems, where both central authorities and local elites capture resources and authority, undermining accountability and effectiveness (Wunsch, 2013; Tambulasi, 2011; Gloppen et al., 2022; Concern Worldwide & Mercy Corps, 2026).

1.3 The role of NGOs in disaster risk governance

Where state capacity is constrained, NGOs frequently emerge as central actors in disaster risk management (DRM) and climate adaptation, particularly in contexts such as Malawi. They often possess comparative advantages in participatory approaches, rapid service delivery, and engagement with marginalized groups (Batley & Rose, 2011;

Bhuiyan et al., 2023; Bankoff & Hilhorst, 2009). In Malawi, where inadequate funding, weak local capacity, and limited political will hinder decentralization, NGOs have become indispensable in delivering services, innovating, and advocating for communities affected by hazards such as rainfall-induced landslides. Their prominence reflects a broader governance shift toward pluralistic and participatory arrangements, where diverse actors including communities, the private sector, and NGOs share responsibility for managing risks (Kermani & Reandi, 2023; UNICEF & NLGFC, 2022; Lassa, 2013). Yet, this reliance on NGOs is not without challenges. Concerns persist regarding accountability to multiple principals, short project cycles, geographic concentration in high-profile disaster areas, and limited sustained collaboration with local government (Islam et al., 2017; Rigolon & Gibson, 2021). Historically, governments were seen as the dominant institutions in public action, but since the 1960s NGOs have increasingly assumed adaptation and DRM roles, particularly in developing countries with constrained state capacity (van Zyl & Claeyé, 2019; McLoughlin, 2011; Benson et al., 2001; Allen, 2006; Tierney, 2012; van Niekerk, 2015; Jones et al., 2016). While their participatory approaches and rapid delivery often surpass state institutions (Johnston, 2014), many NGOs remain narrowly focused on humanitarian relief, raising concerns about fragmented responses, duplication of efforts, and tensions with national authorities (Izumi & Shaw, 2012; Fuchi & Mayuni, 2024). Communities sometimes perceive NGOs as outsiders offering short-term aid without sustained engagement (Alam & Rahman, 2019; Pingeot, 2023). Thus, while NGO networks provide critical resilience support, their dominance stresses the need for stronger state leadership and institutional mechanisms to ensure sustainability, equitable coverage, and long-term ownership of DRM (Matkevičienė, 2024).

2. Study Areas and Case Selection

The study focuses on two sites in southern Malawi that experienced significant rainfall-induced landslides during Cyclones Idai (2019) and Freddy (2023): Soche Hill in Blantyre City (peri-urban) and Bokosi and Nkhulambe villages in Phalombe District (rural). These sites were selected because they illustrate the interaction of physical exposure, socio-economic vulnerability and multi-level governance arrangements under climate stress, while remaining under-researched from a governance perspective (Manda, 2014; Moskov et al., 2026; Mwalwimba, 2023; Niyokwiringirwa et al., 2024). Together, these sites provide a comparative basis for examining how contrasting socio-economic, environmental, and livelihood conditions shape landslide impacts and household risk perceptions. The deliberate inclusion of Blantyre and Phalombe enables analysis of both urbanising hill-area vulnerability and rural land-dependent vulnerability, rather than treating the study area as a homogeneous risk environment.

2.1 Demographic and Governance Context

Blantyre City (population $\approx$ 800 000) is characterized by hilly terrain, extensive informal settlement (65–70% of residents), and competing land-ownership claims among the City Council, Malawi Housing Corporation, central government and private actors (BCC, 2024; NSO, 2018, UN-Habitat, 2023). Soche Hill has been repeatedly affected by landslides linked to intense rainfall, deforestation and settlement on fragile slopes. Phalombe District (projected population $\approx$ 500 000) is predominantly rural and agriculture-dependent, with high population density on and around the slopes of Michesi and related hills. Poverty rates in both landslide-affected communities exceed national averages, compounding exposure and limiting coping capacity (NSO, 2023; GoM, 2023).

Both sites operate under Malawi's decentralization framework (Local Government Act 1998 and National Decentralization Policy, 1998). District and city councils are formally responsible for local development and, increasingly, for DRM coordination through Area Development Committees and Village Development Committees.

In practice, resource and capacity constraints mean that many core DRM functions continue to be performed by NGOs and external partners.

2.2. Biophysical Characteristics

Biophysically, both study areas are characterised by steep slopes, fragile soils, and intense seasonal rainfall, conditions that heighten landslide susceptibility. Soche Hill, located within Blantyre’s hilly terrain (780–1,600 m elevation), is underlain by syenitic and granitic rocks with shallow residual soils that become destabilized under heavy rains. Blantyre receives approximately 1,100–1,200 mm of rainfall annually, concentrated between November and April (UN-Habitat, 2016). Phalombe District, situated between the Mulanje and Michesi ranges (up to 2,800 m elevation), records 700–1,600 mm of rainfall annually, creating conditions conducive to floods, erosion, and landslides (Mwalwimba et al., 2025; GoM, 2023). Human activities, including deforestation, cultivation on steep slopes, quarrying, and poor land management, further exacerbate hazard occurrence (Sudmeier-Rieux et al., 2021).

2.3. Governance System

Blantyre City is governed by the Blantyre City Council (BCC), established under Malawi’s Local Government Act (1998) and National Decentralization Policy (1998), which institutionalize participatory and democratic governance (UN Habitat, 2016). Recognized as a “city in its own right” (Ferguson & Mulwafu, 2004; Manda, 2009), it is divided into constituencies and wards led by Members of Parliament and Councillors (Chimwaza, 2023). Land ownership is shared among the private sector, central government, Malawi Housing Corporation (MHC), and BCC, with 43% of land planned residential, 22% unplanned, and 21% semi-rural (UN Habitat, 2016). Access to serviced land remains limited to medium- and high-income groups, while resource constraints hinder delivery of essential services despite recent allocations under the World Bank’s Governance to Enable Service Delivery (GESD) program (World Bank, 2025; Thokala et al., 2024; Malawi24, 2024; AMALI GovHub, 2024).

Phalombe District governance is similarly anchored in the Local Government Act (1998), with the District Council as the highest policy-making body for development and service delivery (Phalombe SEP, 2024). The Council comprises elected councillors, MPs, Traditional Authorities (TAs), and special interest representatives, supported by the District Executive Committee (DEC) a multi-sectoral body of ministries, NGOs, and faith-based organizations. At community level, Area Development Committees (ADCs) coordinate Village Development Committees, prioritizing needs and overseeing implementation (DRM Plan, 2020; Local Government Handbook, 2021). While decentralization promotes citizen participation (Dulani, 2009), persistent challenges declining political commitment, limited technical capacity, and fragmented coordination mirror broader African experiences (Chiweza, 2007).

2.4. Socio Economic Vulnerability

Socio-economically, both study sites face high poverty levels, climate-sensitive livelihoods, and weak infrastructure. In Phalombe District, households in Nkhulambe and Bokosi villages depend primarily on smallholder rain-fed farming, constrained by recurrent hazards and limited landholdings, resulting in chronic food insecurity (Phalombe SEP, 2024; Government of Malawi, 2023). In Soche Hill, Blantyre City, livelihoods are more diversified, encompassing informal trade, construction, and transport services (Chimwaza, 2024). However, rapid urbanization, unemployment, and the expansion of informal settlements heighten vulnerability to climate hazards (UN-Habitat, 2016; Chimwaza, 2024). The impacts of Cyclone Freddy (2023) were particularly severe, causing widespread

destruction of homes, loss of assets, displacement, and reduced access to essential services, disproportionately affecting women, children, and older persons (Government of Malawi, 2023; UNICEF, 2023).

3. Methodology

The study adopted a qualitative, multi-level research design grounded in the theoretical framework outlined above. Data collection spanned eight months (April-December 2025), with intensive fieldwork in September–October 2025 and follow-up interviews in early 2026. Methods comprised:

- 24 formal semi-structured interviews at national level with officials from ministries, departments, NGOs and development partners;
- District-level interviews with officers from Blantyre City Council and Phalombe District Council;
- 20 follow-up interviews (email, WhatsApp, telephone) for clarification and validation;
- participant observation during six DRM workshops and four monitoring exercises linked to the Tropical Cyclone Freddy recovery;
- Systematic analysis of national policies, legislation, strategic plans and budgetary documents.

Purposive sampling targeted actors with direct institutional responsibility or lived experience of rainfall-induced landslide management. Thematic analysis (Bryman, 2016) was used to identify recurring themes relating to actor roles, coordination, incentives, accountability and decentralization challenges. Findings were triangulated across interview, observational and documentary sources.

Although purposive sampling risks selection bias and reliance on institutional narratives, credibility was strengthened through triangulation across interviews, workshops, field observations, and document analysis, with informal expert discussions further contextualizing rainfall-induced landslide management. Data analysis combined descriptive statistics in Microsoft Excel with thematic analysis (Bryman, 2016), identifying recurring themes such as decentralization challenges, NGO roles, accountability gaps, and best practices, while selected quotations from transcribed interviews were incorporated to substantiate findings. Quantitative descriptive statistics were generated where relevant, complementing qualitative insights. Nonetheless, limitations are acknowledged: purposive sampling prioritized depth over statistical generalizability, and community perspectives were captured primarily through workshops, monitoring exercises, and secondary accounts rather than extensive household surveys, potentially constraining representativeness. These methodological constraints were mitigated through triangulation and the deliberate inclusion of diverse institutional perspectives to enhance credibility and balance. Ethical safeguards were rigorously observed, with clearance obtained from the University of Malawi, informed consent secured from all participants, and anonymity preserved throughout. This integrative approach ensured adherence to ethical standards while capturing both policy structures and lived experiences, thereby highlighting the interplay between formal institutions and local agency in shaping disaster risk governance and resilience outcomes.

4. Results and Discussion

Findings are organized according to the three dimensions of the landscape governance framework: network actors and institutions; incentives and disincentives for collaboration; and accountability.

4.1 Network actors and institutions

4.1.1 Joined-up government and the policy- legislative framework

Addressing rainfall-induced landslides requires a coordinated government response grounded in coherent policy and legislative frameworks. Resilience cannot be achieved through fragmented efforts; it demands cross-sectoral collaboration and inclusive participation (El-Hani & Machado, 2020; UNISDR, 2015; Hendriks et al., 2014). Governance depends on robust policies and enforceable legislation that translate institutional arrangements into measurable outcomes. The rising frequency of climate-related disasters including landslides, floods, droughts, and cyclones erodes development gains and exposes governance weaknesses (Cairney, 2024; World Bank, 2025). Although climate change adaptation (CCA) and disaster risk reduction (DRR) share the goal of reducing vulnerabilities, they often remain siloed, prompting global frameworks such as UNDRR (2025) and UNFCCC (2025) to call for integrated planning, financing, and risk-informed development.

In Malawi, responsibilities are split between the Ministry of Natural Resources and Climate Change and the Department of Disaster Management Affairs (DoDMA) under the Office of the President and Cabinet. Despite a comprehensive climate policy framework, overlapping mandates and unclear roles undermine coordination (Skovgaard et al., 2023; Naeku, 2020; Dzebo & Browne, 2025). The Environmental Affairs Department (EAD) and the Department of Climate Change and Meteorological Services (DCCMS) play central roles but face persistent resource and capacity constraints. DCCMS struggles with outdated infrastructure, limited expertise, and inadequate meteorological equipment, restricting reliable forecasting and early warning systems (Yonasi, 2019; Mtingwi, 2025). EAD similarly faces challenges in translating ambitious climate commitments into actionable projects due to data gaps, weak coordination, and financing shortfalls (Kasoma-Pele et al., 2026). Assessments confirm that Malawi's challenge lies less in policy ambition than in institutional capability (Kasoma-Pele et al., 2026). Without sustained investment in human resources, technology, and coordination frameworks, both EAD and DCCMS will continue to struggle in delivering risk-informed climate services and DRM (Gaillard, 2021; Macheso, 2026; Jere et al., 2026).

Resilience, therefore, requires integrated CCA and DRR, harmonized mandates, and strengthened legislative frameworks. Embedding resilience into land use, infrastructure, agriculture, and environmental management would transform fragmented efforts into a coherent national system. Mainstreaming DRM has placed risk reduction at the core of development planning (GoM, 2022; World Bank, 2024), necessitating reforms across water management, health, education, urban planning, and construction. Education has also been leveraged as a resilience tool, with DRM content integrated into primary and secondary curricula in agriculture, geography, and social studies. As noted by a key respondent, *"disaster impacts can be reduced through preparedness and knowledge-based action. By integrating DRM into school curricula, learners and communities are empowered to foster a culture of safety and strengthen overall preparedness."*

4.1.2 Decentralized government and the urgency of implementation

Formal decentralization places responsibility for local disaster risk management (DRM) coordination on district and city councils, supported by Area and Village Development Committees. In practice, however, limited resources and institutional capacity constrain local authorities, creating space for NGOs to assume leading roles in community-based DRM, often through donor-funded consortia and localized initiatives (Concern Worldwide, 2026; Titukulane RFSA, 2023). By late 2025, more than 80 registered NGOs were active, coordinated partly through the

Civil Society Network on Climate Change, which had 47 members serving as a forum for coordination and information sharing. These organizations are embedded in district and community structures, combining local knowledge with institutional support that provides resources and technical expertise (Maskrey, 2011; Carabine & Wilkinson, 2016; Krummacher, 2014).

This arrangement is symbiotic: government provides legitimacy, endorsement of grant applications, and technical advice, while NGOs supply resources, implementation capacity, and community reach. Governance is further structured under the NGO Regulatory Authority Act (2022), which established both a government appointed NGO Authority and the NGO led NGORA, overseeing 1,217 registered NGOs nationwide (NGORA, 2025). Unlike contexts where NGOs are perceived as outsiders, in Malawi they are embedded within community structures, ensuring continuity and trust. Their approaches create a multi layered safety net, complementing state efforts by translating national strategies into locally relevant action and fostering inclusivity and sustainability (Lalović, Sentić, & Živojinović, 2020; Palich & Edmonds, 2013).

Yet, while such partnerships strengthen short term coordination, they raise concerns about dependency and long-term state ownership. Sustainability remains vulnerable to donor withdrawal and project cycles (Foden & Hendriks, 2026; Vaughan et al., 2026). Scholars caution that reliance on external actors can entrench fragility, distort priorities, and undermine government capacity to lead resilience programming (Magoya & Boruah, 2026).

4.1.3. NGOs as Backbone of Local Resilience

In Malawi and other developing countries, NGO-driven community-based disaster risk management (CBDRM) has long been central to local resilience (Mohanty, 2020; Ugli, 2025). By embedding disaster risk reduction (DRR) into climate adaptation projects, NGOs secure funding while equipping communities with practical tools such as hazard mapping and grain storage, reflecting Maskrey's (2011) argument that networks drive the spread of CBDRM. NGOs reinforce local government capacity, influence national policy, and advocate for resilience prioritization.

However, shrinking donor funding now threatens sustainability. Malawi's flagship social protection and climate resilience programmes remain heavily donor-dependent, with over 90% of financing externally sourced. Allocations to the Social Cash Transfer Programme and the Climate-Smart Enhanced Public Works Programme fell sharply between 2024/25 and 2025/26, heightening vulnerability (Unicef Malawi, 2025/26; Nation Online, 2026). Grassroots NGOs struggle with strict donor requirements and short-term grants that often end before projects achieve impact (Zimba, 2026). Cuts of up to 57% in climate-smart public works have already left millions at risk (Times Group, 2026).

This funding squeeze intensifies the trade-off in NGO operations: broad participation enriches policy design but slows implementation, while reduced financing undermines continuity. Scholars argue that without domestic resource mobilization, private sector engagement, and innovative financing, Malawi's DRM system will remain vulnerable to external aid cycles (Kasoma-Pele et al., 2026; Macheso, 2026; Jere et al., 2026). A donor representative justifies this delay, stating:

"What we want from the development community is to have a perfect national framework that speaks to all key resilience areas and that everyone is happy with. Otherwise, we risk developing another document that will just be gathering dust on people's shelves. And with donor funding shrinking, the danger is even greater without a coherent framework, limited resources will be spread too thin, leaving resilience efforts fragmented and unsustainable."

This justification highlights the donor preference for comprehensive frameworks that achieve broad legitimacy, even at the expense of timeliness. While such inclusivity can strengthen ownership and long-term sustainability, it also risks slowing down urgent interventions, leaving communities exposed during the drafting process.

Government and NGOs have largely developed symbiotic relationships in the field of disaster risk management (Andonova et al., 2009, Rosenbloom & Kravchuk, 2019). As one NGO officer noted, *“The relationship between government and NGOs is very good. Government provides legitimacy and approval for NGO operations, endorses grant applications for resource mobilization, and offers technical support via relevant departments. Yet with donor funding shrinking, this partnership is becoming even more important without strong government endorsement and coordination, NGOs risk losing access to already limited resources, undermining their ability to sustain resilience and disaster risk management initiatives.”*

NGOs’ legitimacy and ability to mobilize resources in Malawi are closely tied to government endorsement, as most grant applications require official approval. This interdependence reflects a governance model in which NGOs extend state capacity at the local level while relying on state structures for recognition and funding.

While such partnerships strengthen coordination and policy coherence, they also raise questions about autonomy, since NGOs’ operational freedom is conditioned by government approval mechanisms. At the same time, government benefits from the resources, expertise, and community connections NGOs provide, while retaining ultimate authority over policy and regulation. In practice, this dynamic is evident in local-level DRM and CBDRM projects. NGOs frequently draw on the technical expertise of government departments, fostering collaboration that bridges community initiatives with institutional frameworks (Jere et al., 2026). This ensures interventions align with national standards and formal knowledge systems, enhancing legitimacy and effectiveness (Kissi & Herzig, 2021; Gonzaga & Pratama, 2025). Such co-production strengthens resilience by embedding community-driven initiatives within national governance structures (Ansell & Gash, 2008; George et al., 2024; Moch, 2025).

4.1.4 Politicians and disaster risk management

Humanitarian aid operates within crises and disasters that disrupt populations. While a universally accepted definition of a crisis remains elusive, the United Nations Strategy for Disaster Risk Reduction defines a disaster as “a serious interruption to the functioning of a society that involves widespread human, material, economic or environmental losses and impacts that exceed the capacity of the affected community to cope with its own resources” (UNISDR, 2017). Both crises and disasters are global in occurrence and impact, with increasing frequency and severity (IFRC, 2022). Importantly, they are not purely natural phenomena but are shaped by social factors such as socioeconomic vulnerability, geographic exposure, and inadequate preparation (Kelman, 2011).

In Malawi, elected politicians are central to DRM, mobilizing resources and enacting laws to reduce risks. Yet their local engagement remains sporadic, constrained by political priorities and limited resources. Contributions are often ad hoc such as providing transport for relief items or using Reformed Constituency Development Fund (CDF) resources for community initiatives reflecting broader findings that politicians influence DRM institutions but engage inconsistently at operational levels. Studies on Cyclone Freddy (2023) revealed how disaster politics exposed weaknesses in institutional coordination, with political actors reacting to crises rather than investing in resilience (Manda & Thindwa, 2025). Similarly, assessments highlight that while frameworks exist, implementation at district and community levels is hindered by inadequate funding, weak planning, and fragmented accountability (Dewa, et al., 2021).

Politicians remain indispensable because they control governance resources, legislation, and community influence (Kayamba Phiri & Khulumbo, 2023; Djalante et al., 2011). Their involvement enables DRR initiatives to be mobilized at scale, yet the political economy of disasters reveals a paradox: while politicians are central to DRM, their engagement often undermines humanitarian neutrality. As Scott and Tarzona (2011) note, governments rarely allocate significant resources to DRR, but disaster response funding requests are seldom rejected. This bias privileges reactive response over proactive prevention. A senior DoDMA officer confirmed: “When a disaster has occurred, funding will come... But the same doesn’t happen with DRR interventions.”

Although the Local Government Act of 1998 requires councilors to champion transparency and accountability, some exploit resources for political gain. Respondents reported that politicians sometimes inflate beneficiary lists, divert relief to supporters, or present ordinary development needs as disasters to access humanitarian finance. As one NGO officer observed: “Most politicians always want things to happen in their areas... They are not a good tool to use for information regarding issues of disasters.”

This behavior reflects a structural bias in disaster governance: emergency relief funding is relatively accessible, while sustained finance for prevention remains scarce. Consequently, Malawi’s political economy reinforces a governance model that reacts to crises rather than addressing underlying vulnerabilities, perpetuating fragility and undermining long term resilience.

4.2 Incentives and disincentives for collaboration

Recent scholarship highlights the role of political champions in advancing disaster risk reduction. Oda et al. (2025) argue that leadership at the highest political levels provides visibility, authority, and legitimacy essential for implementation, while Vaughan et al. (2026) note that situating DRM functions in presidential or cabinet offices enhances resource mobilization and policy coherence. In Malawi, the placement of the Department of Disaster Management Affairs (DoDMA) under the Office of the President and Cabinet offers a distinctive institutional arrangement. With fewer ministerial responsibilities than line ministries, the Presidency has a platform to champion DRR an approach evident during Cyclone Freddy (2023), when presidential involvement accelerated resource mobilization but also exposed coordination and accountability gaps (Manda & Thindwa, 2025).

Yet visibility alone is insufficient. Dewa, Makoka, and Ayo Yusuf (2021) emphasize that sustained political will, adequate resourcing, and institutional capacity are required to translate high level positioning into resilience outcomes. Kita (2017) observes that decentralization reforms have not fully empowered local governments, making the Presidency’s role both critical and contested. As one civil society respondent noted, presidential leadership can embed DRR into national priorities and mobilize resources, but long-term success depends on institutionalizing resilience through financing, systems, and empowered local institutions. The prominence of NGOs in Malawi’s DRM reflects donor dependency and governance challenges.

NGOs fill service delivery gaps but risk undermining government ownership and institutional capacity. Kita (2017) and Hendriks & Boersma (2019) show NGOs often substitute for state delivery while relying on government departments for legitimacy. Foden & Hendriks (2026) highlight aid volatility as a weakness of NGO led governance, and UNICEF Malawi (2025/26) reports that over 90% of resilience financing remains donor funded. Evidence from Cyclone Freddy illustrates how state legitimacy was maintained through coordination despite weak operational presence (Manda & Thindwa, 2025), while the DRM Trust Fund represents efforts to embed resilience financing nationally (Vaughan et al., 2026). Still, Magoya & Boruah (2026) caution that donor funded organizations often fall

into a “compliance trap,” prioritizing accountability to external financiers over sustainable institutional development.

Donor dynamics have shaped Malawi’s DRM landscape since the 2012/13 freeze of direct budgetary support, which elevated NGOs as dominant actors (Kita, 2017). Off budget donor support rose from 31% of official development assistance in 2008/09 to 70% in 2015/16 (World Bank, 2016). UNICEF Malawi (2025/26) confirms this trajectory, noting that resilience programmes such as the Social Cash Transfer Programme and Climate Smart Enhanced Public Works Programme remain over 90% donor funded. Zimba (2026) reports that local NGOs face increasing difficulty accessing climate finance, while Chilangiza (2026) warns that cuts of up to 57% in climate smart public works have already undermined resilience. Kasoma Pele et al. (2026) and Jere et al. (2026) argue that without domestic resource mobilization and stronger institutional frameworks, Malawi’s DRM system will remain vulnerable to external aid cycles.

Capacity challenges at the local level mirror those nationally. DoDMA operates with only two technical sections Disaster Resilience and Recovery, and Disaster Preparedness and Response staffed by seventeen officers (DoDMA, 2025). While technically competent, their limited numbers, bureaucratic constraints, and weak visibility undermine governance. Respondents noted that although staff are skilled, delays and limited dedication weaken their effectiveness. Dewa, Makoka, and Ayo Yusuf (2021) highlight gaps in DRM strategy implementation, while Manda & Thindwa (2025) show how Cyclone Freddy exposed institutional vulnerabilities. UNICEF Malawi (2025/26) further stresses that inadequate state financing leaves DRM heavily reliant on donor funded NGOs, weakening government visibility at community level. As one NGO officer observed, *“NGOs dominate implementation at district and community levels, strengthening short term resilience but risking long term government capacity and ownership”*.

4.3 Accountability and its relevance in Disaster Risk Reduction

Accountability in disaster risk reduction (DRR) is central to governance, enabling scrutiny and clarifying responsibilities across authority levels. Article 19(e) of the Sendai Framework stresses that effective DRR requires cross-sectoral coordination, full engagement of state institutions, and mutual accountability (UNISDR, 2015). Scholars argue accountability is not merely bureaucratic but strengthens democratic processes and citizen rights, with citizen-led initiatives increasingly vital in addressing failures (Garcin et al., 2025; Vaughan et al., 2026).

In Malawi, accountability gaps are evident at local authority level, including ghost projects, wage diversion, and collusion between council staff and committees, reflecting wider corruption in decentralization. Studies confirm this trajectory: Manda & Thindwa (2025) show Cyclone Freddy exposed weaknesses in coordination and transparency, while UNICEF Malawi (2025/26) and UNDP Malawi (2025) highlight donor dependence, with over 90% of resilience financing externally funded. Shrinking donor flows have intensified risks of mismanagement as councils and NGOs compete for limited resources without robust oversight (Zimba, 2026; Chilangiza, 2026). Strengthening financial reporting, coordination, and independent oversight alongside citizen-driven mechanisms is essential to reduce corruption and build sustainable governance. As noted by the National Local Government Financing Committee, councils failing to liquidate allocations are excluded from Public Works Programme funding, with only 21 of 35 councils compliant under the reformed Constituency Development Fund (CDF). This reform underscores government commitment to transparency and financial discipline.

Elected politicians, expected to provide oversight, are often implicated in undermining DRM. Respondents cited cases of dissolving community structures, diverting recovery funds, misclassifying projects as disasters, manipulating beneficiary lists, and politicizing relief distribution. Competition for control of aid eroded

accountability, with council officials reporting difficulty challenging ruling-party politicians. Such opportunism distorts governance, reinforcing patronage and weakening institutional integrity (Chasukwa & Chinsinga, 2013; Manda & Thindwa, 2025). Evidence shows councillors and MPs are not passive actors but actively shape DRM, often opportunistically, undermining resilience rather than strengthening accountability (Kita, 2017; Kayuni & Tambulasi, 2011).

On the NGO side, accountability challenges persist. Many prioritize upward accountability to donors over communities or government, with NGO Act reporting requirements often ignored. Geographic concentration is uneven, with disaster-prone districts like Nsanje hosting multiple NGOs while others remain underserved (van Zyl & Claeyé, 2019; Wellens & Jegers, 2014; Agyemang et al., 2009). Short project cycles foster dependency, and donor volatility undermines sustainability. As studies note, incomplete accountability loops government struggling to monitor non-state actors, local resource capture, and partial NGO transparency—continue to weaken resilience (Steinhauser & Gordon, 2025; NGO Funding Solutions, 2023).

5. Implications for Policy and Practice

Malawi's disaster risk management (DRM) system exemplifies the paradox of the hollow state. Reliance on NGOs and international partners for service delivery reflects constrained fiscal and institutional capacity, yet the state retains a legitimizing and coordinating role, embedding DRM within national priorities and exercising oversight through policy frameworks and mandates. This hollowness represents strategic adaptation, enabling continuity of services, sustaining legitimacy, and leveraging external finance to build resilience (Garcin et al., 2025). The paradox lies in being hollow in delivery but not in authority: NGOs and donors dominate programming, while government legitimizes interventions and frames governance. Scholars describe such processes as a “black box” of opaque accountability (Garschagen et al., 2016; Marks & Lebel, 2016), though others highlight adaptive potential (Donkor et al., 2022; Sinkula, 2026).

Comparative evidence reinforces this view: in Cameroon, decentralization enabled NGOs to deliver services while the state retained symbolic authority (Bang, 2014); in Thailand, NGOs led delivery but the state legitimized oversight (Marks & Lebel, 2016). Malawi's sustainability, however, hinges on strengthening domestic financing, institutional capacity, and equitable resource allocation. Donor-driven NGO prominence has produced uneven coverage and accountability gaps (FEWSNET, 2026; World Bank). Cyclone Freddy illustrated the state's marginal presence offset by coordination (Manda & Thindwa, 2025), while the DRM Trust Fund shows resilience financing embedded nationally despite reliance on partners (Vaughan et al., 2026). Thus, Malawi's DRM governance balances network flexibility with state authority, but aid-driven resilience risks dependency, distorted priorities, and governance vulnerabilities across Sub-Saharan Africa. Where incentives are misaligned, resources are captured, politicized, or misused, undermining long-term resilience. There are three important conclusions to be drawn from these findings:

First, while decentralization in disaster risk governance is not dismissed, this study questions policies promoting rapid devolution without addressing fragile local governance structures. In practice, devolving DRM responsibilities channels substantial resources through councils that often prioritize short-term response over long-term risk reduction, particularly for rainfall-induced landslides. At decentralized levels, resources are frequently captured by political elites or misused by officials, revealing that actors entrusted with DRM and adaptation finance can become major stumbling blocks. Evidence shows that funds from NGOs, central government, and donors are often abused or unaccounted for by council staff and elected politicians, reflecting a business-as-usual culture that

undermines accountability. Effective decentralization requires adequately capacitated local governments, with central and NGO support. Strong local capacity is a prerequisite, not an automatic outcome (Scott & Tarazona, 2011; Garcin et al., 2025). Without addressing structural shortfalls, rapid devolution risks reproducing governance failures and creating new disasters.

Secondly, evidence from this study and others (e.g., Malakar, 2012) shows that most politicians in Malawi approach disaster risk governance through electoral incentives, using disasters to canvass for votes rather than engaging substantively with DRM. Yet politicians remain central: they control resource allocation, legislative approval, and policy endorsement, with grants and loans from institutions such as the World Bank requiring parliamentary approval and cabinet ministers shaping adoption. Scholars argue that major disasters create windows of opportunity for policy change (Penning-Rowsell, 2006), confirmed by cabinet approval of Malawi's DRM Policy in February 2025 following the December 2024 floods. In line with the Sendai Framework's emphasis on governance and accountability, constructive collaboration with politicians can secure legislation, financing, and political ownership, while strengthening their capacity to manage complex hazards such as rainfall-induced landslides.

Finally, this study highlights that strong NGO networks offer hope in reducing disaster vulnerability. In contexts of limited government capacity and donor preference for non-state channels, NGOs often serve as the primary conduit for disaster risk and adaptation finance. Their prominence reflects structural constraints and donor priorities, positioning them as indispensable in Malawi's DRM landscape. As Batley and Rose (2011) note, NGO networks influence policy and practice through vertical and horizontal relationships with state, donors, and communities. International NGOs reinforce this by adapting tested practices. Evidence confirms the dynamic: Garcin et al. (2025), Vaughan et al. (2026), and UNICEF Malawi (2025/26) show NGO dominance yield resilience dividends but risks accountability gaps and inequities.

Thus, while NGO networks provide critical resilience support, their dominance underscores the need for stronger state leadership to ensure sustainability, equitable coverage, and long-term institutional ownership of DRM. Evidence indicates that government leadership and active presence are indispensable, as the absence of visible state engagement undermines legitimacy and leaves communities vulnerable when NGO interventions typically short-term, geographically uneven, and donor-driven withdraw. As Allen (2006) cautions, dependence on NGO support can have devastating consequences once funding cycles end, with concentration in certain districts neglecting chronic vulnerabilities and donor priorities often outweighing local needs. To strengthen DRM, government must move beyond policy formulation to visible leadership in coordinating diverse actors, ensuring equitable coverage, investing in skilled DRM managers, and securing domestic financing to sustain resilience beyond donor cycles. By adopting this approach, Malawi can balance the flexibility of network governance with the stability of state leadership, ensuring resilience efforts are both sustainable and nationally owned (Scott & Tarazona, 2011; Garcin et al., 2025).

6. Conclusion

This study has demonstrated that Malawi's DRM system embodies the paradox of the hollow state: delivery capacity is outsourced to NGOs and international partners, yet authority and legitimacy remain vested in the state. While this arrangement has enabled continuity of essential services under severe fiscal and institutional constraints, it has also entrenched dependency, produced uneven resilience outcomes, and exposed accountability gaps. Incentives within the governance network ranging from donor priorities to political opportunism often

privilege short-term visibility over long-term resilience. Decentralisation, though normatively appealing, risks amplifying elite capture and resource misuse unless local governments are capacitated to lead interventions with accountability and transparency.

Ultimately, the sustainability of Malawi's DRM system depends on balancing the flexibility of network governance with the stability of state leadership. This requires visible government presence at community level, equitable resource allocation across vulnerable areas, and investment in skilled DRM managers capable of navigating multi-actor networks. Strengthening domestic financing and institutional capacity is essential to reduce reliance on donor-driven NGO delivery and to embed resilience within nationally owned frameworks. By adopting this approach, Malawi can transform hollowness from a pragmatic adaptation into a pathway for institutional consolidation, ensuring that resilience efforts are not only sustained but also embedded within accountable, locally grounded governance systems.

7. Policy Recommendations

Transforming Malawi's disaster risk management (DRM) system from a hollow state adaptation into a resilient and nationally owned governance framework requires a set of interlocking reforms that strengthen state presence, embed accountability, and rebalance the relationship between government and non-state actors. The following recommendations provide a pathway for consolidating institutional capacity while ensuring that resilience efforts are equitable, sustainable, and embedded within accountable governance structures:

1. First, the Department of Disaster Management Affairs (DoDMA) must expand its operational presence and fiscal transfers to districts and urban areas so that it is visible and useful at both wards and community levels, rather than functioning merely as a policy coordinator. This visible presence is critical for reinforcing state legitimacy in a landscape where NGOs dominate service delivery.
2. Second, further decentralization of DRM functions and finance should be sequenced behind demonstrable improvements in local government capacity, financial management, and downward accountability. Premature devolution risks reproducing governance failures at the local scale, amplifying elite capture and resource misuse.
3. Third, institutionalizing mutual accountability frameworks between government, NGOs, and communities is essential. Mandatory and enforced reporting, joint monitoring, and public disclosure of beneficiary lists and expenditures would close accountability gaps and strengthen transparency across the governance network.
4. Fourth, investment in the professional capacity of DRM managers is required to navigate complex multi-actor networks and to engage politicians constructively on risk-reduction priorities. Skilled managers can ensure that political involvement contributes to resilience rather than opportunism.
5. Finally, both government and NGOs must promote more equitable geographic coverage of interventions, ensuring that less "visible" but still vulnerable communities are not excluded. This would reduce geographic inequities that currently reinforce fragility and aid dependency.

9. Limitations and Future Research

This study is constrained by its qualitative, purposive design and its focus on institutional rather than household-level perspectives. Findings are specific to two sites in southern Malawi affected by rainfall-induced landslides within the post-Cyclone Freddy recovery context, limiting generalizability. Future research should integrate governance analysis with household surveys of risk perception and adaptive behaviour, comparative

studies across districts, and longitudinal tracking of the 2023 DRM Act's implementation. Such mixed-method approaches would clarify how institutional arrangements intersect with community resilience. Although the empirical material is drawn from Malawi, the paradox of decentralization—promoted despite weak local capacity, political interference, and reliance on non-state actors—resonates across climate-vulnerable, low-capacity settings. Addressing this paradox remains a central challenge for disaster risk governance under climate change, requiring comparative and longitudinal inquiry across Sub-Saharan Africa.

Declarations

Conflict of Interest:

The authors declare that there are no known direct or indirect conflicts of interest associated with this research.

Ethics Approval:

- The study adhered to all necessary ethical and professional standards. Ethical clearance and a waiver were granted by the University of Malawi Research and Ethics Committee.

Consent to Participate:

- The research involved direct interaction with persons and was formally approved by the University of Malawi's Research and Ethics Committee (UNIMAREC). All information collected from human subjects was freely given and informed consent was obtained from all participants prior to their participation in the study. In addition, permission to conduct the study was obtained from the District Commissioner and the village headmen in the study areas, thereby ensuring compliance with institutional, administrative, and community protocols. It should be noted that this study was not participated by individuals of not less than 18 years old. Furthermore, this manuscript does not contain any material from third parties. All figures, tables, and data are original to the authors.

Consent for Publication:

- The authors affirm that ethical approval was waived by the University of Malawi Research and Ethics Committee, which reviewed and confirmed that the study did not involve human or animal experimentation requiring formal approval. Consent to publish in therefore, **"NOT APPLICABLE"**.

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Author Contribution

Authors' Contributions: • S. J. Gama: Led the conceptualization of the study, designed the research framework, coordinated household surveys in Blantyre and Phalombe, drafted the manuscript, and oversaw revisions to ensure coherence and scientific rigor. • C. Ngongondo: Provided overall supervision and methodological guidance, contributed to refining the research design, and critically reviewed the manuscript to strengthen its academic

quality and alignment with geoscience standards. • M. K. Joshua: Supported the interpretation of results, contributed to integrating findings into broader disaster risk management frameworks, and assisted in refining the manuscript for clarity and precision. All authors made substantive contributions warranting authorship and have approved the final version of the manuscript.

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References

1. Adaptation Fund. (2022). *Medium–Term Strategy (2023–2027)*. Washington, DC: Adaptation Fund Board. Available at: <https://www.adaptation-fund.org/document/medium-term-strategy-2023-2027>
2. Agyemang G, Awumbila M, Unerman J, Brendan O'Dwyer. *NGO Accountability and Aid Delivery*. Research report 110. London: The Association of Chartered Certified Accountants; 2009. <https://research-repository.st-andrews.ac.uk/handle/10023/3795>.
3. Ahola T, Ruuska I, Artto K, Kujala J. What is project governance and what are its origins? *Int J Project Manage.* 2014;32(8):1321–32. <https://doi.org/10.1016/j.ijproman.2013.09.005>.
4. Akanle O, Omobowale AO. Contemporary issues in public policy. *Public policy and research in Africa*. Cham: Palgrave Macmillan; 2022. pp. 123–58.
5. Alam E, Ray-Bennett NS. Disaster risk governance for district-level landslide risk management in Bangladesh. *Int J Disaster Risk Reduct.* 2021;59:102220. <https://doi.org/10.1016/j.ijdr.2021.102220>.
6. Alam K, Rahman M. Post-disaster recovery in the cyclone Aila affected coastline of Bangladesh: women's role, challenges and opportunities. *Nat Hazards.* 2019;96(3):1067–90. 10.1007/s11069019-03591-7.
7. Alam M, Bennet C. Hierarchical governance and its limits in disaster risk reduction: Lessons from rainfall induced landslides. *Int J Disaster Risk Reduct.* 2023;92:103123. <https://doi.org/10.1016/j.ijdr.2023.103123>.
8. Allen KM. (2006). Community-based disaster preparedness and climate adaptation: Local capacity-building in the Philippines. *Disasters*, 30(1), 81–101. <https://doi.org/10.1111/j.1467-9523.2006.00308.x>
9. AMALI GovHub. (2024). *Urban governance and service delivery challenges in Malawi's cities*.

10. Andonova LB, Betsill MM, Bulkeley H. Transnational Climate Governance. *Glob Environ Politics*. 2009;9(2):52–73. [10.1162/glep.2009.9.2.52](https://doi.org/10.1162/glep.2009.9.2.52).
11. Ansell C, Gash A. Collaborative governance in theory and practice. *J Public Adm Res Theor*. 2008;18(4):543–71. <https://doi.org/10.1093/jopart/mum032>.
12. Badi G. (2023). *Evaluation of Multi-Level Governance of Disaster Risk Management*. Presented at the UKADR Conference 2023. Chartered Institute of Architectural Technologists, United Kingdom. Available at: https://www.researchgate.net/publication/UKADR_ABS-2023-010
13. Bang HN. (2014). General overview of the disaster management framework in Cameroon. *Disasters*,38(3), 562 – 586.
14. Bang HN. (2014). Governance of Disaster Risk Reduction in Cameroon: The Need to Empower Local Government. *Disaster Risk Governance: Unlocking Progress and Reducing Risk*. ODI/UNDP Input Paper for GAR 2015. Published May 2014.
15. Barrios R. What does catastrophe reveal? Anthropology and the social construction of disasters. *Annu Rev Anthropol*. 2020;49:151–66.
16. Batley R, Rose P. Analysing collaboration between non-governmental service providers and governments. *Public Adm Dev*. 2011;31(4):230–9.
17. Becker P. The problem of fit in flood risk governance: Regulatory, normative, and cultural cognitive deliberations. *Politics Gov*. 2020;8(4):281–93.
18. Begum RA, Sarkar MSK, Jaafar AH, Pereira JJ. Toward conceptual frameworks for linking disaster risk reduction and climate change adaptation. *Int J Disaster Risk Reduct*. 2014;10(Part A):362–73.
19. Bhuiyan TR, Muhamad N, Lim CS, Choy EA, Pereira JJ. (2023) Assessing damage data availability in national landslide databases for SFDRR reporting: a case study of Kuala Lumpur as a local-level application. *Landslides*,1–20.
20. Blackburn S. (2014). The politics of scale and disaster risk governance: Barriers to decentralisation in Portland, Jamaica. *Geoforum*,52, 101–112.
21. Blackburn S. The politics of scale and disaster risk governance: Barriers to decentralisation in Portland. *Jamaica Geoforum*. 2014;52:101–12. [10.1016/j.geoforum.2013.12.013](https://doi.org/10.1016/j.geoforum.2013.12.013).
22. Blantyre City Council (BCC). Blantyre City Urban Structure Plan 2024–2039. Lilongwe: Government of Malawi, Ministry of Local Government; 2024.
23. Braun T, Sydow J. Multi-level governance of climate change adaptation through regional partnerships in Germany. *Reg Environ Chang*. 2019;19(8):2301–13. <https://doi.org/10.1007/s10113-019-01532-0>.
24. Bryman A. Social research methods. 5th ed. Oxford University Press; 2016.
25. Bulkeley H. Governing climate change: The politics of risk society? *Trans Inst Br Geogr*. 2010;35(4):447–62. <https://doi.org/10.1111/j.1475-5661.2010.00391.x>.
26. Cairney P, Toomey C. (2024). Collaborative policymaking: a qualitative systematic review of advice for policymakers [version 1; peer review: 3 approved]. *Open Res Eur*. 2024; 4: 204.
27. Carabine E, Wilkinson E. How Can Local Governance Systems Strengthen Community Resilience? A Social-Ecological Systems Approach. *Politics Gov*. 2016;4(4):62–73. <https://doi.org/10.17645/pag.v4i4.74>.
28. Chasukwa M, Chinsinga B. Electoral politics and local governance in Malawi. *J Asian Afr Stud*. 2013;48(5):533–48.

29. Cvetković V. Underlying causes and drivers of disasters. *International Journal of Disaster Risk Management*; 2026.
30. Chilangiza M. (2026, February 22). Shrinking donor aid puts social protection on brink. *The Times Group*. Retrieved from <https://times.mw>.
31. Chimwaza G. Urban governance and decentralisation in Malawi: Constituencies, wards, and service delivery. *African Governance Review*; 2023.
32. Chinsinga B. (2021). The Political Economy of Resilience and Adaptation in Malawi. BRACC Discussion Paper.
33. Manda S, Thindwa TTM. (2025). This one caught us unaware: Disaster politics and institutions during Cyclone Freddy in Malawi. *International Journal of Disaster Risk Reduction*, 117, 105144. <https://doi.org/10.1016/j.ijdr.2024.105144>. *Disasters*, 50(2), 1–19. <https://doi.org/10.1016/j.disas.2026.10342>.
34. Chiweza A. The ambivalent role of chiefs: rural decentralization initiatives in Malawi. In: Buur L, Kyed H, editors. *State recognition and democratization in Sub-Saharan Africa: a new dawn for traditional authorities?* New York: Macmillan; 2007. pp. 53–78.
35. Chiweza AL. (2015). *Political economy analysis of accountability for resources and results in local government councils*. Lilongwe: Tilitonse Fund. Retrieved from <http://tilitonsefund.org/wp-content/uploads/2016/06/PEA-of-Accountability-for-Resources-in-Local-Government-Councils-PV-111215.pdf>
36. Choudhury M, Haque CE. (2024). Disaster management policy changes in Bangladesh: Drivers and factors of a shift from reactive to proactive approach. *Environmental Policy and Governance*, 34(5), 445–462. Wiley. <https://doi.org/10.1002/eet.2055>
37. Concern Worldwide & Mercy Corps. (2026). *Policy Brief: Generating multiple disaster resilience dividends – Community Resilience Fund pilot in Nsanje District, Malawi*.
38. Deubelli T, Norton R, Mechler R, Venkateswaran K, McClune K, Stevance A-S. (2022). Boosting Systemic Risk Governance: Perspectives and Insights From Understanding National Systems Approaches for Dealing With Disaster and Climate Risks. *Global Assessment Report on Disaster Risk Reduction*. United Nations Office for Disaster Risk Reduction(UNDRR). [https://pure.iiasa.ac.at/id/eprint/18040/1/Paper%2076%20%20Boosting%20systemic%20risk%20\(revised\).pdf](https://pure.iiasa.ac.at/id/eprint/18040/1/Paper%2076%20%20Boosting%20systemic%20risk%20(revised).pdf)
39. Dewa O, Makoka D, Ayo-Yusuf OA. Assessing capacity and implementation status of the disaster risk management strategy for health and community disaster resilience in Malawi. *Int J Disaster Risk Sci*. 2021;12(5):673–88. <https://doi.org/10.1007/s13753-021-00369-z>.
40. Djalante R, Thomalla F. Disaster risk reduction and climate change adaptation in Indonesia: Institutional challenges and opportunities for integration. *Int J Disaster Resil Built Environ*. 2012;3(2):166–80.
41. Djalante R, Thomalla F, with Sinapoy MS, Carnegie M. Building resilience to natural hazards in Indonesia: Progress and challenges in implementing the Hyogo Framework for Action. *Nat Hazards*. 2012;62(3):779–803. 10.1007/s11069-012-0106-8.
42. Djalante R, Holley C, Frank Thomalla. Adaptive Governance and Managing Resilience to Natural Hazards. *Int J Disaster Risk Sci*. 2011;2(4):1–14. 10.1007/s13753-011-0015-6.
43. DoDMA. Malawi hazards and vulnerability atlas. Lilongwe: Department of Disaster Management Affairs; 2015.
44. Donkor FK, Osei-Kyei R, Adjei KA, Boateng E. SDG Final Decade of Action: Resilient Pathways to Build Back Better from High-Impact Low-Probability (HILP) Events. *Sustainability*. 2022;4(22):1–14. 10.3390/su142215401.

45. DRM Plan. Phalombe District Disaster Risk Management Plan. Phalombe: District Council; 2020.
46. Dulani B. (2009). Democracy Movements as Bulwarks against Presidential Usurpation of Power: Lessons from the Third–Term Bids in Malawi, Namibia, Uganda and Zambia. *African Studies Quarterly*, 10(2–3), 1–23. University of Florida. Available at: <http://africa.ufl.edu/asq/v10/v10i2a1.pdf>
47. Dzebo A, Shawoo Z, Browne K. (2025). Does Policy Coherence Make National Implementation of Global Sustainability Agendas More Successful? *Annual Review of Environment and Resources*, 50, 539–562. First published online August 20, 2025. 10.1146/annurev-environ-111523-102337
48. El-Hani CN, Machado V. (2020) COVID-19: the need of an integrated and critical view. *Ethnobiology and Conservation*, 9, 18. Available from: <https://doi.org/10.15451/ec2020-05-9.18-1-20> 748 AOKI ET AL.
49. Eriksen C, Kirschner J, Simon GL. From rigidity traps towards reparative disaster governance and management. *Int J Disaster Risk Reduct.* 2025;125:105603. <https://doi.org/10.1016/j.ijdr.2025.105603>. Elsevier.
50. Famine Early Warning Systems Network (FEWS NET). (2026, January). Malawi food security outlook update, December 2025–March 2026. *ReliefWeb*.
51. FCDO. Evaluation of UK support to disaster resilience in Malawi. London: Foreign, Commonwealth & Development Office; 2022.
52. Ferguson AE, Mulwafu WO. (2004). *Decentralisation, Participation and Access to Water Resources in Malawi*. BASIS Collaborative Research Support Program (CRSP), Department of Agricultural and Applied Economics, University of Wisconsin–Madison, USA. Paper presented at the BASIS CRSP Policy–Makers Workshop, Johannesburg, South Africa, July 2001. Available at: <https://collections.libraries.indiana.edu/africancollections/items/show/8829>
53. Foden GW, Hendriks TD. Disastrous deductions? Aid cuts and disaster governance in Malawi. *Anthropol Today*. 2026;42(1):16–8. <https://doi.org/10.1111/1467-8322.70052>.
54. Folke C, Hahn T, Olsson P, Norberg J. Adaptive governance of social–ecological systems. *Annu Rev Environ Resour.* 2005;30:441–73. 10.1146/annurev.energy.30.050504.14451.
55. Fuchi M. NGO accountability and power dynamics in safeguarding: the core humanitarian standard in theory and practice in refugee camps in Sudan. Ph.D.: University of Birmingham; 2024.
56. Gaillard JC. Critical ethnography in disaster studies: Power, voice, and representation. *Disaster Prev Manage.* 2021;30(4):421–35.
57. Oda ASS, Marchezini V, Lotta GS, Ferreira AM, Cotting ALM, Dias KGC, Calderon OLP. State, institutional and organizational capacities in disaster risk management. *Int J Disaster Risk Reduct.* 2025;129:105777. <https://doi.org/10.1016/j.ijdr.2025.105777>.
58. Garschagen M, Hagenlocher M, Comes M, Dubbert M, Sabelfeld R, Lee YJ, Grunewald L, Lanzendörfer M, Mucke P, Neuschäfer O, Pott S, Post J, Schramm S, Schumann–Bölsche D, Vandemeulebroecke B, Welle T, Birkmann J. (2016). *World Risk Report 2016*. Berlin: Bündnis Entwicklung Hilft and UNU–EHS. ISBN 9783946785026. Focus: Critical infrastructure and vulnerability shaping disaster risk.
59. George B, Van Dooren W, Pandey SK. Accountability and performance in network governance: Evidence from disaster risk reduction. *Public Adm Rev.* 2022;84(2):345–59. <https://doi.org/10.1111/puar.13567>.
60. German Watch. (2023). *Operationalising the Loss and Damage Fund*. Available at: <https://www.germanwatch.org/en/88557>

61. Global Centre on Adaptation. (2024). State and Trends in Climate Adaptation Finance. Available at: <https://gca.org/wp-content/uploads/2024/04/>
62. Gloppen S, Tambulasi R. (2022–2023). *Studies on decentralization and governance challenges in Malawi*.
63. Goldsmith S, Eggers WD. Governing by network: The new shape of the public sector. Brookings Institution; 2004.
64. Gonzaga GL, Pratama AB. Social Capital and Prospects for Collaborative Governance: An Ethnographic Case Study of Sama-Bajaus' Post-Disaster Experiences. *Public Adm Dev*. 2025;1–12. <https://doi.org/10.1002/pad.2096>.
65. Government of Malawi. Malawi 2023 Tropical Cyclone Freddy Post-Disaster Needs Assessment. Lilongwe: Government of Malawi, World Bank, GFDRR, UN, and EU Delegation; 2023.
66. (2013). *National Climate Change Investment Plan 2013–2018*. Lilongwe: Ministry of Environment and Climate Change Management, Environmental Affairs Department. <http://extwprlegs1.fao.org/docs/pdf/mlw190674.pdf>. 76 Republic of Malawi. 2022. *Public Finance Management Act, 2022*. Government of Malawi, Lilongwe. <https://gazettes.africa/archive/mw/2022/mw-government-gazette-dated-2022-03-31-no-2C.pdf>
67. Government of Malawi. (2018). National Resilience Strategy (2018–2030): Breaking the Cycle of Food Insecurity in Malawi. Lilongwe: Department Disaster Manage Affairs. <https://www.preventionweb.net/publication/malawi-national-resilience-strategy-nrs-breaking-cycle-food-insecurity>
68. Government of Malawi. (2020), *Malawi 2063: An Inclusively Wealthy and Self-Reliant Nation*.
69. Government of Malawi (GoM). National Decentralisation Policy Review Report. Lilongwe: Ministry of Local Government; 2023.
70. Hanssen GS, Fimreite AL, Selle P. Explaining the implementation of network governance: The case of local climate adaptation in Norway. *Local Government Stud*. 2013;39(3):403–20. <https://doi.org/10.1080/03003930.2013.781023>.
71. Hendriks A-M, Habraken J, Jansen MW, Gubbels JS, de Vries NK, van Oers H. Are we there yet?' – operationalizing the concept of integrated public health policies. *Health Policy*. 2014;114(2–3):174–82.
72. Hendriks TD, Boersma FK. Bringing the state back in to humanitarian crises response: Disaster governance and challenging collaborations in the 2015 Malawi flood response. *Int J Disaster Risk Reduct*. 2019;40:101262. <https://doi.org/10.1016/j.ijdr.2019.101262>.
73. Holley C, Gunningham N, Clifford Shearing. *The New Environmental Governance*. New York: Routledge; 2011.
74. Irish Aid. (2018). *Malawi Country Climate Risk Assessment Report*. Dublin: Department of Foreign Affairs and Trade, Government of Ireland. Prepared by the Resilience and Economic Inclusion Team, Policy Unit. Available at: <https://www.iiied.org/22076g>
75. Islam R, Walkerden G, Amati M. (2017). Households' experience of local government during recovery from cyclones in coastal Bangladesh: resilience, equity, and corruption. *Natural Hazards*, 85(1), 361–378. 10.1007/s11069-016-2568-6
76. Jere ZM, Mlowoka B, Mpanje DLE, Mandoloma L, Fole WS. (2026). Perspectives of disaster resilience in Africa: Towards a participatory framework for Malawi. *Climate Resilience and Sustainability*. Royal Meteorological Society. <https://doi.org/10.1002/crs2>

77. Jones L, Oven K, Manyena B, Aryal K. Governance struggles and policy processes in disaster risk reduction: A political economy perspective. *Glob Environ Change*. 2016;38:111–22.
<https://doi.org/10.1016/j.gloenvcha.2016.03.003>.
78. Kasoma Pele W, Nkosi M, Matchaya G, Groenewald M, Makoko R. From Commitment to Capability: Insights from the first national NDC Capacity Scorecard Pilot Workshop. CGIAR/UNFCCC RCC ESA; 2026.
79. Kayamba-Phiri F, Khulumbo B. Community-led Resource Mobilization and Early Warning Systems Process Assessment. Washington, DC: International Food Policy; 2023.
<https://ebrary.ifpri.org/digital/collection/p15738coll2/id/136721>. Research Institute (IFPRI).
80. Kayuni H, Tambulasi R. Political leadership and local governance in Malawi. *Afr Dev Rev*. 2011;23(2):215–29.
81. Kelman I. Understanding vulnerability to understand disasters. In: Murphy BL, Etkin D, editors. *Canadian Disaster Management Textbook*, Canadian Risk and Hazards Network. Canadian Risk and Hazards Network: Toronto, ON, Canada; 2011.
82. Kelman I, Mercer J, Gaillard JC, Wisner B. Governance failures in disaster risk reduction: Toward adaptive, multi-actor systems. *Int J Disaster Risk Reduct*. 2023;97:103214. <https://doi.org/10.1016/j.ijdr.2023.103214>.
83. Kermani F, Reandi STA. Exploring the Funding Challenges Faced by Small NGOs: Perspectives from an Organization with Practical Experience of Working in Rural Malawi. *Res Rep Trop Med*. 2023;14:99–110.
<https://doi.org/10.2147/RRTM.S424075>.
84. Kissi E, Herzig C. (2021). Governance of Decent Work in Ghana's Cocoa Industry: Implications for Economic and Social Upgrading. Retrieved on 1st December, 2025 from.
<https://ageconsearch.umn.edu/record/317070/?v=pdf>
85. Kita S. Disaster risk governance in Malawi: Perspectives on decentralization and local participation. *Int J Disaster Risk Reduct*. 2017;22:147–56. <https://doi.org/10.1016/j.ijdr.2017.03.004>.
86. Kita SM. Government Doesn't Have the Muscle: State, NGOs, Local Politics, and Disaster Risk Governance in Malawi. *Risk Hazards Crisis Public Policy*. 2017;8(3):244–67. <https://doi.org/10.1002/rhc3.12118>.
87. Kita SM. Urban vulnerability, disaster risk reduction and resettlement in Malawi. *Int J Disaster Risk Reduct*. 2017;22:52–60. 10.1016/j.ijdr.2017.02.006.
88. Ward A, Steinhäuser G, Gordon MR. (2025, January 28). Trump Order Freezing Foreign Aid Halts Programs Worldwide, Prompts Confusion and Rush for Waivers. *WSJ; The Wall Street Journal*.
<https://www.wsj.com/politics/national-security/trump-order-freezing-foreign-aid-halts-programs-worldwide-prompts-confusion-and-rush-for-waivers-af2b6ece>
89. Kreft S, Eckstein D, Melchior I. Global Climate Risk Index 2017. Germanwatch; 2016.
90. Lalović K, Sentić I, Živojinović. Urban and Regional Planning for Sustainability. In: Leal Filho W, Azul AM, Brandli L, Özuyar PG, Wall T, editors. *Climate Action. Encyclopedia of the UN Sustainable Development Goals*. Cham: Springer; 2020. https://doi.org/10.1007/978-3-319-95885-9_77.
91. Lassa J. (2011). *Institutional vulnerability and governance of disaster risk reduction: Macro, meso and micro scale assessment* (Unpublished doctoral dissertation). University of Bonn.
92. Lassa J. Disaster policy change in Indonesia 1930–2010: From government to governance? *Int J Mass Emergencies and Disasters*. 2013;13(2):130–59.
93. Lassa JA, Boli Y, Nakmofa Y, Fanggidae S, Ofong A, Leonis H. Twenty years of community-based disaster risk reduction experience from a dryland village in Indonesia. *Jàmbá: J Disaster Risk Stud*. 2018;10(1):a502.

94. Ledda A, Serra V, Ruii MGG, Bardi A, Trogu D, Di Cesare EA, De Montis A. Mainstreaming Climate Change Adaptation into Sectoral Plans: An Assessment Based on the Logical Framework Approach. *Sustainability*. 2024;16:3705.
95. Li HM, Wang XC, Zhao XF, Qi Y. Understanding Systemic Risk Induced by Climate Change. *Adv Clim Change Res*. 2021;12(3):384–94. <https://doi.org/10.1016/j.accre.2021.05.006>.
96. Local Government Handbook. Malawi Local Government Structures and Functions. Lilongwe: Ministry of Local Government; 2021.
97. Macheso DW. From policy to practice: Environmental resilience, climate adaptation and governance in developing countries – A case study of Malawi. *Int J Sci Res Manage*. 2026;14(7):343–53.
98. Magoya D, Boruah A. A Systematic Review of Internal Control Frameworks and Long–Term Financial Sustainability in Donor–Funded Organizations: Evidence from the Malawi Compliance Trap. *Afr J Acc Financial Res*. 2026;9(2):77–91. <https://doi.org/10.52589/AJAFR-TD TYOTUM>.
99. Mahendra S, editor. *Claiming Citizenship*. ID21 Focus. Brighton: Institute of Development Studies; 2007.
100. Malakar Y. Increasing adaptive capacity: what is the role of local institutions? *Risk Hazards Crisis Public Policy*. 2012;3(4):60–76.
101. Malawi24. (2024). *Blantyre City Council approves K44.7 billion budget for 2024/25 fiscal year*.
102. Manda S, Mumbo Thindwa TT. This one caught us unaware: Disaster politics and institutions during Cyclone Freddy in Malawi. *Int J Disaster Risk Reduct*. 2025;117:105144. <https://doi.org/10.1016/j.ijdr.2024.105144>.
103. Manyena SB. Rural local authorities and disaster resilience in Zimbabwe. *Disaster Prev Manage*. 2006;15(5):810–20.
104. Marks D, Lebel L. Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand. *Habitat Int*. 2016;52:57–66.
105. Marks D, Lebel L. Disaster governance and the scalar politics of incomplete decentralization: Fragmented and contested responses to the 2011 floods in Central Thailand. *Habitat Int*. 2016;52:57–66. [10.1016/j.habitatint.2015.08.024](https://doi.org/10.1016/j.habitatint.2015.08.024).
106. Maskrey A. (2011). Revisiting community-based disaster risk management. *Environmental Hazards*, 10(1), 42–52.
107. Maskrey A, Jain G, Lavell A. The Social Construction of Systemic Risk: Towards an Actionable Framework for Risk Governance. *Disaster Prev Manage*. 2023;32(1):4–26. <https://doi.org/10.1108/DPM-07-2022-0155>.
108. Matkevičienė R. (2024). NGOs as Catalysts for Societal Resilience: Examining Their Role and Impact During Risk Situations. In: Thrassou, A., Vrontis, D., Efthymiou, L., Weber, Y., Shams, S.M.R., Tsoukatos, E, editors *Non-Profit Organisations, Volume IV*. Palgrave Studies in Cross-disciplinary Business Research, In Association with EuroMed Academy of Business. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-62538-1_6
109. McLoughlin C. Factors Affecting State-Non-Governmental Organisation Relations in Service Provision: Key Themes from the Literature. *Public Adm Dev*. 2011;31:240–51.
110. Mitra A, Shaw R. Systemic Risk From a Disaster Management Perspective: A Review of Current Research. *Environ Sci Policy*. 2023;140:122–33. <https://doi.org/10.1016/j.envsci.2022.11.022>.
111. Moch M. Adaptive governance in disaster risk reduction: Trust and incentives in multi actor networks. *J Risk Res*. 2025;28(5):612–29. <https://doi.org/10.1080/13669877.2025.1123456>.
112. Mohanty M. Sustainable Urban Planning and Making Sustainable Cities. In: Leal Filho W, Azul A, Brandli L, Özuyar P, Wall T, editors. *Sustainable Cities and Communities*. Encyclopedia of the UN Sustainable

- Development Goals. Cham: Springer; 2020. https://doi.org/10.1007/978-3-319-71061-7_62-1.
113. Moskov B, Hassan HK, Sallam H, Serag H. (2026). *Who Holds the Power? NGOs, Pandemic Governance and What COVID-19 Revealed for Future Treaties*. 10.5772/intechopen.1016311
 114. Mtingwi PE. Research Inquiry of Mobile Weather Applications Change Management: Case of DCCMS' Zanyengo App. University of Malawi; 2025.
 115. Mustafa D, Wrathall D. Indus basin floods of 2010: souring of a Faustian. bargain? *Water Alternatives*. 2011;4(1):72–85.
 116. Mwalwimba IK, Ngongondo C, Msadala V, Katonda V, Chisenga C, Manda M, Chikabvumbwa S. Localizing vulnerability, hazard, and disaster risk assessments based on the Hazards-of-Place model in Southern Malawi. *Asian J Water Environ Pollut*. 2025;23(1):64–89.
 117. Naeku MJ. Climate Change Governance: An Analysis of the Climate Change Legal Regime in Kenya. *Environ Law Rev*. 2020;22(3):170–83. <https://doi.org/10.1177/1461452920958398>. Google Scholar.
 118. National Statistical Office (NSO). 2018 Malawi Population and Housing Census: Main Report. Zomba: NSO; 2018.
 119. National Statistical Office (NSO). (2025). *Malawi Population and Housing Census 2025: Preliminary Report*. Zomba: National Statistical Office, Government of Malawi. Available at: <https://www.nsomalawi.mw>
 120. Concern Worldwide. Community-based disaster risk management in Malawi: Strengthening resilience through local structures. Lilongwe: Concern Worldwide Malawi; 2026.
 121. Titukulane RFSA. (2023). Resilience Food Security Activity Annual Report: Enhancing community disaster preparedness and response in southern Malawi. Blantyre: CARE Malawi Consortium.
 122. NGO Funding Solutions. (2023). *Sources of Funds for NGO - NGO Funding*. NGO Funding. <https://ngofundings.org/uncategorized/sources-of-funds-for-ngo/>
 123. NGO Regulatory Authority (NGORA). (2025). *2025 NGO Sector Report*. Lilongwe: NGO Regulatory Authority. Available at: <https://ngora.mw>
 124. Niyokwiringirwa P, Lombardo L, Dewitte O, Deijns AAJ, Wang N, Van Westen CJ, Tanyas H. (2024). Event-based rainfall-induced landslide inventories and rainfall thresholds for Malawi. *Landslides*, 21(6), 1403–1424. Springer-Verlag GmbH Germany.
 125. Normandin J-M, Therrien M-C, Pelling M, Paterson S. The Definition of Urban Resilience: A Transformation Path Towards Collaborative Urban Risk Governance. In: Brunetta G, Caldarice O, Tollin N, Rosas-Casals M, Morato J, editors. *Urban Resilience for Risk and Adaptation Governance Theory and Practice*. Cham, Switzerland: Springer Nature Switzerland AG; 2018. pp. 9–26. 10.1007/978-3-319-76944-8_2.
 126. Okunola OH. Beyond Institutional Silos: Rethinking Multilevel Disaster Risk Governance in Africa a Decade into the Sendai Framework Implementation. *Int J Disaster Risk Sci*. 2025;16:321–32. <https://doi.org/10.1007/s13753-025-00646-1>.
 127. Oliver Smith A. Defying displacement: Grassroots resistance and the critique of resettlement in the Andes. *J Latin Am Anthropol*. 2016;21(2):354–74.
 128. Özbilgin MF, Erbil C and., Valsecchi R. (2026) 'Disaster governance and inequality-responsive accounting: Grenfell and Grand Kartal fires in times of institutional neglect, spatial justice and the evasion of accountability', *Environment and Planning D: Society and Space*, 0 (ahead of print), pp. 1–22. 10.1177/02637758251414582

129. O'Neil T, Cammack D, Kanyongolo E, Mkandawire MW, Mwalyambwire T, Welham B, Wild L. Fragmented governance and local service delivery in Malawi. London: Overseas Development Institute; 2014.
130. Pahl–Wostl C. A conceptual framework for adaptive capacity in integrated water resources management. *Ecol Soc.* 2009;14(2):51. 10.5751/ES-02934.
131. Palich N, Edmonds A. (2013). Social sustainability: creating places and participatory processes that perform well for people. *Environment Design Guide*, 1–13. <http://www.jstor.org/stable/26151925>
132. Parthasarathy D. Decentralisation, pluralization, balkanization? Challenges for disaster mitigation and governance in Mumbai. *Habitat Int.* 2016;52:26–34.
133. Pelling M. Urban Governance and Disaster Risk Reduction in the Caribbean: The Experiences of Oxfam GB. *Environ Urbanization.* 2011;23(2):383–400. 10.1177/0956247811410012.
134. Penning Rowsell E, et al. The benefits of flood warnings. *Realistic achievable Environmental Hazards.* 2006;7(4):290–8.
135. Pereira L, Priya R, Van Zwanenberg P, Yang L. (2020). *Transformations to sustainability: combining structural, systemic and enabling approaches (Version 1)*. University of Sussex. <https://hdl.handle.net/10779/uos.25976077>
136. Pescaroli G, Suppasri A, Galbusera L. Complex governance and cascading risks: Lessons for disaster resilience. *Progress Disaster Sci.* 2024;22:100319. <https://doi.org/10.1016/j.pdisas.2024.100319>.
137. Phalombe District Council. Socio-Economic Profile (SEP) 2024. Phalombe: District Council; 2024.
138. Pingeot L. Police Keeping: The UN, Haiti, and the Production of Global Social Order. Oxford: Oxford University Press; 2023.
139. Polack E, Luna EM, Barilla JD. Accountability for Disaster Risk Reduction: Lessons from the Philippines. Brighton: The Climate and Disaster Governance Programme; 2010.
140. Provan KG, Milward HB. Do networks really work? A framework for evaluating public sector organizational networks. *Public Adm Rev.* 2001;61(3):414–23. <https://doi.org/10.1111/0033-3352.00045>.
141. Putera RE, Nugroho A, Santoso D, Rahman H. Mapping the intellectual structure of governance, bureaucracy, and disaster risk reduction. *Front Political Sci.* 2026;8:112. <https://doi.org/10.3389/fpos.2026.0112>.
142. Querejeta MJA, Landart CI, Wilson JR. *Networks, Governance and Economic Development: An Introduction*. Networks, Governance and Economic Development. Edward Elgar Publishing; 2008. <https://doi.org/10.4337/9781848442689.00009>.
143. Rababa S, Al–Hassan A, Chen R. (2026). Laboratory–based physical modeling of rainfall–induced landslides: A systematic review. *Engineering Geology*, 323, 106234. Elsevier.
144. Rigolon A, Gibson S. The role of non-governmental organizations in achieving environmental justice for green and blue spaces. *Landsc Urban Plann.* 2021;205:103970.
145. Rosenbloom DH, Kravchuk RS. *Public Administration: Understanding Management, Politics, and Law in the Public Sector*. McGraw-Hill Education; 2019.
146. Rumbach A. Decentralisation and small cities: Towards more effective urban disaster governance? *Habitat Int.* 2016;52:35–42.
147. Scott Z, Tarazona M, the Global Assessment Report on Disaster Risk Reduction. (2011). *Decentralisation and Disaster Risk Reduction*. Background Paper prepared for 2011. Geneva: United Nations Development Programme (UNDP) / Bureau for Crisis Prevention and Recovery (BCPR). Available at: <https://www.preventionweb.net/publication/decentralisation-and-disaster-risk-reduction>

148. Senevirathne M, Amaratunga D, Haigh R, Clegg G. Enhancing Systemic Risk Management to Strengthen Community Resilience: Key Recommendations from State-Of-The-Art Practices of Past Complex Incidents. *Int J Disaster Risk Reduct.* 2024;114:105013. <https://doi.org/10.1016/j.ijdr.2024.105013>.
149. Sinkula DJM. Disaster Risk Financing and Clean Energy Management in Sub-Saharan Africa: A Systematic Review and Comparative Cases (Malawi, Zimbabwe, Zambia). *Intech-Open.* 2026. 10.5772/intechopen.1013608.
150. Skovgaard J, Adams KM, Dupuy K, Dzebo A, Funder M, Fejerskov AM, Shawoo Z. (2023). Multilateral Climate Finance Coordination: Politics and Depoliticization in Practice. *Global Environmental Politics*, 23(2), 125–147. MIT Press. https://doi.org/10.1162/glep_a_00703
151. Sparkes E, Cotti D, Valdiviezo Ajila A, Werners SE, and M. Hagenlocher. Impact Webs: A Novel Conceptual Modelling Approach for Characterising and Assessing Complex Risks. *Hydrology Earth Syst Sci.* 2025;29:14: 3297–313. <https://doi.org/10.5194/egusphere-2024-2844>.
152. Sudmeier-Rieux K, Arce-Mojica T, Boehmer HJ, Doswald N, Emerton L, Friess DA, Galvin S, Hagenlocher M, James H, Laban P, et al. Scientific evidence for ecosystem-based disaster risk reduction. *Nat Sustain.* 2021;4(9):803–10.
153. Tambulasi RIC. (2011). Local government without governance: a new institutional perspective of local governance policy paralysis in Malawi. *Public policy and administration*, 26(3), 333–352.
154. The International Federation of Red Cross and Red Crescent Societies. (2022). *World Disasters Report- IFRC*: Geneva, Switzerland, 2023.
155. Thokala P, Duarte H, Wright S, Husereau D, Durand-Zaleski I, Lindgren P, Postema R, Machnicki G, Garrison L. Incorporating resource constraints in health economic evaluations: Overview and methodological considerations. *PharmacoEconomics.* 2024;42(8):789–804. <https://doi.org/10.1007/s40273-024-01345-7>.
156. Tierney K. Disaster Governance: Social, Political, and Economic Dimensions. *Annu Rev Environ Resour.* 2012;37 37:341–63. 10.1146/annurev environ-020911-095618.
157. Triyanti A, Surtiari GAK, Lassa J, Rafliana I, Hanifa NR, Muhidin MI, Djalante R. Governing systemic and cascading disaster risk in Indonesia: Where do we stand and future outlook. *Disaster Prev Management: Int J.* 2023;32(1):27–48. <https://doi.org/10.1108/DPM-07-2022-0156>.
158. Tselios V, Tompkins E. (2021). Local government, political decentralisation and resilience to natural hazard-associated disasters. In *Environmental Hazards and Resilience* (pp. 203–227). Routledge. <https://doi.org/10.4324/9781003171430-11>
159. Ugli OMB, Ugli SIB. Integrating Community-Based Knowledge Systems into National Strategies for Enhanced Global Sustainability. *Int J SDG's Prospects Breakthroughs.* 2025;3(4):53–64. <https://sdgjournal.com/index.php/sdg/article/view/SDG250406>.
160. UNDRR. (2025) *Policy Coherence Between Disaster Risk Reduction and Climate Change Adaptation*; United Nations Office for Disaster Risk Reduction: Geneva, Switzerland, 2021; Available online: <https://www.undrr.org/publications>
161. UNDRR. *Global Synthesis Report on Comprehensive Risk Management: Charting a Path towards Resilient Futures.* Geneva: United Nations Office for; 2025. <https://www.undrr.org/publication/global-synthesis-report-comprehensive-risk-management>. Disaster Risk Reduction.
162. UNFCCC. (2025). *Technical Examination Process on Adaptation*; United Nations Framework Convention on Climate Change: Bonn, Germany, 2019; Available online: <https://unfccc.int/topics/adaptation-and-resilience/workstreams/technical-examination-process-on-adaptation-tep-a> (accessed on 12 April 2025).

163. UNICEF Malawi. (2025/26). *Social Protection Budget Brief*. Lilongwe: UNICEF Malawi Country Office. Retrieved from <https://www.unicef.org/malawi>
164. UNICEF Malawi & National Local Government Finance Committee (NLGFC). (2022). *Fiscal Decentralization in Malawi: A Detailed Situational Analysis*. Lilongwe: UNICEF Malawi/NLGFC. Available at ReliefWeb/UNICEF Eastern and Southern Africa. <https://decentralization.net/2023/12/fiscal-decentralization-in-malawi-a-detailed-situational-analysis/>
165. UNISDR (United Nations International Strategy for Disaster Reduction). Sendai Framework for Disaster Risk Reduction 2015–2030. Geneva: UNISDR; 2015.
166. United Nations Development Programme (UNDP). Malawi and the United Nations forge a renewed partnership for national transformation. Lilongwe: UNDP Malawi; 2026.
167. United Nations International Strategy for Disaster Risk Reduction. *UNISDR Terminology on Disaster Risk Reduction 2017*. Available online: <https://www.undrr.org/terminology>
168. UN–Habitat. (2016, 2023). *Malawi Urban Housing Profile*. Nairobi: United Nations Human Settlements Programme (UN–Habitat). Available at: <https://unhabitat.org/malawi-urban-housing-profile>
169. Valenzuela VP. Disaster risk governance in coastal community for a better normal: The Philippine experience. *Int J Multidisciplinary: Appl Bus Educ Res*. 2021;2(9):818–22. <https://doi.org/10.11594/ijmaber.02.09.11>.
170. Van Niekerk D. A critical analysis of the South African disaster management act and policy framework. *Disaster Prev Manage*. 2014;23(4):574–90. <https://doi.org/10.1108/DPM-09-2013-0162>.
171. Van Niekerk D. Disaster risk governance in Africa. *Disaster Prev Manage*. 2015;24(3):397–416.
172. van Zyl H, Claeyé F. Evolving roles of NGOs in developing countries. In: Ascher W, Brewer GD, Cheema GS, Heffron JM, editors. *The evolution of development thinking*. London: Palgrave Macmillan; 2019. pp. 107–31.
173. van Zyl H, Claeyé F. Up and down, and inside out: Where do we stand on NGO accountability? *Eur J Dev Res*. 2019;31:604–19. <https://doi.org/10.1057/s41287-018-0160-3>.
174. Vaughan C, Banda L, Yusuf A. Resilience dividends and uneven outcomes: NGO led initiatives under Malawi's DRM Trust Fund. *Afr J Resil Gov*. 2026;12(1):88–107.
175. Vedeld T, Coly A, Ndour N, Hellevik S. Climate adaptation at what scale? Multi level governance, resilience, and coproduction in Senegal. *Nat Hazards*. 2015;76(1):283–306. <https://doi.org/10.1007/s11069-014-1490-5>.
176. Wang T, Tang C-S, Zeng Z-X, Cheng Q, Pan X-H, Han X-X, Li L, Wei Y. Rainfall-induced landslide risk: The state of the art and future needs. *Environ Earth Sci*. 2025;84:535. <https://doi.org/10.1007/s12665-025-12541-5>.
177. Ward A, Steinhäuser G, Gordon MR. (2025). Trump Order Freezing Foreign Aid Halts Programs Worldwide, Prompts Confusion and Rush for Waivers. *WSJ;The Wall Street Journal*. <https://www.wsj.com/politics/national-security/trump-order-freezing-foreign-aid-halts-programs-worldwide-prompts-confusion-and-rush-for-waivers-af2b6ece>
178. Wellens L, Jegers M. Beneficiary Participation as an Instrument of Downward Accountability: A Multiple Case Study. *Eur Manag J*. 2014;32(6):938–49. <https://doi.org/10.1016/j.emj.2014.03.004>.
179. Werg J, Grothmann T, Schmidt P. Assessing social capacity and vulnerability of private households to natural hazards – integrating psychological and governance factors. *Nat Hazards Earth Syst Sci*. 2013;13(6):1613.
180. Wisner B, Blaikie P, Cannon T, Davis I. *At risk: Natural hazards, people's vulnerability, and disasters*. 2nd ed. London: Routledge; 2004.
181. World Bank. *Malawi Public Expenditure Review: Strengthening Budgetary Institutions for Sustainable Development*. Washington, DC: World Bank; 2016.

182. World Bank. In focus: International Development Association (IDA) countries—Resilience and disaster risk management stories. Washington, DC: World Bank; 2025.
183. World Bank. Malawi Economic Monitor: Reforming with Urgency – Malawi’s Path to Economic Stability and Investing in Adaptive Safety Nets. Washington, DC: World Bank; 2025.
184. Wunsch JS. Analysing self-organized local governance initiatives: are there insights for decentralization reforms? *Public Adm Dev.* 2013;33(3):221–35.
185. Yonasi C. (2019, October). *Applying Downscaled Climate Models for Adaptation Planning: Case Study NAP Malawi*. Paper presented at the NAP–GSP Regional Workshop on National Adaptation Plans, Addis Ababa, Ethiopia. United Nations Development Programme (UNDP) / NAP Global Support Programme. Retrieved from <https://www.undp.org/nap-gsp>
186. Zimba B. (2026). Climate finance squeeze hits local organisations. *Nation Online*. Retrieved from <https://www.mwnation.com>

Figures

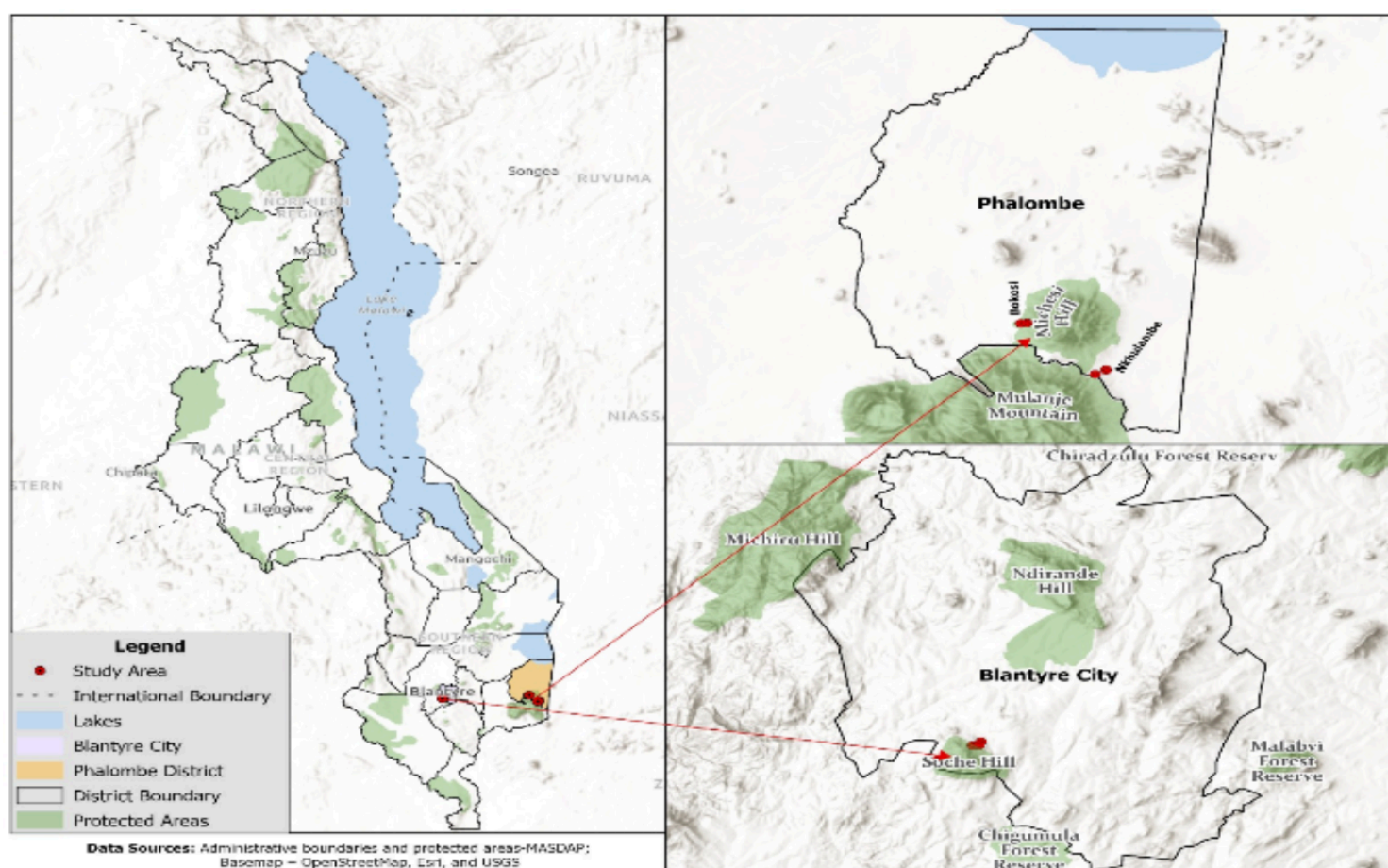


Figure 1

Study area: Blantyre City and Phalombe District

Source: author and Daniel Magombo