

**THE DISCONNECT BETWEEN POLICY-LEVEL DISASTER
PREPAREDNESS FRAMEWORKS AND THE LIVED
EXPERIENCES OF DISASTER-AFFECTED COMMUNITIES**

MSW DISASTER MANAGEMENT

2024-2026

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TABLE OF CONTENTS

Title	Page No
ABSTRACT	5
CHAPTER 1: INTRODUCTION	6
1.1 Introduction	7
1.2 Statement of the problem	8
1.3 Background of the study	11
1.4 relevance and significance of the study	13
1.5 Chapterization	14
CHAPTER 2: REVIEW OF LITERATURE	15
2.1 Introduction	16
2.2 Review of Literature	16
2.3 Theoretical framework	27
2.4 Research gap analysis	28
CHAPTER 3: METHODOLOGY	30
3.1 Introduction	31
3.2 Title of the study	31
3.3 Research Questions	32
3.4 Definition of concepts	32
3.5 Pilot study	35
3.6 Research design	36
3.7 Description of research site and participants	37
3.8 Sampling strategy	38
3.9 Data collection	39
3.10 Data Analysis	40
3.11 Ethical considerations	41
3.12 Assumptions, Limitations & Scope	42
CHAPTER 4: CASE DISCRPTION	45
4.1 Introduction	46
4.2 Case Description	46
4.2.1 CASE A	46
4.2.2 CASE B	49

4.2.3 CASE C	53
4.2.4 CASE D	56
4.2.5 CASE E	59
4.2.6 CASE F	62
4.2.7 Key Informants	67
CHAPTER 5: THEMATIC ANALYSIS & DISCUSSION	74
5.1 Introduction	75
5.2 Profile of The Respondents	75
5.3 Analysis and Discussion	77
CHAPTER 6: FINDINGS, SUGGESTIONS, AND CONCLUSION	80
6.1 Findings	81
6.2 Suggestions	82
6.3 Conclusion	84
REFERENCES	87
ANNEXURES:	94
Interview Guide	

ABSTRACT

This study explores the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities in Mundakkai, Chooralmala, Vellarimala, and Punjirimattom of Meppadi Panchayat, Wayanad, following the 2024 landslide. The study aims to examine how disaster preparedness policies were implemented at the community level and how they influenced the experiences of affected communities.

A qualitative phenomenological research design was adopted to gain an in-depth understanding of participants' lived experiences. Data were collected through in-depth interviews with disaster survivors and key informants using purposive sampling. The collected data were analyzed using thematic analysis to identify key patterns and themes.

The findings reveal significant gaps between disaster preparedness policies and their implementation, particularly in early warning dissemination, community participation, institutional support, and risk communication. The study also found that social vulnerability, livelihood conditions, and limited community engagement significantly influenced the preparedness and recovery experiences of affected communities. While disaster preparedness frameworks emphasize community involvement and resilience, participants reported several practical challenges in accessing information, participating in preparedness activities, and receiving institutional support.

The study concludes that strengthening policy implementation, enhancing institutional coordination, promoting inclusive community participation, and adopting community-centered disaster preparedness approaches are essential for improving disaster resilience and reducing future disaster risks. The findings provide valuable insights for policymakers, disaster management practitioners, and local governments to develop more effective, inclusive, and context-specific disaster preparedness strategies.

CHAPTER – I

INTRODUCTION

1.1 INTRODUCTION

Disasters are serious disruptions that cause widespread human, economic, environmental, and social losses beyond the capacity of affected communities to cope using their own resources (UNISDR, 2009). With the increasing frequency and intensity of disasters worldwide, strengthening disaster preparedness, disaster risk reduction, resilience, and governance has become essential to minimize losses and protect vulnerable populations.

Among natural hazards, landslides are one of the most destructive, particularly in mountainous and hilly regions. Triggered by intense rainfall, earthquakes, weathering, and human activities such as deforestation, quarrying, and unplanned development, landslides often result in severe loss of life, property, and infrastructure (Guo et al., 2023; Huang et al., 2025). Climate change has increased the occurrence of extreme rainfall events, further intensifying rainfall-induced landslides worldwide (Embersson et al., 2021; Kirschbaum et al., 2020).

India's varied geography and monsoon climate make it highly vulnerable to landslides, particularly in regions experiencing heavy rainfall and environmental degradation (Azad et al., 2024). Kerala, situated between the Arabian Sea and the Western Ghats, receives heavy monsoon rainfall and is highly susceptible to floods and landslides. Changing rainfall patterns associated with climate change have further increased disaster risks in the state (Abhilash, 2024). Environmental degradation, including deforestation, quarrying, plantation expansion, and unplanned development in the Western Ghats, has weakened slope stability. Studies indicate that 13 of Kerala's 14 districts are vulnerable to landslides, with about 13% of the state's land area classified as highly susceptible (Kuriakose et al., 2009).

Kerala has experienced several major landslide disasters over the years. The 2018 floods and landslides, caused by rainfall around 42% above normal, affected more than five million people, claimed nearly 500 lives, and triggered thousands of landslides (Aswathi & Nair, 2022). Similar disasters in 2019 exposed weaknesses in disaster preparedness, early warning systems, evacuation planning, and risk-sensitive development.

Among the districts, Wayanad is one of the most landslide-prone regions due to its steep slopes, fragile geology, and heavy rainfall. The district has witnessed repeated landslides, including the Kappikkalam Debris Flow (1992), Vallamthode (2007), Kurichiyarmala (2018), and Puthumala (2019) (Rajkumar et al., 2025). Increasing human activities, such as plantation expansion, tourism, construction, and infrastructure development, have further increased vulnerability despite existing environmental regulations (Priyatha Pradeep, 2025).

On 30 July 2024, catastrophic landslides struck Punjirimattom, Mundakkai, Chooralmala, and Vellarimala in Meppadi Panchayat following nearly 586 mm of rainfall within two days. The rainfall triggered massive debris flows that travelled about eight kilometres, burying entire settlements (Yunus et al., 2025). More than 266 people lost their lives, many remained missing, over 1,500 houses were destroyed, and thousands were displaced. Rescue operations were undertaken by the NDRF, KSDMA, the Indian Armed Forces, local authorities, and volunteers under extremely challenging conditions (Yunus et al., 2025).

The disaster had severe socio-economic and psychological consequences, particularly for plantation-worker families living in layams, who faced the loss of homes, livelihoods, family members, and social support systems. It also highlighted inequalities that increase disaster vulnerability. Despite previous hazard assessments identifying the area as highly vulnerable, significant gaps remained in land-use regulation, early warning dissemination, preparedness planning, and risk communication. Existing rainfall forecasting systems failed to predict the extreme rainfall intensity, and the unprecedented debris-flow runout exceeded the limits of earlier hazard assessments (Yunus et al., 2025).

Globally, disaster preparedness is guided by the Sendai Framework for Disaster Risk Reduction (2015–2030), while in India, disaster management is supported by the Disaster Management Act, 2005, the National Disaster Management Plan, and initiatives of the Kerala State Disaster Management Authority (KSDMA). However, the 2024 Wayanad landslide demonstrated persistent gaps in the implementation of these policies at the community level.

Against this background, the present study explores the disconnect between disaster preparedness policies and the lived experiences of communities affected by the 2024 Wayanad landslide. Focusing on Mundakkai, Chooralmala, Vellarimala, and Punjirimattom in Meppadi Panchayat, the study seeks to understand how disaster preparedness policies are experienced and implemented, identify existing challenges, and contribute to strengthening community-centred disaster risk reduction and resilience.

1.2 STATEMENT OF THE PROBLEM

Disaster preparedness has emerged as a critical component of disaster risk reduction worldwide. International frameworks such as the Sendai Framework for Disaster Risk Reduction (2015–2030) emphasize the importance of understanding disaster risks, strengthening governance, investing in resilience, and enhancing preparedness to reduce disaster losses (UNDRR, 2015). Similarly, India has adopted various disaster management

policies and institutional mechanisms through the Disaster Management Act, 2005, the National Disaster Management Plan, and state disaster management authorities to minimize disaster risks through early warning systems, hazard mapping, evacuation planning, land-use regulations, community awareness programmes, and capacity-building initiatives (Government of India, 2005; NDMA, 2019). These measures are intended to reduce vulnerability and strengthen the resilience of communities exposed to disasters. However, despite these policy frameworks, disaster losses continue to increase in many hazard-prone regions, raising concerns about the effectiveness of community-level preparedness measures.

The state of Kerala provides a significant example of this challenge. Although Kerala is widely recognized for its high literacy rate, strong local governance system, and comparatively advanced social development indicators, it has experienced repeated disasters in recent years. The catastrophic floods and landslides of 2018, followed by severe disasters in 2019, 2020, and 2024, demonstrated the state's increasing vulnerability to climate-related hazards. These events exposed weaknesses in disaster preparedness, particularly in relation to risk communication, evacuation planning, land-use management, and community participation. Despite the existence of disaster management plans and hazard assessments, many communities remained highly vulnerable to the impacts of disasters (KSDMA, 2019; Government of Kerala, 2023).

The situation is particularly evident in Wayanad district, one of Kerala's most landslide-prone regions. Located entirely within the ecologically sensitive Western Ghats, Wayanad is characterized by steep slopes, fragile geological formations, heavy monsoon rainfall, and increasing environmental degradation. Historical records indicate that the district has experienced several major landslides, including the Kappikkalam landslide (1992), Vallamthode landslide (2007), Kurichiyarmala landslide (2018), and Puthumala landslide (2019). These repeated disasters clearly indicate that landslide risk is not a new phenomenon in the district. Scientific studies, hazard zonation reports, and government agencies have repeatedly identified several areas in Wayanad as highly susceptible to landslides. Yet settlements, agricultural activities, tourism infrastructure, and construction continue to expand in these vulnerable zones (Kuriakose et al., 2009; Rajkumar et al., 2025).

The devastating landslide disaster that occurred on 30 July 2024 in the villages of Mundakkai, Chooralmala, Vellarimala, and Punjirimattom in Meppadi Panchayat further highlighted these concerns. Although hazard information and disaster preparedness policies were in place, the scale of destruction raised critical questions regarding the effectiveness of preparedness

measures and their implementation at the community level. The disaster demonstrated that vulnerable populations continued to reside in high-risk areas despite scientific hazard assessments and policy interventions, indicating a significant gap between disaster risk knowledge and the practical implementation of disaster risk reduction measures (Yunus et al., 2025).

In Kerala, disaster preparedness is implemented through a decentralized governance system involving the Kerala State Disaster Management Authority (KSDMA), District Disaster Management Authorities (DDMAs), and Local Self-Government Institutions (LSGIs), including Gram Panchayats. In line with the Sendai Framework for Disaster Risk Reduction (2015–2030), these institutions are expected to strengthen community-based disaster preparedness through local disaster management planning, risk communication, early warning dissemination, capacity building, and community participation (UNDRR, 2015; Government of Kerala, 2023). However, the experience of the 2024 Wayanad landslide suggests that significant challenges remain in translating these policy provisions into effective community-level preparedness. The scale of the disaster highlighted limitations in the implementation of preparedness measures, coordination among institutions, land-use regulation, and community engagement, particularly in the most severely affected villages.

The repeated occurrence of landslides in Wayanad, despite the presence of preparedness frameworks, suggests that disaster preparedness cannot be evaluated solely by the existence of policies, plans, and institutional mechanisms. Instead, it is necessary to examine how these policies are implemented at the local level, how they are experienced by disaster-affected communities, whether they adequately address local vulnerabilities, and how effectively local governance institutions facilitate community preparedness and resilience.

Therefore, the central problem addressed in this study is the apparent disconnect between policy-level disaster preparedness frameworks and their implementation within the disaster-affected communities of Mundakkai, Chooralmala, Vellarimala, and Punjirimattom in Meppadi Panchayat, Wayanad. While disaster preparedness policies emphasize resilience, community participation, risk reduction, and community safety, the recurring impacts of landslides and the experiences of affected populations indicate that significant gaps persist between policy intentions and on-the-ground realities. This study, therefore, seeks to critically examine how disaster preparedness policies are implemented and experienced by disaster-affected communities, the role of local governance institutions in facilitating preparedness, and

the factors contributing to the persistence of vulnerability despite existing preparedness mechanisms. Exploring these issues is essential for developing more inclusive, community-centred, and context-sensitive disaster preparedness strategies that reduce disaster risks and strengthen resilience among vulnerable populations in Wayanad.

1.3 BACKGROUND OF THE STUDY

Disasters have become an increasingly significant global concern due to their growing frequency, intensity, and impact on human societies. Climate change, environmental degradation, rapid urbanization, population growth, and unsustainable development practices have increased disaster risks worldwide. Among natural hazards, landslides are recognized as among the most destructive and deadly disasters, particularly in mountainous and hilly regions. Landslides often occur suddenly, causing extensive loss of life, infrastructure damage, community displacement, and long-term environmental damage (Guzzetti, 2000; Petley, 2012). Globally, extreme rainfall events associated with climate change have increased the occurrence of rainfall-induced landslides, making them a major concern for disaster risk reduction and sustainable development (Embersson et al., 2021; Kirschbaum et al., 2020).

The reduction of landslide risk has become an important goal within international disaster management frameworks such as the Sendai Framework for Disaster Risk Reduction (2015–2030), which emphasizes understanding disaster risk, strengthening disaster governance, investing in resilience, and enhancing preparedness to reduce disaster losses (UNDRR, 2015). Similarly, the United Nations Sustainable Development Goals (SDGs) recognize disaster risk reduction as an essential component of sustainable development. India has adopted these principles through the Disaster Management Act, 2005, the National Disaster Management Plan, and state disaster management authorities to strengthen disaster preparedness, resilience, and risk-informed development (Government of India, 2005; NDMA, 2019). Despite these efforts, landslide disasters continue to occur frequently, especially in regions where environmental vulnerability, climate variability, and human-induced pressures interact to increase hazard exposure.

India is one of the most vulnerable countries to natural disasters due to its diverse geography and climate. In recent decades, the country has experienced an increase in floods, cyclones, droughts, and landslides. Studies indicate that fatal landslide incidents have risen significantly between 1995 and 2014, with many of these events linked to extreme rainfall and changing climatic conditions (Azad et al., 2024). The increasing frequency of extreme precipitation

events has heightened landslide risk in several mountainous regions of the country, underscoring the need for effective preparedness and mitigation measures.

Within India, Kerala has emerged as one of the states most affected by rainfall-induced landslides. Situated on the southwestern coast of the Indian peninsula, Kerala is bordered by the Arabian Sea to the west and the Western Ghats to the east. The state's unique geographical setting contributes to its ecological richness while simultaneously increasing its vulnerability to natural hazards. Kerala receives substantial rainfall through both the Southwest Monsoon and Northeast Monsoon seasons. In recent years, however, rainfall patterns have changed, with more frequent short-duration, high-intensity rainfall events. Researchers attribute these changes to climate variability and rising temperatures in the Arabian Sea, which have altered precipitation patterns across the region (Abhilash, 2024).

The Western Ghats, recognized as one of the world's biodiversity hotspots, play a crucial role in regulating climate and ecological balance. However, the region has experienced significant environmental degradation due to deforestation, quarrying, infrastructure development, agricultural expansion, and unplanned urbanization. Such environmental changes have weakened slope stability and increased susceptibility to landslides. Climate change, combined with unsustainable land-use practices, has further intensified disaster risks across the region.

The situation in Kerala has become increasingly alarming since the catastrophic floods and landslides of 2018. The state received exceptionally high rainfall during the monsoon season, resulting in widespread flooding and thousands of landslides. More than five million people were affected, approximately five hundred lives were lost, and thousands of families were displaced (Aswathi & Nair, 2022). The state again experienced severe floods and landslides in 2019, causing additional casualties and widespread destruction. These repeated disasters exposed significant vulnerabilities in disaster preparedness, risk communication, land-use planning, and environmental management. In response, the Kerala State Disaster Management Authority (KSDMA), District Disaster Management Authorities (DDMAs), and Local Self-Government Institutions strengthened disaster management initiatives through district disaster management plans, hazard mapping, community awareness programmes, mock drills, capacity-building activities, and local disaster management planning. These measures were intended to improve preparedness and resilience at the community level, particularly in hazard-prone regions of the state.

1.4 RELEVANCE AND SIGNIFICANCE OF THE STUDY

The relevance of this study arises from the increasing frequency of disasters and the growing need to strengthen disaster preparedness to reduce risks and protect vulnerable populations. Although disaster preparedness is emphasized in international, national, and state disaster management frameworks, recent disasters continue to reveal gaps between policy intentions and community realities. The catastrophic Wayanad landslide of 30 July 2024, which resulted in over 1,500 houses being destroyed, widespread displacement, and significant loss of life, highlighted limitations in the implementation of disaster preparedness measures despite the existence of hazard maps, early warning systems, and preparedness guidelines (UNDRR, 2015; Government of India, 2005; NDMA, 2019; Yunus et al., 2025).

The study is particularly relevant because Wayanad has experienced repeated landslides despite scientific hazard assessments identifying many areas as highly vulnerable, highlighting the need to examine why existing preparedness measures have not adequately reduced community vulnerability (Kuriakose et al., 2009; Rajkumar et al., 2025). This gap underscores the significance of examining disaster preparedness from the perspective of disaster-affected communities themselves. While preparedness policies have largely focused on technical measures such as hazard mapping, forecasting, evacuation planning, and emergency response, the lived experiences of the 2024 Wayanad landslide reveal that preparedness is equally shaped by social, economic, cultural, and livelihood factors (UNDRR, 2015; NDMA, 2019).

The study further examines the gap between policy-level disaster preparedness frameworks and their implementation at the community level. Although the principles of the Sendai Framework have been incorporated into India's disaster management system through the Disaster Management Act, 2005, the National Disaster Management Plan, and the initiatives of the Kerala State Disaster Management Authority (KSDMA), District Disaster Management Authorities (DDMAs), and Local Self-Government Institutions, the Wayanad disaster indicates continuing challenges in policy implementation, institutional coordination, risk communication, and community participation (Government of India, 2005; NDMA, 2019; Government of Kerala, 2023; KSDMA, 2023).

The study is also significant in the context of climate change, as changing rainfall patterns and increasing extreme weather events have intensified landslide risks in Kerala and the Western Ghats, making effective preparedness and resilience-building increasingly important (Embersson et al., 2021; Kirschbaum et al., 2020; Abhilash, 2024).

From a social work perspective, the findings will support disaster social workers in strengthening community participation, preparedness programmes, psychosocial interventions, and long-term resilience. The study also contributes to community-based disaster risk reduction by emphasizing local knowledge and community experiences in preparedness planning (UNDRR, 2015).

Methodologically, the study adopts a qualitative approach to explore how disaster preparedness policies are experienced and implemented at the community level. Academically, it contributes to the literature on disaster preparedness, disaster governance, climate adaptation, and community resilience by complementing existing studies that primarily focus on hazard assessment, environmental vulnerability, and disaster impacts. It also gives voice to disaster survivors by examining their experiences of preparedness, early warning, and disaster response.

This study aims to explore the disconnect between disaster preparedness policies and the actual experiences of communities affected by disasters in Wayanad. The findings are anticipated to inform more participatory, inclusive, and community-focused approaches to disaster risk reduction, while offering practical value to policymakers, disaster management authorities, researchers, social workers, and local communities alike in building stronger preparedness and resilience.

1.5 CHAPTERIZATION

The chapterization of the dissertation is as follows:

Chapter I: Introduction

Chapter II: Review of literature

Chapter III: Methodology

Chapter IV: Case Description

Chapter V: Thematic Analysis and Discussion

Chapter VI: Findings, Suggestions and Conclusion

References and Annexures will be appended in the following Chapter

CHAPTER – II
REVIEW OF LITERATURE

2.1 INTRODUCTION

A literature review is an essential part of any research study. It provides a clear understanding of what has already been studied on a particular topic and helps the researcher gain in-depth knowledge of existing theories, concepts, and findings. According to Denney and Tewksbury (2013), literature reviews help researchers learn about their chosen topic and strengthen their writing by identifying what has already been established in prior research. This process not only supports learning but also improves the overall quality and clarity of the research.

A well-written literature review demonstrates that the researcher has a strong grasp of the subject area, thereby building credibility and strengthening the integrity of the research. By examining previous studies, the researcher can identify gaps, limitations, and weaknesses in existing knowledge, thereby justifying the need for further research; as Berg (2009) notes, the literature review essentially foreshadows the researcher's own study, guiding its direction and purpose. Similarly, they emphasized that reliable accounts of prior studies are essential for systematic knowledge building, particularly in the social sciences, where research output and specialization continue to expand (Cooper, 1984). The nature of the review also depends on the type of research question; in qualitative research, it tends to be broad, drawing on many related studies primarily to establish why the research problem warrants investigation. Reviewing earlier studies helps the researcher understand the topic clearly and justify the need for the present study (Denney and Tewksbury, 2013).

This literature review examines the major themes related to landslide disasters, including their causes, displacement and recovery, livelihood impacts, disaster experiences and responses, disaster preparedness, environmental change and risk awareness, coping mechanisms and resilience, and the roles of government and NGOs. These themes provide the background for understanding the study and identifying existing research gaps.

2.2 REVIEW OF LITERATURE

LANDSLIDE

A landslide is the movement of a mass of rock, soil, debris, or earth down a slope under the influence of gravity. Landslides may occur suddenly or develop gradually and are commonly triggered by natural factors such as intense rainfall, earthquakes, volcanic activity, and weathering, as well as human activities including deforestation, quarrying, road construction, mining, and unplanned land-use changes. Depending on the type of material involved and the

mode of movement, landslides may occur as falls, topples, slides, spreads, or flows. They can cause significant loss of life, damage to infrastructure, destruction of livelihoods, environmental degradation, and displacement of communities, making them one of the most destructive natural hazards in mountainous and hilly regions (Cruden, 1991; Highland & Bobrowsky, 2008).

CAUSES OF LANDSLIDES

Landslides refer to the downslope movement of rock, soil, debris, or artificial fill under the force of gravity, including processes such as falling, sliding, toppling, spreading, and flowing (Cruden & Varnes, 1996; Hungr et al., 2013). They occur worldwide and serve as major geomorphic processes that reshape landscapes through erosion, transport, and deposition. At the same time, they pose serious risks to human life, property, and infrastructure (Petley, 2012). Studies show that in unstable regions, landslides can displace up to 2000 m³/km²/year of material, significantly affecting soil stability and long-term land productivity (Crozier, 1989; Sidle et al., 1985).

Environmental and geological conditions form the natural basis of landslide occurrence. Features such as fractured bedrock, weathered soils, steep slopes, and tectonically active regions create inherent weaknesses that make slopes more prone to failure (Radbruch-Hall & Varnes, 2016). Earthquakes are also a major trigger, often initiating widespread landslides. Large slope movements can even generate seismic vibrations and lead to secondary hazards such as debris flows, rockfalls, or floods caused by the sudden breaching of landslide dams.

Climate change has recently emerged as a significant factor intensifying landslide risk. Rising global temperatures have increased the frequency of extreme rainfall events, which saturate soil layers, raise pore water pressure, and reduce soil shear strength. This process leads to heightened slope instability (Emberson et al., 2021, 2022). Research across multiple regions confirms that rainfall-induced landslides are becoming more frequent and severe (Guo et al., 2023; Huang et al., 2022; Kirschbaum et al., 2020; Ma et al., 2023; Liu & Xu, 2024). Historically, many of the most destructive landslides have been directly linked to prolonged or intense rainfall, highlighting the strong connection between climatic extremes and slope failure.

Human activities add another layer of risk by disturbing fragile environments. Deforestation, unplanned urban growth, mining, excavation, road cutting, and alterations in natural drainage systems all weaken slope stability. These actions remove protective vegetation, disrupt hydrological pathways, and exert additional pressure on unstable slopes (Radbruch-Hall &

Varnes, 2016). In many regions, poor land-use planning and construction on unstable ground have increased vulnerability, underscoring the need for integrated environmental and engineering assessments.

Overall, the literature clearly shows that landslides result from a combination of geological, climatic, environmental, and human-induced factors. While natural conditions create the foundation for slope instability, climate change and anthropogenic activities are increasingly amplifying both the frequency and severity of landslides. Understanding the interaction among these causes is essential for effective hazard mapping, early warning systems, and long-term disaster risk reduction.

DISASTER EXPERIENCE AND IMMEDIATE RESPONSE

Disaster experiences are often characterized by sudden disruption, uncertainty, and acute psychological stress as individuals confront threats to life, property, and social stability. Research shows that the immediate phase following a disaster involves heightened fear, confusion, and a temporary breakdown of normal communication and decision-making structures (Tierney, 2007; Dynes, 1994). Communities often rely on spontaneous, collective actions such as search-and-rescue, evacuation support, and mutual aid, reflecting the importance of social capital in shaping survival outcomes (Aldrich, 2012; Kirschenbaum, 2004). Immediate disaster response typically includes the mobilization of government agencies, emergency responders, and community volunteers to provide lifesaving assistance, restore communication, deliver medical care, and establish temporary shelters (Quarantelli, 1998; Perry & Lindell, 2003). Studies highlight that local communities are almost always the true “first responders,” often acting before formal authorities arrive, especially in remote or hazard-prone regions (Ronan & Johnston, 2005; Wisner et al., 2004). However, the effectiveness of immediate response is influenced by pre-disaster preparedness, early warning dissemination, infrastructure resilience, and coordination among institutions (UNDRR, 2015). Inefficiencies such as delayed relief distribution, inadequate rescue resources, and poor inter-agency communication can heighten casualties and prolong suffering, particularly among socially and economically vulnerable groups (Tierney & Oliver-Smith, 2012). Disaster experience also has profound psychosocial impacts—survivors report shock, grief, and disorientation during the initial hours and days after the event, which may evolve into longer-term trauma without timely psychological first aid (Norris et al., 2002; WHO, 2013). Overall,

literature underscores that the immediate response phase is crucial, as it significantly shapes survival, recovery trajectories, and community resilience.

DISPLACEMENT AND RECOVERY CHALLENGES

Displacement is traditionally viewed as a challenge affecting conflict-prone or developing countries, yet disasters such as Hurricane Katrina demonstrated that even high-income nations face severe difficulties when communities are uprooted. Research shows that displacement is not a one-time event but a prolonged process shaped by governance, housing systems, mental-health services, and social inequalities. Studies on Katrina highlight that inconsistent definitions of “displaced persons” created confusion in estimating needs, planning shelters, and designing long-term housing interventions (Finch, Emrich & Cutter, 2010). Similar gaps appear in global disaster literature, where displacement risk is rarely quantified, and community disaster plans often ignore vulnerability.

The psychosocial dimension of recovery is equally significant. Slade, Adams, and O’Hagan (2012) stress that recovery extends beyond physical rebuilding to include wellbeing, empowerment, and social inclusion. Displaced people often experience identity loss, uncertainty, and community fragmentation, psychological injuries that cannot be addressed through material support alone. This is consistent with Norris et al. (2002), who found that displacement is one of the strongest predictors of long-term post-disaster mental-health problems, including chronic stress and decreased social functioning.

Governance performance strongly shapes recovery outcomes. The study by Ashraf and Saud (2024) on landslide recovery in Wayanad reveals how fragmented institutional roles and weak interdepartmental coordination delay recovery efforts. Their AHP-based analysis echoes the conclusions of Tierney (2014), who argues that disasters become prolonged crises when institutions lack clarity, preparedness, or mechanisms for integrated response. Poor governance also contributes to “secondary displacement,” where families cannot return home due to delayed reconstruction or rising housing costs.

International evidence further shows that displacement disproportionately affects low-income communities. Research on post-Katrina New Orleans indicates that poorer households experienced multiple relocations, unstable employment, and limited access to permanent housing (Elliott & Pais, 2006). Similar patterns appear in global studies, where reconstruction policies often benefit wealthier groups first, leaving vulnerable populations in extended states of uncertainty (Cernea, 2000).

Taken together, these studies show that displacement is shaped by intertwined factors: clear terminology, governance quality, mental-health support, and long-term housing strategies. Effective recovery must therefore be holistic, integrating institutional coordination, psychosocial care, and equitable housing policies to rebuild not only physical structures but also the stability and dignity of displaced communities.

IMPACTS ON LIVELIHOODS

Disasters significantly affect livelihood systems, particularly in socially and economically vulnerable regions. In Wayanad, Kerala, landslide-affected communities are largely composed of working-class plantation labourers whose livelihoods depend heavily on the Harrison Malayalam plantations. Many of the victims of the Mundakkai landslides lived in layams, low-income labour settlements originally occupied by migrant workers from districts in Kerala and the Nilgiris region of Tamil Nadu. Their dependence on plantation-based employment, limited income, and restricted mobility heightens their livelihood vulnerability during disasters (Azad, Salim, Muhammed, & Das, 2023).

Landslides cause severe environmental changes that directly influence local livelihoods. They reshape landforms, destroy vegetation, and disrupt natural water systems (Costa & Schuster, 1988; Locat & Lee, 2002). Such changes can reduce soil fertility, degrade agricultural land, and affect forest-based livelihood resources on which many rural communities depend. The destruction of vegetation and habitats also causes long-term ecological effects, including declines in biodiversity (Geertsema et al., 2009). According to Turner (2018), landslides destabilise slopes, accelerate soil erosion, and render land unsuitable for cultivation, thereby directly undermining the livelihood base of affected communities.

The socio-economic consequences of landslides are equally severe. Disasters damage infrastructure, transportation routes, homes, and public facilities, disrupting everyday activities essential for maintaining livelihoods. Research shows that disasters reduce productivity, interrupt wage labour, and weaken income stability effects that are especially acute among daily-wage workers and informal labourers (Atta-ur-Rahman et al., 2011). Kjekstad and Highland (2009) emphasize that landslides impose heavy economic losses, limit access to services, and create long-term financial burdens for households. Winter et al. (2016) and Perera et al. (2018) further explain that landslides restrict mobility, inhibit market access, and disrupt community networks, thereby weakening local economies and slowing livelihood recovery.

For plantation workers in Wayanad, the impact is multidimensional. Damage to worker housing, estate infrastructure, internal roads, and nearby markets results in immediate job loss and prolonged livelihood instability. Loss of documents, tools, agricultural land, and livestock further intensifies hardship. As livelihoods collapse, households face food insecurity, indebtedness, and prolonged displacement, all of which hinder their ability to rebuild self-sustaining economic activities. Thus, disasters pose a major challenge to livelihood security by simultaneously affecting the environment, economy, and social support systems of vulnerable populations.

DISASTER MANAGEMENT ACT, 2005

The Disaster Management Act, 2005 provides the legal and institutional framework for disaster management in India by establishing the National Disaster Management Authority (NDMA), State Disaster Management Authorities (SDMAs), and District Disaster Management Authorities (DDMAs). The Act emphasizes a shift from a relief-centric approach to one focused on disaster prevention, mitigation, preparedness, response, and recovery. Studies have noted that the Act has strengthened disaster governance and institutional coordination across India. However, researchers also report challenges in its implementation, including inadequate community participation, limited preparedness at the local level, insufficient capacity building, and gaps between policy provisions and practice (Gupta, 2016; Ray-Bennett, 2009; Kapur, 2010). These findings suggest that while the Act provides a comprehensive framework for disaster risk management, its effectiveness depends on effective implementation, local institutional capacity, and active community engagement, making it highly relevant to the present study.

IMPLEMENTATION OF THE SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION

The Sendai Framework for Disaster Risk Reduction (2015–2030) has been widely recognized as a global strategy for strengthening disaster preparedness and resilience through risk-informed governance and community participation. Studies have shown that the implementation of the Sendai Framework has improved disaster risk governance and promoted community-based disaster risk reduction in many countries. However, research also highlights persistent challenges, including inadequate policy implementation, limited local participation, weak institutional coordination, and insufficient investment in preparedness, particularly in developing countries (Aitsi-Selmi et al., 2015; Kelman, 2017). In the Indian context, scholars

have noted that while disaster management policies are increasingly aligned with the Sendai Framework, translating these policies into effective local preparedness remains a significant challenge due to socioeconomic vulnerabilities and governance gaps (Shaw et al., 2016). These studies indicate that strengthening community engagement and bridging the gap between policy and practice are essential for achieving the goals of the Sendai Framework, which is highly relevant to the present study.

DISASTER PREPAREDNESS IN A LANDSLIDE CONTEXT

Preparedness for natural disasters remains a central focus in disaster studies, strengthened by international initiatives such as the International Decade for Natural Disaster Reduction (IDNDR). The United Nations defines a disaster as a serious disruption that exceeds the capacity of affected communities to cope using their own resources, emphasizing both human and environmental losses. Similarly, CRED highlights disasters as unforeseen events that overwhelm local capacity and necessitate external assistance. These definitions provide the conceptual foundation for research on preparedness and risk reduction.

In their study, Shin and Managi (Household Preparedness for Natural Disasters in Japan) examine household-level preparedness, identifying two primary strategies: purchasing insurance and stockpiling emergency supplies (food, water, radio, medicines). Their work aligns with the FEMA disaster management framework, which categorizes the cycle into mitigation, preparedness, response, and recovery. Preparedness, especially through emergency stockpiling, is considered essential in reducing impacts during the post-disaster phase. However, despite extensive governmental planning, many communities, including those in Japan, still face delays or shortages in receiving relief supplies after large-scale disasters.

Empirical research highlights several determinants of disaster preparedness. Factors such as previous disaster experience, hazard awareness, socioeconomic status, education, and household characteristics influence the adoption of protective measures (Lindell & Perry; Solberg et al.). However, findings are inconsistent regarding the role of past disaster experience. While some studies show that experience significantly increases preparedness for hazards like earthquakes and floods, others report negligible effects, suggesting that psychological, cultural, and socio-economic contexts shape preparedness differently across populations.

Beyond household preparedness, the literature on specific hazards, such as landslides, offers insights into risk formation and disaster impacts. Landslides, described as the downslope

movement of rock, soil, or debris under gravity (Cruden & Varnes, 1996; Hungr et al., 2013), are influenced by rainfall, snowmelt, earthquakes, temperature fluctuations, volcanic activity, and anthropogenic changes. Michael Crozier (1999) highlights that landslides involve multiple movement types, sliding, flowing, toppling, and falling and pose significant risks to populations despite being natural components of landscape evolution (Petley, 2012). Climate variability also plays a crucial role, with studies showing that changes in rainfall intensity and patterns significantly affect slope stability (Dhakal & Sidle, 2004; Sidle & Ochiai, 2006; Seneviratne et al., 2012).

Recent research, such as the 2024 conference *SECON'24* highlights governance challenges in early warning and response. India has established multi-tier geological hazard forecasting systems, including the National Landslide Forecasting Centre (NLFC) operationalized in July 2024. Although the NLFC provides forecasts to government agencies, dissemination to the public remains limited. During the 2024 Wayanad landslide, multiple agencies, including GSI, IMD, and local institutions, issued rainfall and landslide warnings; however, inconsistencies in alerts, lack of real-time data sharing, and delayed public communication weakened community preparedness. For instance, while the IMD issued Orange Alerts and forecasted heavy rainfall, actual precipitation exceeded forecasts, and the highest-level Red Alert was issued only after the event. Conflicting claims by state and central agencies over the adequacy of warnings reveal significant governance gaps in risk communication.

Overall, the literature suggests that although disaster preparedness frameworks and forecasting systems are increasingly sophisticated, preparedness outcomes remain uneven. Household-level preparedness is shaped by socio-behavioural factors, while hazard-specific risks such as landslides demand integrated forecasting, timely public communication, and stronger governance to reduce disaster impacts effectively.

ENVIRONMENTAL CHANGE AND RISK AWARENESS

Environmental change, driven largely by global climate warming, has substantially intensified hydrometeorological hazards, including rainfall-induced landslides in mountainous regions (IPCC, 2021). Studies consistently highlight that climate change amplifies extreme rainfall events, increasing slope instability and triggering catastrophic landslides, particularly in ecologically fragile environments (Gariano & Guzzetti, 2016; Bogaard & Greco, 2018). The Wayanad landslide of July 2024 demonstrates this pattern, as unusually high precipitation of more than 372 mm in a single event far exceeded meteorological forecasts and reactivated pre-

existing geological weaknesses (Wang et al., 2024). Research shows that the interaction of unstable geological formations, land-use changes, and anthropogenic disturbances such as deforestation, unregulated construction, and road cutting heightens environmental vulnerability to landslides (Sassa, 2018; Petley, 2012). Despite technological advancements in hazard monitoring, including India's multi-tiered early warning system and the operationalization of the National Landslide Forecasting Centre (NLFC) in 2024, risk communication gaps persist (Assessment of Governance Gaps in Landslide Recovery, 2024). Forecast data in Wayanad was shared only with district authorities, not the public, thereby diminishing community preparedness and inhibiting timely evacuation. The literature emphasizes that early warning systems are effective only when warning messages are clear, timely, and accessible to vulnerable populations (UNDRR, 2015; Basher, 2006). However, low levels of risk awareness, limited literacy, and weak community engagement often hinder public responsiveness to warnings in plantation-based settlements like those in Wayanad (Wang et al., 2024; Alexander, 2013). Studies further argue that socio-economic marginalization and a poor perception of environmental risk reduce adaptive capacity, thereby reinforcing disaster vulnerability (Wisner et al., 2004). As seen in Wayanad, even when local research institutions issued rainfall-triggered landslide alerts 16 hours in advance, these warnings were not integrated into official systems, reflecting governance gaps similar to those documented in other global landslide-prone regions (Piciullo et al., 2018). This convergence of climatic extremes, environmental degradation, and weak risk awareness underscores the need for community-centred disaster education, transparent multi-channel warning dissemination, and enhanced integration of scientific forecasts into public communication protocols.

COPING MECHANISMS AND RESILIENCES

Resilience and coping mechanisms are widely discussed concepts in disaster studies, reflecting how individuals, communities, and systems respond to adverse events. Resilience is commonly understood as the capacity to withstand, adapt to, and recover from hazards without compromising long-term well-being. The International Strategy for Disaster Reduction (ISDR, 2004) defines resilience as “the capacity of a system, community or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner” (UNISDR, 2009). Similarly, DFID (2011) describes disaster resilience as the ability to manage change while maintaining or transforming living standards in the face of shocks such as earthquakes, droughts, or conflict. The conceptual roots of resilience can be traced to the work of Holling (1973), who emphasized ecological resilience as the capacity of systems

to absorb disturbances, and later expanded by Berkes and Folke (1998) to include social-ecological systems. In community development research, resilience has increasingly been linked to social capital, participation, and local capacity building (Berkes & Ross, 2013; Norris et al., 2008).

Coping mechanisms operate at individual, household, and community levels and are integral to understanding resilience. Coping refers to the cognitive and behavioural efforts used to manage stressful situations (Lazarus & Folkman, 1984). In disaster contexts, coping mechanisms may include problem-focused strategies such as evacuation planning, livelihood diversification, and accessing institutional support, as well as emotion-focused strategies such as seeking social support or engaging in spiritual practices (Campbell-Sills & Stein, 2007). Studies show that communities with strong social networks and trust demonstrate greater adaptive capacity because collective coping mechanisms such as resource sharing, mutual aid, and community-based early warning enhance recovery (Aldrich & Meyer, 2015). According to Norris et al. (2008), resilience emerges from a set of adaptive capacities including social capital, community competence, economic resources, and communication processes. These capacities shape the nature and effectiveness of coping responses.

Community cohesion plays a critical role in resilience and collective coping. Buckner's (1988) Index of Cohesion (BIC), which includes dimensions such as psychological sense of community, neighbourhood, and attraction to the neighbourhood, has been widely used to assess social connectedness. High community cohesion supports both emotional and practical coping by creating shared identity, mutual support systems, and collective problem-solving structures (Townshend, 2001; Wilkinson, 2007). Cross-cultural studies also highlight that resilience-building requires community participation, inclusive decision-making, and recognition of local knowledge (Berkes & Ross, 2013). As Leykin et al. (2013) note, measuring resilience continues to pose challenges due to its multidimensional and context-specific nature, yet social cohesion consistently emerges as a core component.

Livelihood resilience is another essential dimension of coping in disaster-prone environments. DFID (2011) defines resilient livelihoods as those that enable people to prepare for, respond to, and recover from shocks without undermining their long-term well-being. Early warning systems, awareness programs, safe housing, and food reserves are considered key elements of livelihood-based coping and resilience (FAO, 2015). Households resort to various coping strategies such as temporary relocation, borrowing money, reducing consumption, or adjusting

livelihood activities during crises (Moser, 1998). However, overreliance on short-term negative coping strategies, such as selling productive assets, may erode resilience over time (Hallegatte et al., 2017).

Overall, resilience and coping mechanisms in disaster contexts are interdependent concepts shaped by social, economic, psychological, and institutional factors. While resilience emphasizes long-term adaptive capacity, coping highlights immediate responses to stress. Effective disaster management requires strengthening social networks, fostering community participation, improving livelihoods, and promoting psychological well-being to ensure that individuals and communities can withstand and recover from future hazards.

THE ROLE OF GOVERNMENT, NGOS, AND OTHER ORGANIZATIONS

Effective disaster recovery requires coordinated governance, accurate risk assessment, and responsive relief systems; however, evidence from recent disasters shows persistent institutional gaps that undermine resilience. The National Disaster Management Authority (NDMA) of India introduced a comprehensive Landslide Risk Management Plan in 2019, outlining measures such as hazard zonation, early warning systems, stakeholder training, and stabilization of vulnerable mountain zones. Although the plan is robust on paper, its implementation has remained largely limited, with minimal progress at the state and micro-levels (Azad, Salim & Anoop, 2024). This governance gap became evident during the Wayanad landslide, where inadequate early warning mechanisms and outdated geospatial data hindered preparedness. Similarly, despite the National Remote Sensing Centre (NRSC) updating landslide mapping in 2023, experts view Kerala's hazard maps as insufficient due to rapidly changing climatic patterns and the lack of real-time monitoring sensors, underscoring the need for a more dynamic, locally grounded risk management system (Azad et al., 2024).

Non-Governmental Organizations (NGOs) play a critical complementary role in addressing these systemic limitations, particularly during immediate response and early recovery. NGOs, being voluntary, non-profit, and community-focused, often mobilize faster than government systems and provide essential relief services such as rescue support, distribution of food and shelter materials, establishment of temporary shelters, and functioning communication channels (Research Journal of Agricultural Sciences, 2015). Their contributions also extend to organising health camps, supplying safe drinking water, and providing essential household items, including soap, mosquito nets, sanitary products, tarpaulins, and fuel, especially in highly affected communities. Studies note that NGOs do not replace government agencies but

serve as coordination bridges between state systems and disaster-affected populations, helping to reduce vulnerability through training, awareness-building, and community-level capacity strengthening (UNISDR, 2007). Their involvement in relief and rehabilitation underscores their importance in filling operational gaps where government responses may be delayed or insufficient.

A related structural issue in disaster governance concerns the relationship between disaster victims and government authorities, particularly the extent to which satisfaction with relief services influences post-disaster conflict. Lee and Lee (year NA) argue that disaster victims' satisfaction with public relief services significantly affects levels of conflict with the government. Their large-scale study of 2,311 disaster victims in South Korea demonstrates that dissatisfaction arising from delays, poor service quality, or unequal allocation can intensify tensions between victims and the state. Their research shows that both the scale of disaster damage and the type of disaster influence the quantity and quality of government relief services, which in turn shape victim–government conflict dynamics. They emphasize that preparedness, response, and recovery efforts vary across disaster categories, and these variations can either mitigate or exacerbate conflict depending on how victims perceive the fairness and adequacy of relief. The study highlights the need for differentiated, context-specific relief policies that are tailored to disaster severity and affected groups, thereby contributing to a stronger theoretical foundation for disaster conflict management.

Taken together, these studies illuminate the interconnected challenges of governance failures, relief effectiveness, and community-level experiences in disaster contexts. While India has developed comprehensive frameworks for landslide risk management, weak on-ground implementation reduces their impact. NGOs help fill these gaps through rapid and community-centred interventions, but long-term resilience requires strong state-community trust. Research also shows that poorly delivered relief services can escalate tensions, reinforcing the need for transparent, equitable, and adaptive disaster governance systems. Strengthening early warning mechanisms, improving risk mapping, enhancing coordination between agencies and NGOs, and ensuring victim-centred relief delivery are, therefore, essential steps toward reducing governance gaps and promoting effective disaster recovery.

2.2 THEORETICAL FRAMEWORK:

Protection Motivation Theory (PMT)

Protection Motivation Theory (PMT), developed by Ronald W. Rogers (1975; revised 1983), explains how individuals decide to adopt protective behaviours when faced with potential threats. The theory suggests that preparedness is influenced by people's perception of a disaster's severity, their vulnerability to it, the effectiveness of recommended protective measures, and their confidence in carrying out those measures. In the context of Wayanad, PMT helps explain why some individuals adopted preparedness measures while others remained vulnerable despite government policies, early warning systems, and disaster preparedness programmes.

Social Capital Theory

Social Capital Theory, developed by Pierre Bourdieu (1986), James S. Coleman (1988), and Robert D. Putnam (2000), explains how trust, social networks, community participation, and collective action contribute to disaster preparedness and resilience. Strong social relationships facilitate information sharing, encourage community participation, support evacuation and recovery efforts, and strengthen resilience. This theory helps explain how local communities, volunteers, and institutions influenced preparedness, response, and recovery in Wayanad.

This study is guided by Protection Motivation Theory (PMT) and Social Capital Theory to examine the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities in Wayanad. Together, these theories provide a comprehensive understanding of how both individual and community-level factors influence disaster preparedness, response, resilience, and recovery. By integrating these two theories, the study examines disaster preparedness from both individual and community perspectives. While PMT explains how individuals perceive risk and decide whether to undertake protective actions, Social Capital Theory explains how community relationships, participation, and institutional support shape preparedness and recovery. Together, they provide a strong theoretical foundation for understanding why gaps exist between policy-level disaster preparedness frameworks and the actual experiences of disaster-affected communities in Wayanad. This integrated framework supports the analysis of disaster preparedness, community participation, resilience, policy implementation, and the lived experiences of affected communities.

2.3 RESEARCH GAP ANALYSIS:

Most studies on the Wayanad landslides have focused on geological causes, climate change impacts, hazard mapping, governance issues, and post-disaster recovery. In addition, the

majority of these studies have adopted quantitative and technical approaches, emphasizing scientific assessments and disaster statistics. While these studies provide important information about the disaster, they offer limited insights into the experiences, perceptions, and preparedness practices of affected communities.

There is a noticeable lack of qualitative research exploring how disaster preparedness policies and frameworks are understood, experienced, and implemented at the community level. Therefore, this study adopts a qualitative approach to examine the lived experiences of disaster-affected communities and to understand the gap between policy-level preparedness measures and ground-level realities following the 2024 Wayanad landslide disaster. This will contribute to a more community-centred understanding of disaster preparedness and resilience.

CHAPTER – III

METHODOLOGY

3.1 INTRODUCTION

Research methodology refers to the systematic procedures and techniques used to conduct a research study in a scientific and organized manner. It provides a framework for selecting appropriate research methods and for collecting, analysing, and interpreting data to achieve the research objectives. A well-defined methodology enhances the reliability, validity, and credibility of the study by ensuring that the research process is transparent, rigorous, and appropriate to the research problem (Creswell & Creswell, 2023).

The catastrophic landslides that occurred in Chooralmala and Mundakkai villages of Wayanad district, Kerala, in July 2024 resulted in significant loss of life, displacement of communities, and extensive damage to infrastructure and livelihoods. The disaster highlighted the critical importance of community preparedness, early warning systems, local participation, and coordinated disaster risk reduction measures in landslide-prone regions. Understanding the experiences and preparedness practices of affected communities is therefore essential for strengthening community-based disaster preparedness and enhancing resilience against future disasters.

Considering the nature of the research problem, a qualitative research approach was adopted to obtain an in-depth understanding of the perceptions, experiences, and preparedness practices of disaster-affected community members and key stakeholders. Qualitative methods are particularly suitable for disaster research because they facilitate a comprehensive exploration of complex social realities and community responses to disasters (Phillips, 2014).

This chapter describes the research methodology adopted for the present study on Community-Based Disaster Preparedness for Landslide Risk Reduction in Chooralmala and Mundakkai, Wayanad District, Kerala. It explains the research design, study area, study population, sampling technique, sample size, sources of data, methods and tools for data collection, data analysis procedures, ethical considerations, and the study's limitations. These methodological procedures were selected to ensure that the study systematically addresses the research objectives and produces credible and meaningful findings.

3.2 TITLE OF THE STUDY:

The disconnect between Policy-level Disaster Preparedness Frameworks and the Lived Experiences of Disaster-affected Communities

3.3 RESEARCH QUESTIONS:

General Question:

What are the lived experiences of community members concerning disaster readiness, and how do these experiences shape their perceptions, behaviours, and sense of preparedness?

Specific Questions:

- How do community members describe their experiences during the recent landslides and floods in Wayanad, and how did they and their community respond in the immediate aftermath of the disaster?
- What kinds of preparedness measures or safety practices were in place within the families or communities before the disaster, and how effective were these in protecting lives and livelihoods?
- How has the disaster affected the livelihoods, homes, and daily lives of community members, and what challenges have they experienced during displacement and recovery?
- What coping strategies, community strengths, or local practices have helped community members survive and recover from the impacts of the disaster?
- How have government agencies, NGOs, and other organizations supported the community through relief, rehabilitation, or livelihood assistance, and what challenges or gaps do community members still perceive?
- What lessons have community members learned from the disaster, and what improvements do they believe are necessary to strengthen disaster preparedness and ensure a safer future?

3.4 DEFINITION OF CONCEPTS

Disaster

Conceptual Definition: A disaster is defined as a serious disruption of the functioning of a community or society at any scale due to hazardous events interacting with conditions of exposure, vulnerability, and capacity, leading to human, material, economic, and environmental losses and impacts (United Nations Office for Disaster Risk Reduction (UNDRR, 2025). The Sendai Framework for Disaster Risk Reduction (2015–2030) emphasizes that disasters are not solely the result of natural hazards but are significantly influenced by social, economic, environmental, and institutional vulnerabilities. Effective disaster

management, therefore, requires reducing disaster risk through preparedness, mitigation, resilience building, and inclusive governance (UNDRR, 2015).

Operational Definition: In the present study, the July 2024 Wayanad landslides are considered a disaster due to their severe impacts on lives, livelihoods, infrastructure, and the well-being of affected communities.

Disaster Preparedness

Conceptual Definition: Disaster preparedness refers to the knowledge, capacities, and actions developed by governments, organizations, communities, and individuals to effectively anticipate, respond to, and recover from the impacts of disasters (UNDRR, 2025). Preparedness includes hazard assessment, contingency planning, public awareness, early warning systems, evacuation planning, emergency resource management, capacity building, and simulation exercises.

Operational Definition: The Sendai Framework identifies disaster preparedness as a key component of disaster risk reduction and advocates a people-centred approach that strengthens institutional capacity and ensures active community participation in preparedness planning (UNDRR, 2015). In this study, disaster preparedness refers to both the formal preparedness measures established through policies and the actual preparedness experiences of disaster-affected communities.

Policy-level Disaster Preparedness Frameworks

Conceptual Definition: Policy-level disaster preparedness frameworks encompass the laws, policies, institutional arrangements, guidelines, and strategic plans formulated by governments and disaster management authorities to strengthen preparedness and reduce disaster risks. Internationally, the Sendai Framework for Disaster Risk Reduction (2015–2030) provides the guiding framework for disaster risk reduction by emphasizing understanding disaster risk, strengthening disaster risk governance, investing in resilience, and enhancing disaster preparedness for effective response and recovery (UNDRR, 2015).

Operational Definition: In India, policy-level preparedness is guided by the Disaster Management Act, 2005, the National Disaster Management Policy, and the National Disaster Management Plan, which outline the responsibilities of national, state, district, and local institutions in disaster preparedness and response (NDMA, 2019). In this study, policy-level

disaster preparedness frameworks refer to these formal institutional mechanisms designed to improve disaster preparedness and resilience.

Lived Experiences

Conceptual Definition: Lived experiences refer to the personal meanings, perceptions, emotions, and everyday realities through which individuals understand and interpret events in their lives. In qualitative research, lived experiences are explored to understand how people experience social phenomena from their own perspectives rather than through external interpretations (Creswell & Poth, 2018).

Operational Definition: Within the context of this study, lived experiences refer to the experiences of individuals and families affected by the 2024 Wayanad landslides, including their perceptions of disaster preparedness, early warning systems, evacuation, institutional support, recovery processes, and the extent to which existing disaster preparedness policies addressed their actual needs.

Disaster-affected Communities

Conceptual Definition: Disaster-affected communities are groups of people whose lives, livelihoods, property, health, social relationships, and environment have been adversely affected by a disaster. Such communities often experience displacement, economic losses, psychosocial distress, and disruptions to essential services. The Sendai Framework recognizes affected communities as central stakeholders in disaster risk reduction and emphasizes their participation in planning, implementation, and monitoring of disaster management initiatives (UNDRR, 2015).

Operational Definition: Disaster-affected Communities: In this study, disaster-affected communities refer to the residents of Mundakkai, Chooralmala, Vellarimala, and Punjirimattom in Meppadi Panchayat, Wayanad, who were directly affected by the 2024 Wayanad landslide through the loss of lives, homes, livelihoods, displacement, and other social, economic, or psychological impacts.

Disaster Risk Reduction (DRR)

Conceptual Definition: Disaster Risk Reduction (DRR) is the systematic development and application of policies, strategies, and practices to prevent new disaster risks, reduce existing risks, and strengthen resilience (UNDRR, 2025). The Sendai Framework identifies DRR as a

shared responsibility of governments, institutions, communities, and individuals and emphasizes an inclusive, multi-sectoral, and evidence-based approach to disaster governance.

Operational Definition: Disaster Risk Reduction (DRR): In this study, DRR refers to the policies, programmes, and community-based measures implemented to reduce landslide risks and impacts in Wayanad. It includes preparedness activities, early warning, awareness programmes, evacuation planning, and community participation to reduce vulnerability and enhance resilience.

3.5 PILOT STUDY

A pilot study was conducted on 8th September 2025 in Chooralmala, Meppadi, and Kalpetta of Wayanad District to assess the feasibility of the research and gain a preliminary understanding of the experiences of landslide-affected families. The study involved field observations, informal interactions, and preliminary interviews with displaced survivors and community members.

The pilot revealed several long-term challenges faced by affected families, including displacement, psychological trauma, loss of livelihoods, financial hardship, and difficulties in accessing government rehabilitation and compensation schemes. Many participants continued to experience emotional distress, fear during heavy rainfall, and uncertainty about their future. Livelihood loss due to the destruction of agricultural land, plantations, and employment opportunities had further increased their economic vulnerability.

The study also highlighted the positive role of community solidarity, with local residents, volunteers, and organizations providing emotional, social, and material support during the recovery process. These interactions offered valuable insights into the resilience and coping strategies of survivors.

The pilot study helped the researcher refine the interview schedule, improve the sequencing of questions, and identify important ethical considerations while interacting with disaster-affected participants. It confirmed the feasibility of the research and guided the development of the main study by identifying four key themes: disaster preparedness, psychosocial well-being, livelihood recovery, and the gap between disaster management policies and the lived experiences of affected communities.

3.6 RESEARCH DESIGN

Research design is the overall plan or blueprint that guides the research process. It provides a systematic framework for collecting, analyzing, and interpreting data to address the research problem and achieve the study objectives. A well-designed research plan helps ensure that the methods used are appropriate for answering the research questions and producing valid and trustworthy findings. The research design is a framework that connects the research questions, data collection procedures, data analysis, and the interpretation of findings, enabling researchers to address the research problem in a logical and systematic manner (Creswell and Creswell, 2022).

Since the present study aims to explore the lived experiences of disaster-affected communities and understand the gap between disaster preparedness policies and their implementation, a qualitative case study research design was adopted. This design is appropriate because it facilitates an in-depth exploration of a contemporary phenomenon within its real-life context through multiple sources of evidence.

The present study adopted a qualitative case study design to explore the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities in Wayanad district, Kerala. A qualitative approach was considered appropriate because it enables an in-depth exploration of participants' experiences, perceptions, and interpretations of disaster preparedness in their natural settings. It is particularly useful for understanding complex social issues where human experiences and contextual factors are central to the research (Creswell & Poth, 2018).

A case study design was employed as it facilitates a comprehensive investigation of a contemporary phenomenon within its real-life context (Yin, 2018). This design is appropriate for the present study because it examines the experiences of communities affected by the 2024 Wayanad landslides and explores how disaster preparedness policies are implemented and perceived at the local level. The case study approach allows the researcher to gain a holistic understanding of the relationship between policy provisions and the realities experienced by disaster-affected communities.

The study was conducted in Chooralmala, Kalpetta, and Meenangadi of Wayanad district. Participants included women, elderly women, elderly men, persons with disabilities, individuals who lost their livelihoods, and youth. In addition, ASHA Workers, community volunteers, NGO representatives, the Panchayat President, and Police/Forest Department

officials were selected as key informants to provide institutional perspectives on disaster preparedness and response.

A purposive sampling technique was used to select participants with direct experience of the disaster who could provide rich, relevant, and meaningful information related to the study objectives. The sample consisted of six participants, selected based on their knowledge and experience. The case study design enabled the researcher to examine the gap between disaster preparedness policies and the lived experiences of disaster-affected communities, thereby generating an in-depth understanding of the research problem.

3.7 DESCRIPTION OF RESEARCH SITE AND PARTICIPANTS

Research Site:

Wayanad district is located in the northeastern part of Kerala and forms part of the ecologically sensitive Western Ghats region. Characterized by mountainous terrain, steep slopes, dense forests, and high rainfall, the district is highly susceptible to landslides and other hydro-meteorological hazards. The study was conducted in Chooralmala, Kalpetta, and Meenangadi, areas that have experienced varying levels of disaster impact and recovery processes. The selection of these locations enabled the researcher to examine disaster preparedness from both community and institutional perspectives within the broader context of the 2024 Wayanad landslide disaster.

Participants:

The study included six disaster survivors and key informants, selected through purposive sampling to understand the diverse experiences of the 2024 Wayanad landslides. The survivors included a 31-year-old woman tailor from Mundakkai who lost her husband, two children, in-laws, and several relatives; a 67-year-old restaurant owner whose livelihood was severely affected; a 40-year-old man with a physical disability who depended on repair work and daily-wage jobs; a 45-year-old medical shop owner whose business was destroyed; a 20-year-old youth who had to put aside his higher education plans to support his family after the disaster; and a 67-year-old tribal woman who lost one son, two daughters-in-law, and two grandchildren. Their varied family backgrounds, occupations, and disaster experiences provided valuable insights into the social, emotional, and economic realities of disaster preparedness and recovery.

The key informants included an ASHA worker, a community volunteer, the Panchayat President, an NGO representative, and officials from the Police and Forest Department. Based on their direct involvement in disaster management, they shared their experiences of rescue operations, healthcare support, relief distribution, rehabilitation, inter-agency coordination, and the implementation of disaster preparedness measures. Their perspectives complemented the survivors' narratives and helped provide a broader understanding of the gap between disaster preparedness policies and the lived experiences of affected communities in Wayanad.

3.8 SAMPLING STRATEGY

Sampling strategy refers to the systematic process of selecting participants who can provide relevant and meaningful information to address the research objectives. In qualitative research, sampling is not intended to achieve statistical representation; rather, it aims to identify participants with direct knowledge and lived experience of the phenomenon under study. Therefore, participants are selected for their ability to provide rich, detailed, and context-specific information that deepens understanding of the research problem (Patton, 2015; Creswell & Poth, 2018).

Unlike quantitative research, where participants are generally selected through probability sampling techniques, qualitative research commonly uses non-probability sampling strategies because the emphasis is on depth of understanding rather than numerical generalisation. The selection of participants is guided by the study's purpose, research questions, and the relevance of participants' experiences to the phenomenon under investigation. A well-planned sampling strategy enables the researcher to gather diverse perspectives and generate comprehensive insights into complex social issues (Patton, 2015; Creswell & Poth, 2018).

For the present study, which explores the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities, a carefully designed sampling strategy was essential to include participants who had directly experienced the Wayanad landslides and those who had actively participated in disaster preparedness, response, and recovery. Their experiences provided rich qualitative data that helped the researcher understand how disaster preparedness policies were implemented at the community level and how these policies were experienced by disaster-affected populations.

The study employed a purposive sampling strategy, a non-probability sampling technique widely used in qualitative research. Purposive sampling involves the deliberate selection of participants who possess direct experience, relevant knowledge, and the ability to provide rich

and meaningful information about the research problem (Patton, 2015). This strategy is particularly appropriate for qualitative case study research, where the objective is to obtain in-depth insights rather than achieve statistical representation.

Participants were selected based on their experiences of the 2024 Wayanad landslides and their familiarity with disaster preparedness and recovery processes. The study included women, elderly women, elderly men, persons with disabilities, individuals who lost their livelihoods, and youth, as these groups represent diverse perspectives and varying levels of vulnerability. In addition, key informants such as an ASHA Worker, Community Volunteer, NGO Representative, Panchayat President, and Police/Forest Department official were selected because of their active involvement in disaster preparedness, response, and community recovery.

The sample consisted of six participants who met the inclusion criteria and were willing to participate in the study. The purposive sampling strategy enabled the researcher to collect detailed, context-specific information on the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities. This approach ensured that the data gathered were relevant to the study objectives and contributed to a comprehensive understanding of the research problem (Creswell & Poth, 2018; Yin, 2018).

3.9 DATA COLLECTION

The study employed both primary and secondary sources of data to obtain a comprehensive understanding of the research problem. Primary data were collected through semi-structured, in-depth interviews, a widely used qualitative research method for exploring participants' experiences, perceptions, and interpretations in detail. This method provided the flexibility to ask open-ended questions while allowing participants to freely express their views on disaster preparedness, policy implementation, institutional support, and their lived experiences during and after the 2024 Wayanad landslides.

The interviews were conducted with selected participants and key informants using an interview guide prepared in accordance with the study objectives. With the participants' informed consent, interviews were audio-recorded wherever possible, and detailed field notes were maintained to capture non-verbal observations, contextual information, and the researcher's reflections. This helped ensure the accuracy and completeness of the data collected.

Secondary data were gathered from a variety of sources, including government reports, disaster management policies, official publications, reports of the Kerala State Disaster Management Authority (KSDMA), the National Disaster Management Authority (NDMA), the Sendai Framework for Disaster Risk Reduction (2015–2030), books, peer-reviewed journal articles, and other relevant documents. These sources provided contextual and policy-level information that supported the analysis of the primary data.

The use of both primary and secondary data enabled the researcher to triangulate information, thereby enhancing the credibility and trustworthiness of the findings. It also facilitated a comprehensive understanding of the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities (Yin, 2018).

3.10 DATA ANALYSIS

Data analysis is a crucial stage in the research process, as it enables the researcher to organize, interpret, and make sense of the data collected during the study. It transforms raw information into meaningful findings by identifying patterns, relationships, and significant themes related to the research problem. Through systematic analysis, researchers can answer the research questions, achieve the study objectives, and draw evidence-based conclusions (Creswell & Poth, 2018).

In qualitative research, data analysis helps researchers go beyond simply describing participants' responses to understand their experiences, perceptions, and meanings in depth. It allows the researcher to identify recurring ideas, compare different perspectives, and interpret the meaning behind participants' narratives within their social and cultural context (Patton, 2015), producing findings that are credible and true to participants lived experiences (Braun & Clarke, 2006). This process also lays the groundwork for discussing findings, connecting them to existing theories and literature, and developing practical recommendations for policy and practice. Ultimately, systematic data analysis helps researchers generate meaningful insights that add to existing knowledge and support informed decision-making in the field (Nowell et al., 2017).

The data collected for this study were analysed using thematic analysis, a widely used method in qualitative research for identifying, analysing, and interpreting patterns or themes within qualitative data (Braun & Clarke, 2006). Thematic analysis was considered appropriate because it enabled the researcher to systematically examine participants' narratives and understand the

disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities.

The analysis began with transcribing interview recordings and conducting a thorough reading of the transcripts to gain familiarity with the data. The researcher then coded the data by identifying meaningful words, phrases, and ideas relevant to the research objectives. Similar codes were grouped into broader categories, which were further refined into themes representing participants' experiences, perceptions, and views on disaster preparedness, policy implementation, institutional support, and recovery.

The findings from the interviews were interpreted alongside secondary data obtained from disaster management policies, government reports, and relevant literature. This process facilitated data triangulation and enhanced the credibility and trustworthiness of the findings. The identified themes were presented and discussed in relation to the research objectives and existing literature to provide a comprehensive understanding of the research problem.

3.11 ETHICAL CONSIDERATIONS

Ethical principles were strictly followed throughout the research process to protect the rights, dignity, privacy, and well-being of all participants. Since the study involved disaster-affected community members and key informants, special care was taken to ensure the research was conducted ethically, respectfully, and sensitively. Before data collection, the study's purpose, objectives, and significance were clearly explained to each participant. Informed consent was obtained prior to conducting the interviews, and participants were informed that their participation was entirely voluntary. They were also made aware of their right to refuse participation, skip any question they did not wish to answer, or withdraw from the study at any stage without any negative consequences.

Information was collected directly from disaster-affected community members and key informants based on their willingness to participate in the study. No participant was compelled or pressured to share personal experiences. The researcher respected participants' decisions throughout the interview process and ensured that the interviews were conducted at a time and place that were convenient and comfortable for them.

Confidentiality and anonymity were maintained throughout the study. Personal identifiers such as names, addresses, and other identifying details were omitted from the interview transcripts and the presentation of findings. Instead, participants were described using general categories

to protect their identities. All information collected during the study was used solely for academic purposes and was stored securely to prevent unauthorized access.

Considering that the research involved individuals who had experienced the 2024 Wayanad landslides, particular attention was given to minimizing emotional distress during the interviews. The researcher approached each participant with empathy, patience, and respect, allowing them sufficient time to express their experiences without interruption or pressure. If participants became emotionally uncomfortable while recalling traumatic events, they were given the option to pause or discontinue the interview. Care was taken to avoid asking unnecessary or intrusive questions that could increase psychological distress.

The researcher also maintained honesty, neutrality, and objectivity throughout the research process. The views and experiences shared by the participants were recorded and presented accurately without distortion or personal bias.

3.12 ASSUMPTIONS, LIMITATIONS & SCOPE

Assumptions

The present study is based on certain assumptions that guided the research process. It is assumed that the disaster-affected community members and key informants selected for the study possess sufficient knowledge and firsthand experience of the 2024 Wayanad landslides to provide reliable and meaningful information. The study also assumes that the participants shared their experiences, perceptions, and opinions honestly and voluntarily during the interviews, thereby enabling the researcher to obtain authentic insights into the research problem.

Another important assumption is that policy-level disaster preparedness frameworks influence the preparedness, response, and recovery capacities of disaster-affected communities. It is further assumed that differences may exist between the intended objectives of disaster preparedness policies and the actual experiences of communities during and after disasters. The study assumes that these gaps can be understood by examining the lived experiences of affected individuals alongside the perspectives of key stakeholders involved in disaster management. Finally, it is assumed that a qualitative case study approach is appropriate for exploring the complex relationship between disaster preparedness policies and community experiences within their real-life context.

Limitations of the Study

As with any research, the present study has certain limitations that should be considered when interpreting its findings. The study is geographically limited to Chooralmala, Kalpetta, and Meenangadi in Wayanad district, Kerala. Therefore, the findings reflect the specific social, cultural, environmental, and institutional context of these areas and may not be directly applicable to other disaster-prone regions.

The study adopts a qualitative case study design with a limited sample size. The objective of qualitative research is to obtain rich, detailed, and context-specific information rather than achieve statistical generalization. Consequently, the findings represent the experiences and perceptions of the selected participants and should not be interpreted as representative of all disaster-affected communities.

The research also relies on participants' recollections of the 2024 Wayanad landslides. Their responses may be influenced by personal experiences, emotions, memory, and individual interpretations of the events. In addition, the sensitive nature of the disaster may have caused some participants to withhold certain experiences or feel emotional while recounting them. Time constraints limited financial resources, and participant accessibility also restricted the duration of fieldwork and the number of interviews conducted. Nevertheless, appropriate qualitative research procedures were followed to ensure the credibility, dependability, and trustworthiness of the study.

Scope of the Study

The present study examines the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities following the 2024 Wayanad landslides. The study is confined to Chooralmala, Kalpetta, and Meenangadi in Wayanad district, Kerala, and explores disaster preparedness within the social, institutional, and community contexts of these areas.

The study examines the experiences and perceptions of disaster-affected individuals, including women, elderly persons, persons with disabilities, youth, and individuals who lost their livelihoods, as well as key stakeholders involved in disaster preparedness, response, and recovery. It specifically explores community awareness of disaster preparedness measures, access to early warning systems, evacuation experiences, institutional support, community participation, livelihood recovery, and the implementation of disaster preparedness policies at the local level.

Furthermore, the study seeks to identify the factors contributing to the gap between policy intentions and community experiences and to understand how this gap influences disaster preparedness and resilience. The findings are expected to contribute to disaster management and social work practice by providing evidence-based recommendations to strengthen community-centred disaster preparedness, improve policy implementation, promote inclusive disaster governance, and enhance resilience in disaster-prone communities. The study may also serve as a useful reference for policymakers, disaster management practitioners, researchers, and future studies on disaster preparedness and community resilience.

CHAPTER – IV
CASE DESCRIPTION

4.1 INTRODUCTION

This chapter presents case descriptions of selected participants directly affected by the 2024 Wayanad landslide. The purpose of these case descriptions is to provide an in-depth understanding of the lived experiences of disaster-affected individuals and to capture the diverse social, economic, emotional, and psychological impacts of the disaster. Each case reflects the unique circumstances, challenges, coping mechanisms, and recovery experiences of the participants while highlighting their perspectives on disaster preparedness and post-disaster life.

The cases were selected through purposive sampling to represent different sections of the affected community, including women, elderly persons, persons with disabilities, youth, and individuals who experienced livelihood loss. To maintain confidentiality and protect participants' privacy, personal identities have been anonymized wherever necessary. The case descriptions are based on information gathered through in-depth interviews conducted during the field study and are presented in a narrative form to preserve the authenticity of participants' experiences.

These case descriptions provide valuable insights into the realities of disaster preparedness, vulnerability, resilience, and recovery. They also contribute to a deeper understanding of the gap between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities in Wayanad.

4.2 CASE DESCRIPTION

4.2.1 CASE - A

Case A is a 31-year-old woman who was living in Mundakkai, Chooralmala, before the devastating landslide in Wayanad. She was living with her spouse, three children, and her husband's parents. Their family was closely connected, and daily life was built on mutual care, emotional bonding, and shared responsibilities. This family structure gave her a strong sense of security and belonging.

She completed her higher secondary education in a nearby school. After her studies, she got married and started her family life. Although she entered married life early, she continued to develop her interests and later completed a diploma in fashion design. She had good stitching and tailoring skills and gradually started doing stitching work from her home. People in the neighbourhood appreciated her work for its neatness and creativity. Over time, this work

became not only a small source of income but also an important part of her personal identity and confidence.

Her family had even planned to open a small stitching shop in the locality so that she could expand her work and support the family financially. Her spouse had been working abroad and had returned a few months before the disaster, planning to stay with the family permanently. This decision created happiness and hope for the future. They were living in a well-built house, and many relatives were living nearby. As a result, she felt emotionally supported and socially connected.

However, the landslide completely changed her life in a matter of moments. The disaster occurred suddenly during the night. *“The disaster happened suddenly.”* There had been no clear warning or preparation before the incident. On that day, she had finished her regular household work and gone to sleep. She described the moment saying, *“After finishing all the work and lying down to sleep, I suddenly heard a sound in my sleep.”* She felt the ground shaking, and within moments, the land collapsed.

Everything happened very quickly. *“I was shocked... and everything was over in a moment.”* The house and surroundings were suddenly filled with mud and debris. People were shouting, crying, and searching for their loved ones. Roads were blocked, and communication became very difficult.

During this disaster, she lost her spouse, two children, and her husband’s parents. Several relatives living nearby also lost their lives. Her house disappeared in the landslide along with all her belongings, documents, and memories. *“I lost everything... we had a big house.”* At present, she is living only with one daughter, and her parents are staying with her to provide support.

Despite experiencing such a deep personal loss, she appeared emotionally composed while narrating her experience. She did not cry openly during the conversation, but her grief was visible in her words and pauses. It appeared she was consciously trying to remain strong, especially for her daughter.

Her daughter is still experiencing emotional trauma after the disaster. The child becomes very frightened whenever it rains. *“My daughter gets very scared whenever it rains. She starts crying when she hears the sound of the rain.”* The sound of rain reminds the child of the

landslide, triggering fear and anxiety. As a mother, she is trying to comfort and support her daughter while also dealing with her own grief.

Immediately after the disaster, community members came together and supported one another. *"We all cried. We ran and called for help. I could only save my daughter, who was lying there with us. They were all with me."* Neighbours began rescue work using whatever resources were available. Women in the community gathered, supported each other emotionally, and comforted children and the elderly. She also received emotional support from other women who stayed beside her during those painful hours.

Before the disaster, there was very little awareness or preparedness for landslides in the area. *"We had no awareness or preparedness before the disaster."* Her family had no emergency plan, and they did not keep emergency supplies such as food, water, or important documents ready. There was also no effective early warning system, and no alert reached them before the landslide occurred. Because of this lack of preparation, people were unable to respond quickly or protect themselves.

After the disaster, she and her daughter had to move to relief camps and temporary shelters. They stayed in the relief camp for almost one month. When they first arrived there, they were still in shock and fear. *"When we reached the camp, we were still in fear. We lost our home and many things, and we did not know what would happen next."*

The living conditions in the relief camp were generally supportive, although space was limited. About 13 to 15 people stayed in a single room, reducing privacy and comfort. Despite these limitations, the authorities-maintained cleanliness and sanitation. Drinking water, food, and basic facilities were available. Toilets were cleaned regularly, and hygiene was maintained.

For women in particular, safety was given attention. Security arrangements were present, and essential items such as clothes and sanitary pads were provided. This helped women maintain dignity and personal hygiene during a difficult period. Healthcare services were also available in the camp. Doctors were present throughout the day to provide treatment whenever needed. This support was especially important for children and elderly people staying in the camp.

Emotionally, however, the experience of displacement created stress and uncertainty. She was worried about the future and about how she would rebuild her life after losing her home and family members. Counselling services were available in the camp, and these sessions helped survivors manage their emotional distress to some extent.

Children's daily routines were also disrupted. Their education was temporarily suspended, and many children were frightened by the disaster. Teachers staying in the camp organized activities and informal learning sessions for children. These efforts helped them slowly regain a sense of normal routine.

Even though the relief camp provided many facilities, managing daily life in such a crowded space was difficult, especially for families with children. However, the presence of volunteers, teachers, and officials helped families meet their basic needs. After leaving the relief camp, she moved to a rented apartment, where she currently lives with her daughter. The house has two bedrooms, a kitchen, and a dining area. Compared to the house she had before the disaster, this place feels small and temporary. However, it provides basic safety and shelter for her and her child.

At present, the government is providing ₹ 9,000 per month in rent assistance to support her housing needs. This financial support helps her manage the cost of living in the rented house. In addition to this monthly assistance, she also received ₹75,000 from the government to start a new livelihood activity. She plans to restart her stitching work soon with this financial support. Before the disaster, stitching was an important source of income and personal confidence for her. Even though she lost her house, sewing materials, and equipment in the landslide, her skill remains with her. Her decision to restart stitching work shows her determination to rebuild her life and regain financial independence.

She believes that stronger disaster preparedness is necessary in vulnerable areas. She feels that early warning systems, awareness programs, and disaster response training are very important, especially for women. She also believes that counselling services, livelihood support, and financial assistance are essential for women who have lost their families and homes.

Her experience clearly shows how disasters affect women not only physically but also emotionally, socially, and economically. She faced the disaster as a survivor, a grieving family member, and a mother responsible for protecting her child. Despite experiencing extreme loss, she continues to move forward step by step, showing resilience and determination in rebuilding her life.

4.2.2 CASE - B

Case B presents the experience of a 65-year-old man living near the town of Chooralmala in Wayanad district, an area severely affected by the recent landslide disaster. Although his

residence was not within the exact landslide-affected area, the disaster still significantly affected his life because his livelihood was directly tied to the economic activities of Chooralmala town. He currently lives with his wife, while his two daughters are married and living separately with their families in the Kozhikode district and another part of the Wayanad district. Since his daughters are settled elsewhere, he and his wife depend mainly on the income from his small business to cover their daily living expenses. Even at the age of sixty-seven, he continues to work actively because it is necessary to maintain the household and meet financial responsibilities.

For several years, he had been running a small restaurant near a school in the town of Chooralmala. The restaurant served as the family's primary source of income. Before the disaster, Chooralmala was known as a place frequently visited by tourists and travellers, which helped small businesses such as restaurants and tea shops thrive. Because of the steady flow of visitors, his shop usually had regular customers throughout the day.

On the night when the landslide occurred, he was working inside the restaurant, completing routine preparations. As part of his usual routine, he was arranging the food items and ingredients needed for the following day's cooking. After finishing the preparations, he decided to close the shop and return home. A few minutes after reaching his house, he suddenly heard a very loud, unusual sound coming from Chooralmala town. His house is slightly higher on a slope near the town, giving him a clear view of the surrounding area. When he stepped outside to check what was happening, the sight he witnessed was extremely frightening.

“My house is a little on the hillside. When I came outside and looked, I saw that the whole of Chooralmala was flowing like a river. I was completely shocked. The scene was something he had never experienced before”.

Heavy rainfall had already been continuing in the region, but the landslide suddenly changed the entire landscape. Water, mud, and debris were rushing through the town, creating chaos and fear. He attempted to contact people he knew in Chooralmala and tried to reach the area. However, travelling to the town was impossible at that time because the roads were completely blocked.

“Immediately, I called everyone and tried to go to Chooralmala. But there was no road to reach there. There was no electricity or light anywhere”. The landslide had destroyed transportation routes and interrupted the electricity supply.

Only when daylight appeared the next morning were residents able to see the full extent of the destruction. When he looked towards the town again, around six in the morning, the situation became clearer.

“When daylight came, and we looked again, everything was gone. One side of my restaurant had collapsed, and the rest of the shop was completely filled with mud.”

The restaurant that had supported his family for years was badly damaged. A section of the structure had collapsed, and the remaining portion of the building was filled with mud and debris. Most of the utensils, cooking equipment, and supplies kept in the shop were destroyed. Although his house remained standing, it sustained structural damage and was shaken by the disaster. However, because the damage was not severe enough to classify the house as destroyed, it was not considered eligible for government compensation.

Despite the house remaining intact, the disaster still resulted in a major loss of livelihood for him. The destruction of Chooralmala town also meant that tourism activities came to a complete halt. The customer base that once supported many small businesses disappeared. For nearly six to seven months after the disaster, he was unable to restart his business. Eventually, he reopened the place as a small tea shop, hoping that economic activity would gradually return to the area.

However, the present situation remains extremely difficult. The number of visitors to the area has significantly reduced, and business has not recovered as expected. Earlier, he earned ₹5000 to ₹6000 per day; now his daily earnings have drastically decreased. On most days, he earns only ₹100 to ₹150, which is far from sufficient for meeting household needs. Often, he prepares snacks and tea in anticipation of customers, but very few people visit the shop. As a result, much of the prepared food remains unsold, and he has to take the leftovers home.

Apart from financial struggles, the family is also dealing with health-related concerns. His wife has recently been experiencing several health issues that require medical attention and care. Due to the reduced income, managing treatment costs has become another source of stress for him. He strongly expressed his dissatisfaction with the lack of financial assistance for people in his situation. According to him, government compensation was primarily provided to families who lost their homes or were housed in relief camps. Since his house did not collapse, he was not included among those who received major financial support. However, he feels that the loss of livelihood is equally serious and deserves recognition. *“Since we did not lose our*

house, we did not receive any major financial assistance. But nobody noticed that our livelihood was destroyed. There are many people like us here. To whom should we complain?"

He explained that, even though his house experienced a minor structural disturbance, the damage was not severe enough to qualify for repair assistance.

"Now it is very difficult to live. Only if someone comes here occasionally can we earn something." This statement clearly reflects the economic hardship he is currently facing due to the decline in visitors and commercial activity in the area.

Although he did not stay in a relief camp himself, he occasionally visited the camp to see the situation of displaced people and to meet acquaintances staying there. During these visits, he observed that several support systems were in place within the camp. He noticed that medical professionals and health workers were regularly present in the camp to provide treatment and health monitoring for residents. According to him, the healthcare services were organized so that camp residents could receive medical care whenever necessary. However, he also expressed concern that individuals like him, who were economically affected but not living in camps, did not receive similar mental health or financial support.

He explained that people like him also experienced emotional pain because they lost friends, neighbours, and familiar community spaces during the disaster. Despite this, they were not included in counselling or psychological support services. *"We also faced the same difficulties. We also lost friends and relatives. But we did not receive any mental or financial support. We are also affected, people. Why is the government not doing anything for us?"*

During the interaction, he appeared emotionally affected as he discussed the economic difficulties and uncertainty about the future. His expressions and tone reflected frustration and disappointment regarding the limited support available for people in his situation. Even with these challenges, he continues to run the tea shop. Although the income is very small, he believes continuing the business is the only way to sustain his livelihood.

This case highlights an important dimension of disaster impact that often receives limited attention. While disaster response programs primarily focus on housing destruction and displacement, individuals who lose their livelihoods due to environmental and economic disruptions also face long-term hardships. Although he did not lose his home, the destruction of the town of Chooralmala eliminated the economic environment that supported his business. Consequently, his financial security and daily life have been significantly affected. His

experience suggests that disaster recovery programs should include livelihood restoration measures, financial assistance for small businesses, and psychosocial support for individuals indirectly affected.

Overall, this case demonstrates that disasters create both direct and indirect forms of vulnerability, and effective recovery strategies must consider the needs of all community members whose lives and livelihoods are disrupted by such events.

4.2.3 CASE - C

Case C is a 67-year-old elderly woman from a tribal community in Wayanad. Before the disaster, she lived a simple, peaceful life with her family near a hillside. Her family depended mainly on daily wage work in tea plantations for their livelihood. She has three sons and one daughter and is a grandmother to four grandchildren. The family lived in a small house and had strong emotional connections with their home, land, and temple.

For her, the house was not only a place to live but also a space filled with memories, safety, and family unity. The nearby temple was also very important in her life, providing her with spiritual strength and emotional comfort. Her daily life included household chores, spending time with her grandchildren, and interacting with neighbours.

However, the landslide suddenly changed her life and family structure. During the disaster, she lost one son, two daughters-in-law, and two grandchildren. The loss deeply affected her emotionally and spiritually. *“Our house and everything are gone”. “Our temple and God are also gone.”* These words show that the disaster destroyed not only her physical house but also the emotional and cultural spaces that gave her strength.

On the day of the landslide, she was at home when she suddenly heard a loud roaring sound from the hill. The ground began to shake, and mud and water rushed down rapidly. *“I did not understand what was happening... everything became dark and loud.”* Because of her old age, weak physical condition, and poor eyesight, she was not able to move quickly. *“I could not even walk fast... I thought my life was over.”*

During those first moments, she depended completely on her family members and neighbours. People in the community supported her physically by holding her hands and guiding her uphill to safer areas. Some elderly persons were even carried by others. This shows how community support played a very important role during the first phase of the disaster.

Before the disaster, there was very little awareness about disaster preparedness in her community. There were no early warning systems or evacuation plans. *"We have seen heavy rain before... but never like this."* Although people were familiar with heavy rainfall in the region, they had never imagined such a severe landslide. Because of this lack of awareness and preparation, many people were unable to protect themselves in time.

After the landslide, she and her surviving family members had to move to a relief camp. They stayed in the relief camp for about one month. Arriving at the camp was emotionally difficult for her because the displacement happened suddenly. *"At this age, leaving our home suddenly was very painful. Everything happened so fast."* The living conditions in the relief camp were generally supportive, although space was limited. Around 13 to 15 people stayed in a single room, making it uncomfortable for elderly people who needed quiet space and rest. Despite these limitations, sanitation facilities were maintained properly. Toilets were cleaned regularly, and clean drinking water was available. Government officials, teachers, and volunteers worked continuously in the camp to support displaced families.

The healthcare system in the camp was very important. Doctors and medical teams were available twenty-four hours a day to provide treatment whenever needed. This service helped many people, especially elderly persons who needed regular health care and monitoring. Even now, she receives free medical check-ups from government health services, which help her manage her age-related health problems.

Emotionally, the experience of displacement created sadness, fear, and insecurity. She was grieving the loss of her family members and home. At the same time, she worried about the future of her surviving children and grandchildren. During the interaction, she sometimes grew silent as she remembered the people she had lost. These reactions showed deep grief and emotional trauma. Counselling services in the relief camp helped survivors share their feelings and cope with emotional stress. Talking with others who experienced similar losses also helped reduce loneliness.

Mobility inside the camp sometimes became difficult for her due to crowded spaces and her physical weakness. Walking long distances inside the camp or standing for long periods was challenging. However, volunteers and camp staff helped elderly persons with daily needs, which reduced some of these difficulties. Children staying in the relief camp also faced many challenges. Their schooling and daily routines were suddenly interrupted, and many children

were frightened after the disaster. Teachers at the camp organized learning activities and games to keep children engaged. These efforts helped children slowly return to a normal routine.

The disaster also affected the family's livelihood and financial situation. The house's destruction led to the loss of important documents, clothing, and household items. Her surviving sons also lost their regular jobs for some time, creating financial instability. *"Now we don't know how to start again."* After leaving the relief camp, she moved to temporary housing and is currently living with her son. The government is providing ₹ 9,000 per month in financial assistance to support her basic needs. This support helps the family manage daily expenses while they continue rebuilding their lives.

Even though she experienced multiple losses, some coping mechanisms helped her survive emotionally. Family members, neighbours, and volunteers provided emotional comfort and practical help. Community bonding played a major role in helping her deal with grief. She said softly, *"If people were not there to help, I would not be alive."* Prayer and faith also helped her cope with the trauma. Even though the temple was destroyed, spiritual belief continues to give her emotional strength. Talking with others in the community and sharing memories slowly helped her process the grief.

Observation during the interaction showed that she still carries deep emotional pain. Her voice softened when she spoke about the disaster, and she paused several times as she recalled her experiences. These reactions suggest that the trauma and grief remain strong even after the disaster. Based on her experience, she believes that disaster preparedness needs improvement in vulnerable areas. Early warning systems should reach remote communities on time. Special support should also be available for elderly people, including evacuation assistance, mobility support, and better medical care. She also believes that relief camps should provide more comfortable spaces for elderly persons who need rest and privacy. Improved sanitation, better access to healthcare, and easier movement inside the camp would make the environment more suitable for elderly survivors.

This case clearly shows how disasters deeply affect elderly persons, especially those belonging to tribal communities. Age, health conditions, poverty, and lack of preparedness increased her vulnerability during the disaster. At the same time, her survival reflects the importance of family bonding and community solidarity. Her experience highlights the need for disaster management systems that protect the safety, dignity, and well-being of elderly survivors.

4.2.4 CASE - D

Case D is a 40-year-old man from Wayanad living with a physical disability that affects his mobility and balance. He lives with his wife, children, and younger brother in a small house in a landslide-prone hilly area of Chooralmala. His child studied in Vellarimala LP School. His disability makes walking and maintaining balance difficult. Therefore, he often relies on his family members for mobility, especially in adverse weather or when travelling outside the home.

Despite these physical limitations, the case always tried to live independently and maintain his dignity. He contributed to the family's income through small repair work and occasional daily-wage jobs he could manage within his physical capacity. His wife usually handled most household responsibilities and assisted him with daily activities, while his younger brother helped him leave the house and complete physically demanding tasks. The family maintained a modest but stable livelihood before the disaster.

The recent landslides and floods drastically changed the life of the case and his family. On the day of the disaster, he was inside his house when he suddenly heard a loud roaring sound from the nearby hill. Within moments, the ground began to shake, and rainwater mixed with mud flowed rapidly towards the house. *"I struggled a lot... I cannot walk properly."*

The situation became more dangerous when a second landslide occurred shortly after the first one. Water and mud quickly entered the house, reaching a dangerous level. *"When the second landslide happened, water reached my waist... then my younger brother pulled me out."*

Because of his disability, he was unable to run or escape like many others in the community. The sound of breaking earth, rushing mud, and frightened voices created panic and confusion. *"I could not do anything... I was afraid."*

During those critical moments, he relied entirely on his family's support. His younger brother physically pulled him out of the flooded house and helped him move to a safer location. His wife was also frightened and emotionally distressed during the incident. The entire family experienced fear and uncertainty as they tried to escape the rapidly worsening situation.

When they later returned to look at their house, they found the entire space filled with thick mud. The whole house was filled with mud. Almost every household item was buried or damaged. Clothes, utensils, important documents, furniture, and work tools were destroyed.

The house became completely uninhabitable. The family lost not only their belongings but also their sense of safety and stability.

Before the disaster, there was limited awareness about disaster risks and preparedness in the community. Although residents were familiar with heavy rainfall during monsoon seasons, many did not fully understand the risk of severe landslides in the area. He shared that people knew the region experienced heavy rains, but they had never imagined such a destructive landslide. There were no effective early warning systems or clear evacuation instructions that could alert vulnerable residents in advance.

For persons with disabilities, like him, disaster preparedness was even more limited. There were no disability-inclusive disaster management measures in the community. There were no accessible warning systems designed to ensure that persons with disabilities received clear and timely information. Evacuation routes were uneven and slippery, especially during heavy rain, making them difficult for someone with mobility challenges to use safely. There were also no trained volunteers specifically assigned to assist persons with disabilities during emergencies. Relief shelters were not designed with ramps, handrails, or accessible sanitation facilities. Because of these barriers, the case was at greater risk during the disaster and depended heavily on his family for survival.

After the landslide, the house was severely damaged and filled with mud, making it impossible for the family to continue living there. As a result, the case and his family were displaced and had to move to a relief camp along with many other affected families. He and his family stayed in the relief camp for approximately one month. The first time he arrived at the camp, the experience was emotionally overwhelming. He felt uncertain about the future and worried about his physical limitations in a crowded environment. “Moving around was very difficult for me, and I had to rely on others for many things.”

The relief camp provided basic facilities, including food, shelter, sanitation, and healthcare. However, living conditions were crowded, with approximately 13-15 people sharing a single room. This made movement in the room difficult for him, as his mobility was already limited. Privacy was minimal due to the crowded environment. Adjusting to these conditions was physically and emotionally exhausting for him. However, volunteers and camp workers tried to help whenever possible and assisted him in accessing basic facilities.

Sanitation facilities were available but not fully accessible to persons with disabilities. Toilets and bathing areas lacked supportive infrastructure such as handrails or ramps. The pathways

within the camp were sometimes slippery and uneven, increasing the risk of falls. Mobility was the biggest challenge he faced during his stay in the relief camp. Simple activities such as going to the toilet, bathing, or moving between different areas required assistance from his wife or brother. This increased dependency affected his sense of independence and dignity.

He expressed sadness about not being able to protect his family or save his belongings during the disaster. One of his greatest concerns was becoming a burden to his family members. His emotional state reflected both grief from the loss of his home and anxiety about the future. The emotional impact of displacement was significant for the entire family. Living in a crowded space and dealing with uncertainty created stress and emotional exhaustion. However, counselling services provided in the camp helped many survivors express their feelings and cope with trauma. These sessions provided psychological support to individuals experiencing distress. Children staying in the relief camp initially experienced disruptions in their education and daily routines. However, the teachers at the camp organized informal learning sessions and small educational activities to help children continue their studies. These efforts helped restore some normalcy in children's daily lives.

Healthcare support in the relief camp played a crucial role in supporting affected families. Doctors and medical teams were available twenty-four hours a day, providing medical assistance whenever required. This was particularly helpful for individuals with health conditions, elderly persons, and persons with disabilities.

The disaster also severely affected his family's livelihood. Since he depended on small repair work and daily-wage jobs, the destruction of his tools and his displacement disrupted his ability to earn an income. This created financial instability and uncertainty for the family. *"Now I don't know how to live."*

After leaving the relief camp, the case and his family moved into temporary housing. However, many challenges remain. Accessibility issues continue to affect his daily activities, and rebuilding a stable livelihood is still difficult. The loss of tools and work opportunities has slowed and made financial recovery uncertain. Despite these hardships, the case demonstrated resilience and determination. His wife and younger brother provided continuous emotional and physical support during the difficult period. Neighbours and community volunteers also offered assistance and treated him with care and respect.

Gradually, the case has tried to restart small repair work activities within his physical ability. Although progress is slow, his willingness to continue working reflects strong inner strength

and perseverance. Observation during the interaction revealed that the case often paused while describing the disaster and its aftermath. His facial expressions showed a mixture of sadness and frustration, particularly when discussing the loss of his house and the challenges of dependency. At the same time, he expressed gratitude to his family members who supported him during the crisis. Based on his experience, the case strongly believes that disaster management systems must become more inclusive for persons with disabilities. Early warning systems should be accessible and understandable for everyone. Evacuation planning should include mobility assistance and trained volunteers who can support vulnerable individuals during emergencies.

Relief camps should also include ramps, handrails, accessible toilets, and safer pathways to ensure dignity and safety for persons with disabilities. In addition, livelihood restoration programs, replacement of mobility aids, and psychosocial support services are essential for long-term recovery. Overall, his experience highlights both vulnerability and resilience. His physical disability increased his risk during the disaster, especially in the absence of inclusive preparedness and accessible infrastructure. At the same time, strong family support and community solidarity played a crucial role in his survival.

This case clearly emphasizes the importance of disability-inclusive disaster preparedness, response, and recovery systems to ensure that persons with disabilities are protected, supported, and included during emergencies.

4.2.5 CASE – E

The case E is a 45-year-old small-scale medical shop owner from Chooralmala in Wayanad. His medical shop, located in the Chooralmala town area, had been the main source of income for his family for many years. He lives with his wife, three children, and his bedridden father. The income from the shop supported the family's daily expenses, including food, electricity, education, and healthcare.

His family includes one son and two daughters. Two of his children are currently studying in 10th standard and Plus Two, which requires regular financial support for their education. His elder daughter has completed the TTC (Teacher Training Course) and has recently started working as a teacher at a private school in Wayanad. As the head of the family, he is responsible for managing household expenses and caring for his bedridden father.

For many years, the medical shop had been an important part of his life. It represented years of effort, investment, and dedication. Through hard work, he built trust among the local community, and many people in the area depended on his shop for essential medicines and medical supplies. The shop provided the family with stability and financial security.

However, the recent landslides and floods in Wayanad suddenly changed his life. On the night of the disaster, the entire family was sleeping while heavy rain continued outside. *“There was heavy rain outside that night. Suddenly, we heard a loud sound. When I went outside to check, I saw water rushing into our compound. I immediately woke my children and my wife. Since my father is bedridden, I had to carry him. Through the kitchen door, we rushed to the terrace of a nearby unfinished house. Within a short time, the water level rose very quickly, and our house was completely submerged.”*

His only concern was the safety of his family members, especially his children and his father. The situation created panic and fear as they struggled to escape the rapidly rising water. After the water level dropped, the family returned to their house and found the entire building filled with thick mud and debris. Furniture, clothes, kitchen utensils, and important documents were damaged or buried under mud. The house became extremely dirty and unsafe, and cleaning it required several days of physical effort. At the same time, his medical shop in Chooralmala town was also badly affected by the disaster. Muddy floodwater entered the shop, damaging almost everything inside. Medicine shelves collapsed, refrigerators stopped working, and most of the medicines were destroyed. Since medicines contaminated by floodwater cannot be sold, the financial loss was severe. The shop was filled with mud, making it impossible to reopen immediately. This loss was emotionally painful for him because the shop represented many years of hard work and financial investment. Overnight, the livelihood that supported his family was destroyed.

Before the disaster, the community had only limited awareness about landslide risks and environmental vulnerability. People in the area were familiar with heavy rainfall during the monsoon season, but many did not expect such a severe landslide and flooding. Early warning communication was insufficient to alert people in advance or to help them prepare for evacuation. Community preparedness measures were also limited. Small business owners like him did not have insurance coverage for their shops or business stock. There were no emergency financial resources available to manage such sudden losses. This shows the vulnerability of small entrepreneurs living in disaster-prone areas.

After the disaster, his family moved to a relief camp established for affected families. They stayed there for approximately one month. When he first arrived at the relief camp, he felt relieved because his family members had survived the disaster. At the same time, he was deeply worried about how he would rebuild his livelihood and support his family.

The relief camp provided basic facilities, including food, shelter, drinking water, and sanitation. About 13 to 15 people stayed in each room, which sometimes made the space crowded. Privacy was limited because several families had to share the same room. However, volunteers and relief workers tried their best to maintain cleanliness and organize the camp properly. Medical teams regularly visited the camp to check the health conditions of the residents. People who needed medical care received treatment and basic medicines. This support was helpful, especially for families with elderly members and those experiencing health problems after the disaster.

The disaster also caused significant emotional distress for the family. His wife experienced the most severe psychological impact. During the landslide, around eighteen members of her extended family lost their lives, including her mother, sister, sister's husband, and their children. This tragic loss caused deep emotional trauma for her. For nearly seven to eight months after the disaster, she experienced severe grief, shock, and emotional distress. Psychological counselling services were provided to support her recovery. For the first two months after the disaster, mental health professionals visited their house every week to provide counselling and emotional support. Later, they continued to visit once a month to monitor her emotional condition. These counselling sessions gradually helped her regain emotional stability and cope with the loss.

Staying in the relief camp also created several practical difficulties. Caring for his bedridden father in a crowded environment required patience and adjustment. Limited space and shared facilities made daily routines more challenging, but volunteers and relief workers helped families manage these difficulties. Children in the camp also experienced disruption in their daily routines and education. Being away from home caused them emotional stress. However, teachers and volunteers organized informal classes and learning activities in the camp so that children could continue their studies during the displacement. The disaster had a major impact on his livelihood and financial responsibilities. With the medical shop closed and damaged, the family lost their main source of income. At the same time, he still had to manage household expenses, his children's education, and his father's medical needs.

After leaving the relief camp, the family initially stayed in temporary housing arrangements. Even after returning to daily life, many challenges remained. After nearly one year of struggling to rebuild his livelihood, he finally managed to start a new medical shop in Kalpetta town. However, the shop is far from its original location in Chooralmala. Because of this long distance, the family also moved and now lives in a rented house in Kalpetta.

Although reopening the shop helped him restart his livelihood, the relocation created new challenges. The family had to adjust to a new place, new surroundings, and a new customer base. He also mentioned that after moving to Kalpetta, they gradually lost regular contact with their earlier community members and neighbours in Chooralmala. Earlier, the shop had strong community ties and many regular customers, but at the new location, he had to rebuild trust and relationships.

During the interaction, it was observed that he still experiences emotional pain when recalling the disaster. His voice became softer when speaking about the night of the landslide and the tragic loss experienced by his wife's family. At the same time, he expressed gratitude that his immediate family survived the disaster. Based on his experience, he believes that stronger disaster preparedness systems are necessary to protect communities in vulnerable areas. Early warning systems should be improved so that residents receive timely alerts about potential landslides or floods. He also emphasized that livelihood restoration support is crucial for families who lose their businesses in disasters. Financial assistance, compensation programs, and low-interest recovery loans could help small entrepreneurs rebuild their businesses more quickly.

Overall, this case reflects the multiple impacts of disasters on livelihood, emotional well-being, and family stability. The loss of his medical shop created severe financial challenges, while the tragic loss of his wife's family members caused deep emotional trauma.

Despite these difficulties, his determination to start a new shop and continue supporting his family demonstrates resilience and hope. His experience highlights the importance of family support, counselling services, and community solidarity in helping disaster-affected individuals recover and rebuild their lives.

4.2.6 CASE - F

Case F describes the lived experiences of a 20-year-old youth from Chooralmala in Wayanad district, an area severely affected by recent landslides and floods. He completed his Higher

Secondary education at Government Higher Secondary School, Chooralmala. He currently lives with his father, mother, and grandmother, while his elder sister is married and settled in Meenangadi in Wayanad district.

His father works as a daily wage labourer, and his mother is employed as a plantation worker. The family's livelihood depends mainly on these daily wage incomes. Since both jobs are irregular and dependent on seasonal work availability, the family has always faced financial instability. They do not have savings, insurance coverage, or other forms of financial protection. Even before the disaster, the family struggled to meet their daily expenses and basic needs.

Despite these challenges, he had strong aspirations for his future. After completing his higher secondary education, he planned to pursue technical studies in a Polytechnic College. He believed that acquiring technical skills would help him secure a stable job and improve his family's financial condition. His goal was not only personal career development but also to support his parents and ensure a better future for the household. However, the landslide disaster occurred during this crucial stage of his life, significantly disrupting his educational and personal plans.

Before the disaster, he was actively involved in a youth club in Chooralmala, which played an important role in community life. The youth club organized various community engagement programs and social initiatives that encouraged young people in the area to participate. The members regularly organized celebrations during Onam, Vishu, Perunnal, and Christmas, bringing together people from diverse backgrounds and strengthening community ties. These cultural programs helped create a sense of unity, cooperation, and shared identity among the village's residents. Apart from cultural events, the club was especially active in sports activities. Cricket and football tournaments were frequently organized, and many young people participated. The local cricket ground was an important place where youth gathered to play sports, socialize, and spend their leisure time together. These activities helped build strong friendships and teamwork among the youth of the area.

However, the disaster had a major impact on these social networks and community activities. Many of his friends lost their houses and were forced to relocate to different parts of the Wayanad district. Some moved to relatives' homes, while others shifted to temporary rented houses or rehabilitation areas.

The cricket ground that once served as a meeting place for young people was also affected by the disaster. Because of these changes, the youth club gradually became inactive. According to him, the club has remained closed since the disaster, and many members are not interested in reopening it because they are still dealing with personal losses and displacement. This reflects how disasters not only damage infrastructure but also weaken social connections and community engagement among young people.

The landslide itself occurred suddenly and unexpectedly. *“When the landslide happened, I was playing on my phone. Suddenly, I heard a loud sound. It was raining heavily. Within a short time, water came everywhere. When I ran outside, the compound wall of the neighboring house collapsed. I carried their three-year-old baby and ran to a safe place.”* This statement clearly illustrates how rapidly the situation escalated. A loud rumble followed the heavy rainfall, and within minutes, water and debris began pouring into the area. The environment became chaotic and frightening. Despite the confusion and fear, he acted quickly. When he saw the compound wall collapse, he immediately rescued a three-year-old child from the neighboring house and carried the child to a safe location. His actions demonstrate courage, quick decision-making, and a strong sense of responsibility toward others in the community.

Before the disaster, he had very limited awareness of landslide risks or environmental vulnerability in the region. Residents in the area were accustomed to heavy monsoon rainfall, but they did not expect such a destructive landslide. Discussions about environmental hazards and disaster preparedness were uncommon in the community.

His family had no specific safety preparations or emergency plans before the disaster. They did not maintain emergency supplies, evacuation plans, or financial security measures such as insurance or savings. This lack of preparedness increased the vulnerability of the family and made recovery more difficult.

After the disaster damaged their house and the surrounding area, he and his family were displaced and moved to a relief camp for affected residents. According to him, they stayed in the camp for approximately two months. *“Everything happened suddenly. We left our home with nothing and came to the camp in fear.”*

The relief camp provided immediate shelter for families who had lost their homes. However, the living conditions were challenging due to overcrowding. About 13 to 15 people stayed in a single room, which limited privacy and personal space.

Even though the camp environment was crowded, efforts were made to maintain sanitation and hygiene. Toilets were cleaned regularly, and volunteers ensured essential daily living materials were available. Relief workers and local authorities worked continuously to manage the camp and support the residents. Staying in the relief camp caused him stress and uncertainty. One of the most painful experiences was the death of a close school friend during the disaster. Losing someone he had grown up with caused deep emotional distress and sadness.

He says about the experience of shock, grief, and anxiety about the future. The uncertainty about his education, the destruction of his home, and the financial struggles faced by his family increased his emotional burden. Counselling services available in the camp helped him cope with these psychological challenges. Through these sessions, he was able to talk about his experiences and gradually manage his grief and fear. These interactions with mental health professionals provided emotional support and helped him adjust to the difficult situation.

While staying at the camp, he also noticed that elderly people and people with disabilities faced additional challenges adjusting to camp life. Moving around crowded spaces and accessing facilities required assistance and support from others.

The disaster also interrupted the education and daily routines of children and youth staying in the camp. However, teachers at the camp organized informal learning sessions and educational activities, allowing students to continue studying during the displacement period. Regarding physical health support, arrangements were made to assist residents whenever health concerns arose. Medical professionals and health workers visited the camp periodically and provided medical care to those in need. This helped ensure that people affected by illness or stress-related conditions could receive proper care.

After leaving the relief camp, his family shifted to a rented house because their original house was severely damaged by mud and debris. *“Our house was filled with mud. We are now staying in a rented house. We are getting ₹7,000 from the government.”* Although government assistance helps the family cover basic expenses such as rent and food, it is not sufficient to rebuild their home or fully recover from the financial losses caused by the disaster.

Due to these financial difficulties, he was forced to change his life plans. Instead of continuing his higher education, he decided to start working to support his family. Approximately six months after the disaster, he began working in a textile shop located in the Kozhikode district.

Since the workplace is far from his hometown in Wayanad, he currently stays near the shop in Kozhikode and visits his family once a month. Moving to another district for employment was not easy, but he decided to reduce the financial burden on his parents and contribute to the family's income. The disaster also affected his work life. During the floods, the textile shop experienced losses as several materials were damaged. The shop had to remain closed temporarily, and during that time, he lost his daily wages. This created additional financial pressure.

Despite these difficulties, he demonstrated determination and resilience. Instead of giving up, he chose to adapt to the situation and continue working. During the interaction, he appeared emotionally sensitive but determined. When speaking about the loss of his friend, his voice became quieter and more serious, indicating that the grief remains. However, he also showed maturity and responsibility in accepting work and supporting his family. His action of rescuing the child during the disaster reflects courage, compassion, and strong community values. His willingness to sacrifice his educational plans for his family's well-being highlights his sense of responsibility and resilience.

Overall, this case illustrates the multi-dimensional impact of disasters on young people from economically vulnerable families. The landslide caused emotional trauma, loss of a close friend, interruption of education, displacement from home, and financial instability. At the same time, the youth demonstrated strength, adaptability, and determination to overcome adversity. Counselling services, family encouragement, employer support, and community solidarity played important roles in helping him cope with the crisis. Based on his experience, he believes that future disaster response efforts should provide stronger educational support for affected youth, including scholarships, vocational training, and skill development opportunities. These measures would help young people continue their education and rebuild their future.

He also suggested that relief camps should include recreational and educational programs for youth, such as sports activities and community engagement initiatives. These programs can help young people cope with stress and maintain hope during difficult times.

This case highlights that although disasters can severely disrupt the lives and aspirations of young people, supportive social systems, mental health services, and livelihood opportunities can help them recover and rebuild their lives with resilience and determination.

4.2.7 CASE DESCRIPTIONS OF KEY INFORMANTS

ASHA Worker

She played a crucial role in connecting disaster-affected families with government health services following the landslides and floods in Wayanad. As a frontline community health worker, she became one of the most trusted and accessible persons for the affected community. Through her daily work in the village, she was already familiar with most households, which helped her respond quickly when the disaster occurred. *“I know almost every family in this place.”* This close relationship helped her identify vulnerable individuals who needed immediate support.

Government relief efforts in the health sector were implemented through primary health centers, medical teams, and community health workers. She supported these initiatives by identifying injured persons, guiding families to hospitals, and ensuring that pregnant women, elderly people, children, and patients with chronic illnesses received proper medical care. Many families had lost their medicines and medical records during the disaster. She helped reconnect them with government health services so they could continue treatment without interruption.

In relief camps, she helped distribute medicines provided through government health departments and monitored the health conditions of displaced families. She also supported maternal and child health services by checking pregnant women and newborn babies. Through these activities, she became an important link between the affected community and the formal healthcare system.

However, the disaster also deeply affected her personally. She lost sixteen relatives, including her husband and daughter. Despite experiencing this severe personal loss, she continued working to support survivors in the community. *“Even though I lost my family, I felt it was my responsibility to stand with the people who survived.”* Her decision to continue working reflects the strong sense of duty and compassion often seen among frontline workers during disasters.

Another important part of her role was preventing health problems in overcrowded relief camps. Poor sanitation, contaminated water, and close living conditions created a high risk of disease outbreaks. To address this, she conducted awareness activities about hygiene practices, safe drinking water, and sanitation before the disaster. *“If we did not act quickly, small*

infections could have turned into serious outbreaks.” These preventive efforts helped reduce the risk of secondary health crises in the camps.

Beyond physical healthcare, she also provided emotional support to survivors who were struggling with grief and shock. Many families had lost loved ones, homes, and livelihoods, and they were experiencing deep emotional distress. She observed, *“Many people were crying silently. They needed someone to listen.”* Although she did not have formal training in mental health counselling, she supported survivors by listening to them and offering comfort.

Despite government health initiatives, several challenges remained. Medical resources were sometimes limited, and reaching remote areas was difficult due to damaged roads. Many survivors also needed stronger mental health and psychosocial support services, which were not fully available. Additionally, frontline workers like her did not always receive adequate emotional support, even though they were also affected by the disaster.

From her experience, it became clear that community health workers play a vital role in implementing government relief and rehabilitation programs. At the same time, there is a need for better psychosocial support systems, disaster training, and institutional support for frontline workers to improve future disaster response.

Community Volunteer

Volunteers played an important role in supporting disaster response and relief activities after the landslides in Wayanad. As active members of the local community, he and his team were among the first to reach the affected areas. Their early response helped support many families before large-scale institutional assistance arrived. *“We reached there within a few hours after the disaster happened.”*

Local volunteers helped implement relief efforts by distributing food, drinking water, clothes, blankets, and other basic necessities to affected families. Many people had lost their homes and belongings, so these immediate relief supplies were essential for survival during the first few days after the disaster.

They also helped relocate families to relief camps and supported rescue teams by identifying people trapped or injured. Vulnerable groups such as elderly persons, children, pregnant women, and persons with disabilities were given priority during evacuation and relief distribution. *“At that moment, we did not think about fear. We only thought about saving whoever we could.”*

As the rescue operations continued, the work became emotionally difficult. Volunteers also helped recover bodies and support identification processes. Many bodies were severely damaged due to the landslides. “Later bodies started coming without hands, legs, or even a head.” Dealing with such situations caused deep emotional stress for the volunteers.

Volunteers also helped families identify missing relatives and ensured that victims were treated with dignity during recovery and burial procedures. “Showing photographs for identification felt like a duty to give dignity and respect to the deceased.” This reflects how volunteers often take on humanitarian responsibilities even without formal training.

Through his experience, he also observed some gaps in the disaster response system. Families living in remote and forest-border areas faced delays in receiving assistance because roads were damaged and transportation was limited. “If the warning had reached earlier and clearly, some lives could have been saved.” This highlights the importance of effective early warning systems and communication during disasters.

Another challenge was the lack of protective equipment and psychological support for volunteers. Many volunteers worked continuously for long hours without rest or formal guidance. Despite these difficulties, they continued their efforts to support the affected community.

Overall, the role of local volunteers shows how community participation strengthens disaster response. Their quick action, local knowledge, and strong sense of responsibility helped support government and NGO relief efforts and reach affected families during the emergency.

NGO Representative

The NGO representative explained how non-governmental organizations supported disaster-affected families during the relief and rehabilitation phases after the landslides in Wayanad. NGOs worked alongside government agencies and local volunteers to provide immediate relief and long-term support for affected communities.

During the initial stage of the disaster, NGOs helped distribute relief materials, including food kits, clothing, hygiene products, and basic household items, to families staying in relief camps. These materials helped families meet their basic needs during the emergency period.

However, the NGO gradually shifted its focus from short-term relief to long-term rehabilitation and livelihood recovery. The representative explained, “*Relief materials can support for a few*

days, but livelihood support rebuilds dignity and independence.” This reflects the idea that sustainable recovery requires rebuilding people’s ability to earn a living.

Many families had lost agricultural land, livestock, or small businesses due to the landslides. To address these losses, the NGO introduced livelihood programs including mushroom cultivation and honey farming. These activities were chosen because they require a small investment, can be done in hilly areas, and can generate income relatively quickly.

The NGO also organized skill development programs for youth and women. These training programs aimed to improve employment opportunities and encourage small-scale entrepreneurship within the community. Women were especially encouraged to participate in home-based income activities so that they could contribute to family income while managing household responsibilities.

In addition to livelihood programs, NGOs also conducted community meetings where survivors could share experiences and discuss their needs. These gatherings helped rebuild social connections and provided emotional support for families who were coping with loss and trauma.

However, some challenges were observed in implementing these programs. Many families in remote areas were unaware of available livelihood initiatives because communication did not always reach them effectively. Transportation difficulties also prevented some people from attending training sessions.

Another challenge was the emotional condition of the affected families. Many survivors were still grieving the loss of loved ones and were not mentally ready to start livelihood activities immediately. For them, emotional recovery was more urgent than economic recovery.

There were also concerns about the long-term sustainability of livelihood programs. Without continuous guidance, financial support, and market connections, some beneficiaries may struggle to sustain these activities independently.

From this experience, it becomes clear that NGOs play an important role in supporting rehabilitation after disasters. At the same time, better communication, stronger follow-up support, and integration of psychosocial care with livelihood programs are necessary to ensure that assistance reaches all affected families effectively.

Panchayat President

The Panchayat President, He played an important leadership role in coordinating relief and rehabilitation activities at the local level after the landslides in Wayanad. As the head of the local self-government institution, he was responsible for connecting affected families with government support programs and ensuring that relief measures reached the community.

Immediately after the disaster, the Panchayat worked with district authorities, police, health workers, volunteers, and NGOs to organize relief camps and provide basic facilities such as food, water, sanitation, and temporary shelter. Ensuring that vulnerable groups received special attention was a key responsibility.

Another important responsibility was conducting damage assessments. The Panchayat helped verify the number of houses destroyed, agricultural losses, livestock deaths, and other property damage. These assessments were necessary to recommend financial compensation and government rehabilitation support.

The Panchayat also helped affected families apply for government assistance schemes, including housing reconstruction programs and financial compensation. These programs were designed to help families rebuild their homes and restore their livelihoods after the disaster.

In addition to immediate relief measures, discussions were held on long-term recovery strategies, including skill development programs and livelihood opportunities for youth. These initiatives aimed to strengthen community resilience and reduce vulnerability to future disasters.

However, several challenges were observed during the implementation of these initiatives. Many families lost important documents, including identity cards, land records, and bank details, in the disaster. This made verification and approval processes more difficult.

Administrative procedures sometimes delayed the delivery of compensation and rehabilitation assistance. While such procedures are necessary to ensure transparency, they created frustration among families who urgently needed support.

Limited financial resources at the Panchayat level also slowed the response time. The Panchayat had to balance public expectations with administrative limitations while coordinating with multiple government departments.

Overall, the experience highlights the important role of local self-government institutions in disaster management. Stronger coordination, simplified emergency procedures, and increased local resources could improve the effectiveness of future disaster response and rehabilitation efforts.

Police and Forest Officials

Police and forest officials played a crucial role in ensuring safety and supporting rescue and relief operations after the landslides in Wayanad. Due to the hilly terrain and forested areas, their involvement was especially important for managing emergency situations and accessing remote locations.

Police officers were responsible for maintaining law and order during the chaotic situation following the disaster. Many people gathered near the affected areas searching for missing family members, which created confusion and emotional distress. In such situations, police officers helped control crowds and ensure that rescue operations could continue safely. “Our duty was to ensure that relief reached safely and that panic did not create more harm.”

Police also assisted in transporting injured persons to hospitals and supported medical teams and volunteers during rescue operations. They were involved in the difficult task of recovering bodies and supporting identification procedures, while ensuring dignity and respect for the victims.

Forest officials contributed their knowledge of the local terrain and forest pathways, which helped rescue teams reach remote settlements. Many affected families lived near forest borders, and damaged roads made access difficult. Their familiarity with the environment helped search teams move through difficult terrain more safely.

In addition to rescue operations, forest officials assessed environmental damage, including unstable soil, fallen trees, and blocked water channels. Their observations helped identify areas still at risk of further landslides and guided decisions on whether families could safely return to their homes.

Despite their efforts, several challenges affected the response process. Continuous rainfall, damaged roads, and landslide debris made movement extremely difficult. Limited manpower and long working hours led to physical exhaustion among many personnel.

Handling dead bodies and interacting with grieving families also created emotional stress for officers. In some situations, coordination between departments was not fully smooth, which slowed certain aspects of response operations.

Overall, their experience highlights the importance of multi-agency coordination in disaster management. Police and forest officials played a vital role in maintaining safety, supporting rescue operations, and helping ensure that relief efforts reached affected communities.

CHAPTER - V

THEMATIC ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

Thematic analysis is a widely recognised and flexible method of qualitative data analysis used to identify, analyse, interpret, and report meaningful patterns or themes within qualitative data.

It enables researchers to organize large volumes of textual information into coherent themes that address the research objectives while preserving the depth and richness of participants' experiences. Owing to its flexibility, thematic analysis can be applied across a range of qualitative research designs and theoretical perspectives, making it one of the most commonly used methods in social science, health, and disaster research (Braun & Clarke, 2006).

In the present study, thematic analysis was employed to analyse data collected through semi-structured interviews with disaster-affected community members and key informants. Interview transcripts were read repeatedly to become familiar with the data, after which meaningful codes were generated from participants' narratives. Similar codes were grouped into categories and further refined into broader themes that reflected the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities. The identified themes were interpreted in relation to the research objectives, relevant literature, and disaster preparedness frameworks, including the Sendai Framework for Disaster Risk Reduction (2015–2030). This analytical approach facilitated a systematic, in-depth understanding of participants' experiences and the challenges of translating disaster preparedness policies into practice.

5.2 PROFILE OF THE RESPONDENTS

The study included six community respondents and five key informants, purposively selected for their direct experiences of the 2024 Wayanad landslides and their involvement in disaster preparedness, response, and recovery. The respondents represented different age groups, genders, occupations, family backgrounds, and vulnerability categories, enabling the researcher to gain diverse perspectives on the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities.

The community respondents included a 31-year-old woman survivor, a 67-year-old elderly tribal woman, a 67-year-old elderly man, a 40-year-old man with a physical disability, a 45-year-old man who lost his livelihood, and a 20-year-old youth. Each respondent experienced the disaster differently, reflecting the varied impacts of the landslide on individuals and families.

The woman survivor was living in Mundakkai with her husband, three children, and parents-in-law before the disaster. She earned an income through stitching and tailoring from her home. During the landslide, she lost her husband, two children, and parents-in-law, and is now living with her surviving daughter while receiving support from her parents.

The elderly tribal woman belonged to a tribal community and had depended on daily wage work in tea plantations for her livelihood. She was living with her family near a hillside and lost one son, two daughters-in-law, and two grandchildren in the disaster. She is currently residing with her surviving son and continues to cope with the emotional and physical consequences of the disaster.

The elderly man lived with his wife, while his two married daughters were settled separately with their families. Before the disaster, he operated a small restaurant in Chooralmala, which was the household's primary source of income. Following the landslide, the destruction of the local economy severely affected his livelihood, and he now runs a small tea shop with limited earnings.

The respondent with a physical disability lived with his wife, children, and younger brother in Chooralmala. His mobility impairment made evacuation during the disaster particularly difficult, and he depended on his family for rescue and support. Before the disaster, he engaged in small repairs and occasional daily-wage labour to support his family.

The respondent who experienced livelihood loss was a 45-year-old medical shop owner residing with his wife, three children, and bedridden father. His medical shop was the family's primary source of income, but it was severely damaged during the disaster. Although he later reopened a medical shop in Kalpetta, the family continues to face financial and emotional challenges.

The youngest respondent was a 20-year-old youth living with his parents and grandmother, while his elder sister was married and living separately. Before the disaster, he had planned to pursue higher education. However, the disaster disrupted his educational aspirations, and he began working in a textile shop to support his family financially.

In addition to the community respondents, the study included five key informants: an ASHA Worker, a Community Volunteer, an NGO Representative, the Panchayat President, and a Police/Forest Department official. These participants were selected because of their active roles in disaster preparedness, emergency response, relief distribution, rehabilitation, and local governance. Their experiences provided valuable institutional perspectives that complemented the lived experiences of the disaster-affected community members.

The diversity of the respondents in terms of age, gender, family circumstances, occupation, and disaster experiences enabled the study to capture a comprehensive understanding of how

disaster preparedness policies were experienced and implemented at the community level. Their narratives form the basis for the thematic analysis presented in the subsequent sections of this chapter.

5.3 ANALYSIS AND DISCUSSION

This chapter presents the analysis and discussion of the findings, based on the respondents' experiences and perspectives. The data were analysed using thematic analysis, a widely accepted qualitative method that enables researchers to identify, analyse, and interpret recurring patterns of meaning within qualitative data (Braun & Clarke, 2006). The collected data were carefully transcribed and read several times to gain a comprehensive understanding of the participants' experiences. Meaningful codes were identified from the narratives, and similar codes were grouped into categories. These categories were then refined into broader themes that represented the central ideas emerging from the participants' accounts. The themes were developed inductively from the data and interpreted in relation to the study's objectives, the existing literature, and disaster management frameworks.

The analysis revealed that the experiences of disaster-affected communities extended far beyond the immediate physical impacts of the 2024 Wayanad landslides. Participants described the disaster as a life-changing event that affected their physical safety, emotional well-being, social relationships, livelihoods, and future aspirations. Although several disaster preparedness policies and institutional mechanisms exist at the national, state, and local levels, the findings indicate that many community members experienced significant gaps in preparedness, early warning dissemination, evacuation planning, livelihood protection, psychosocial support, and long-term rehabilitation. At the same time, the findings highlight the important role played by families, neighbours, volunteers, community-based organizations, government departments, and non-governmental organizations in supporting affected communities during rescue, relief, and recovery.

The thematic analysis generated eight interrelated themes, namely: (1) Lived Experiences of the Disaster and Immediate Response; (2) Disaster Preparedness and Early Warning Systems; (3) Evacuation, Rescue, and Relief Camp Experiences; (4) Psychosocial Impacts, Grief, Trauma, and Coping Mechanisms; (5) Livelihood Disruption and Recovery Challenges; (6) Community Participation, Institutional Support, and Stakeholder Coordination; (7) Vulnerabilities and Resilience of Women, Elderly Persons, Persons with Disabilities, and Youth; and (8) Disconnect Between Policy-level Disaster Preparedness Frameworks and the

Lived Experiences of Disaster-affected Communities. These themes are interconnected and collectively explain how disaster preparedness policies were experienced and implemented at the community level.

The first theme explores respondents' firsthand experiences of the landslide, including the sudden onset of the disaster, the immediate responses of individuals and communities, and the challenges faced in the initial hours. The second theme focuses on disaster preparedness, examining participants' awareness of disaster risks, the effectiveness of early warning systems, and the availability of preparedness measures before the disaster. The third theme discusses evacuation experiences, rescue operations, relief camp management, and the adequacy of basic services provided during the emergency response. The fourth theme examines the emotional and psychological consequences of the disaster, including grief, trauma, loss, and fear, as well as the coping strategies adopted by survivors, with support from families, communities, and counselling services.

The fifth theme highlights severe disruption of livelihoods, financial insecurity, and the challenges of rebuilding economic stability after the disaster. The sixth theme explores the contributions of government agencies, local self-government institutions, healthcare workers, volunteers, and non-governmental organizations in disaster response, rehabilitation, and community recovery. The seventh theme examines how disasters affected different vulnerable groups, particularly women, elderly persons, persons with disabilities, and youth, while also highlighting their resilience and adaptive capacities. The final theme critically analyses the disconnect between policy-level disaster preparedness frameworks and the lived realities of disaster-affected communities by comparing participants' experiences with the objectives and principles of existing disaster management policies and the Sendai Framework for Disaster Risk Reduction (2015–2030).

The discussion of each theme integrates participants' narratives with relevant theoretical perspectives, empirical studies, and disaster management frameworks to provide a comprehensive understanding of the research problem. The findings not only highlight the strengths of existing disaster management efforts but also identify critical gaps in preparedness, inclusive planning, community participation, livelihood restoration, and long-term recovery. By bringing together the lived experiences of disaster-affected communities and the perspectives of key stakeholders, this chapter contributes to a deeper understanding of the factors influencing disaster preparedness and resilience. The insights generated from the

analysis are expected to inform policy, practice, and future research aimed at developing more inclusive, community-centered, and resilient disaster preparedness and disaster risk reduction strategies in Wayanad and other disaster-prone regions.

CHAPTER – VI

FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 FINDINGS

Disaster preparedness was largely perceived by the respondents as a government responsibility rather than a shared community responsibility. Most participants expected warnings and rescue

support from government agencies, but had not been actively involved in preparedness planning, risk assessment, or community-based disaster management activities before the landslide.

A significant finding was that disaster preparedness existed more as a policy concept than as a lived community practice. While institutional mechanisms for disaster preparedness were in place, respondents were largely unaware of evacuation protocols, emergency kits, safe shelters, or household preparedness measures, indicating that policy objectives had not been effectively translated into community action.

The study revealed that the effectiveness of disaster preparedness largely depended on local social capital rather than on formal disaster management systems. Immediate rescue, evacuation, emotional support, and access to basic necessities were primarily facilitated by neighbours, relatives, youth volunteers, and local community members before organised institutional support became available.

Another important finding was that disaster vulnerability was socially differentiated. Women, elderly persons, persons with disabilities, youth, and livelihood-dependent families experienced the disaster differently because of their age, gender roles, physical abilities, family responsibilities, and socio-economic conditions. This demonstrates that a uniform preparedness strategy cannot adequately address the needs of all vulnerable groups.

The findings indicated that disaster recovery extended beyond the reconstruction of houses. For many respondents, recovery involved rebuilding emotional security, restoring livelihoods, reconnecting with social networks, and adapting to a new way of life. Participants often measured recovery by their ability to regain dignity, stability, and hope rather than by physical rehabilitation alone.

The study also found that government assistance was perceived as more effective during the emergency response than during long-term recovery. While respondents appreciated rescue operations, relief camps, healthcare, and temporary financial assistance, many believed that livelihood restoration, psychosocial support, and economic rehabilitation were insufficient for sustainable recovery.

Another notable finding was that indirect disaster impacts received less policy attention than direct physical losses. Respondents who lost businesses, employment opportunities, customers, or community networks experienced prolonged hardship despite not losing their houses. Their

experiences suggest that existing rehabilitation programmes primarily recognise visible physical damage while overlooking indirect livelihood losses.

The findings further revealed that the disaster transformed the social fabric of the affected communities. Displacement, relocation, and the loss of neighbourhoods weakened long-standing community relationships, cultural practices, and informal support systems. Young people, in particular, described the disappearance of shared social spaces and reduced community interaction after the disaster.

The study found that lived experiences challenged the assumption that preparedness ends with emergency response. Participants consistently highlighted the importance of continuous psychosocial care, livelihood assistance, educational support, and community rebuilding as essential components of preparedness and resilience.

Overall, the central finding of the study is that the disconnect between policy-level disaster preparedness frameworks and lived experiences lies not in the absence of disaster management policies but in the gap between policy intentions and their practical, inclusive, and context-specific implementation at the community level. The respondents' experiences demonstrate that effective disaster preparedness requires greater community participation, locally relevant planning, inclusive approaches for vulnerable groups, and sustained support that extends beyond immediate relief and rehabilitation.

6.2 SUGGESTIONS

Based on the study's findings, the following suggestions are proposed to strengthen disaster preparedness and bridge the gap between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities.

Disaster preparedness should be strengthened through a community-based and participatory approach. Local communities should not be viewed merely as beneficiaries of disaster management programmes but as active partners in disaster risk reduction. Regular awareness campaigns, community meetings, mock drills, evacuation exercises, and disaster preparedness training should be conducted at the ward and Panchayat levels. Such initiatives will improve risk awareness and enhance community members' capacity to respond effectively during emergencies.

The early warning system should be strengthened to ensure that disaster warnings are timely, accurate, understandable, and accessible to all sections of society. Warnings should be

disseminated through multiple communication channels, including mobile alerts, sirens, local television and radio, social media, public announcement systems, ASHA workers, local volunteers, and Panchayat representatives. Special attention should be given to ensuring that warning messages reach people living in remote and tribal areas, where communication barriers often exist.

Disaster preparedness policies should adopt a more inclusive approach by addressing the specific needs of vulnerable populations such as women, elderly persons, persons with disabilities, children, and individuals with chronic illnesses. Disaster management plans should include disability-friendly evacuation procedures, accessible shelters, age-friendly facilities, gender-sensitive relief services, and targeted support mechanisms to ensure that no one is excluded during disaster preparedness, response, or recovery.

Greater emphasis should be placed on community participation in disaster planning and decision-making. Local residents possess valuable knowledge regarding environmental changes, hazard-prone locations, and community resources. Their participation in hazard mapping, preparedness planning, and monitoring can improve the relevance and effectiveness of disaster management strategies while strengthening community ownership and resilience.

The study highlights the need to strengthen livelihood restoration programmes as an essential component of disaster recovery. Financial assistance should not be limited to households that experience complete damage to their homes. People who lose their businesses, employment, agricultural activities, or other sources of livelihood should also receive adequate support through compensation, livelihood grants, skill development programmes, low-interest loans, and market support. Sustainable livelihood recovery is crucial for restoring the dignity, self-reliance, and long-term well-being of disaster-affected families.

The government and concerned agencies should expand mental health and psychosocial support services beyond the immediate relief phase. Counselling, trauma care, grief support, and community-based psychosocial interventions should continue during rehabilitation and long-term recovery. Particular attention should be given to children, women who have lost family members, elderly survivors, persons with disabilities, and frontline workers who may continue to experience emotional distress long after the disaster.

Effective disaster management requires strong coordination among government departments, local self-government institutions, non-governmental organizations, community-based organizations, healthcare institutions, and volunteers. Establishing clear communication

mechanisms, defining institutional roles, and conducting joint preparedness exercises can improve coordination, reduce duplication of efforts, and ensure a more efficient disaster response.

The study also suggests strengthening the capacity of frontline workers and community volunteers through regular training in disaster preparedness, search and rescue, first aid, psychological first aid, emergency communication, and community-based disaster risk reduction. Since frontline workers are often the first point of contact during emergencies, enhancing their knowledge and skills can significantly improve disaster response and community resilience.

Disaster preparedness policies should be regularly monitored and evaluated to determine whether they effectively reach disaster-prone communities. Community feedback should be systematically incorporated into policy review and programme implementation. Lessons learned from disasters such as the 2024 Wayanad landslides should be used to revise existing disaster management plans and improve preparedness strategies for the future.

Finally, disaster preparedness should adopt a people-centred and context-specific approach that recognises the lived experiences of disaster-affected communities. Policies should move beyond institutional preparedness and focus on the realities, capacities, vulnerabilities, and priorities of local communities. Integrating community experiences into disaster planning will help bridge the gap between policy intentions and practical implementation, leading to more inclusive, equitable, and resilient disaster risk reduction and recovery systems.

6.3 CONCLUSION

The present study, "The Disconnect Between Policy-level Disaster Preparedness Frameworks and the Lived Experiences of Disaster-affected Communities," examined the gap between disaster preparedness policies and the actual experiences of communities affected by the 2024 Wayanad landslides. Using a qualitative case study approach, the research explored the perspectives of women, elderly persons, persons with disabilities, youth, individuals who lost their livelihoods, and key informants involved in disaster response and recovery. The study provided a deeper understanding of how disaster preparedness policies are experienced at the community level and identified the challenges faced by vulnerable groups before, during, and after the disaster.

The findings revealed that although India has comprehensive disaster management policies and frameworks aligned with the Sendai Framework for Disaster Risk Reduction (2015–2030), significant gaps remain in their implementation at the grassroots level. Most participants reported limited awareness of disaster preparedness measures, inadequate early warning communication, and a lack of community-based preparedness activities before the landslide. These experiences indicate that the existence of disaster policies alone is insufficient unless they are effectively translated into local practice through awareness, participation, and capacity building.

The study also highlighted that the disaster affected different groups in different ways. Women experienced the combined burden of caregiving, grief, and livelihood loss; elderly persons and persons with disabilities faced additional challenges related to mobility and accessibility; youth experienced disruptions to education and future opportunities; and families dependent on small businesses and daily wages suffered prolonged economic insecurity. These findings demonstrate the need for disaster preparedness and recovery programmes that are inclusive and responsive to the diverse needs of vulnerable populations.

Another important finding was the significant role of family members, neighbours, local volunteers, frontline workers, and non-governmental organisations in supporting rescue, relief, and recovery. Community solidarity and local support systems emerged as key sources of resilience, often providing immediate assistance before formal institutional support became fully operational. The study also found that recovery extends beyond rebuilding physical infrastructure and includes restoring livelihoods, psychosocial well-being, social relationships, and a sense of security.

Overall, the study concludes that the disconnect between policy-level disaster preparedness frameworks and the lived experiences of disaster-affected communities is primarily a gap in implementation rather than policy formulation. Bridging this gap requires a people-centred and participatory approach that strengthens community preparedness, improves early warning systems, ensures the inclusion of vulnerable groups, and incorporates the lived experiences of disaster-affected communities into disaster planning and decision-making. Such an approach will contribute to more effective disaster risk reduction and build resilient communities capable of facing future disasters.

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ANNEXURES:

TITLE OF THE STUDY:

The disconnect between Policy-level Disaster Preparedness Frameworks and the Lived Experiences of Disaster-affected Communities.

RESEARCH QUESTIONS:

General Question:

What are the lived experiences of community members concerning disaster readiness, and how do these experiences shape their perceptions, behaviours, and sense of preparedness?

Specific Questions:

- How do community members describe their experiences during the recent landslides and floods in Wayanad, and how did they and their community respond in the immediate aftermath of the disaster?
- What kinds of preparedness measures or safety practices were in place within the families or communities before the disaster, and how effective were these in protecting lives and livelihoods?
- How has the disaster affected the livelihoods, homes, and daily lives of community members, and what challenges have they experienced during displacement and recovery?
- What coping strategies, community strengths, or local practices have helped community members survive and recover from the impacts of the disaster?
- How have government agencies, NGOs, and other organizations supported the community through relief, rehabilitation, or livelihood assistance, and what challenges or gaps do community members still perceive?
- What lessons have community members learned from the disaster, and what improvements do they believe are necessary to strengthen disaster preparedness and ensure a safer future?

INTERVIEW GUIDE

1. Can you share your experiences during the recent landslides or floods in Wayanad and how you and your community responded in the first moments?
2. Before the disaster, were you aware that your area was landslide-prone or environmentally sensitive? What do you know about rainfall patterns or environmental risks in this area?

3. What kinds of preparations or safety measures did your family or community have before the disaster?
4. How long did you and your family stay in the relief camp after the landslide, and what was your first experience when you arrived there?
5. Can you describe the living conditions in the relief camp, including space, privacy, sanitation, and safety?
6. What kinds of emotional stress or mental health challenges did you or your family experience while staying in the camp?
7. Did you face any difficulties related to mobility, safety, or caring for elderly people, children, or persons with disabilities in the camp?
8. How did staying in the relief camp affect children's education and their daily routines?
9. How did the disaster and displacement affect your livelihood, financial responsibilities, and daily life?
10. After leaving the relief camp, what are your current living conditions and the main challenges you still face?
11. What coping strategies, strengths, or community support helped you and your community survive and recover from these hardships?
12. Based on your experience, what improvements are needed in relief camps and disaster preparedness to better support affected families in the future?

KEY INFORMANTS:

- From your role and experience as a key informant in this community, how have government and NGO initiatives such as relief, rehabilitation, and livelihood support been implemented after the disaster, and what challenges or gaps have you observed in reaching the affected families?