



Vol. 4 No. 4 (March) (2026)

Disaster Governance in Balochistan: Assessing the Role of PDMA and Local Institutions

Tahira Naudani

Assistant Professor, Department of Social Work, University of Balochistan, Quetta

Faiza Mir

Lecturer, Department of International Relations, University of Balochistan, Quetta

ABSTRACT

This study examines disaster governance in Balochistan by assessing the role of the Provincial Disaster Management Authority (PDMA) and local institutions in managing natural and climate-induced disasters. The core problem lies in weak institutional coordination, limited local capacity, and ineffective governance mechanisms, which have contributed to inadequate disaster preparedness and response in the province. The purpose of this research is to evaluate existing disaster governance structures and identify gaps between policy design and ground-level implementation. The study adopts a qualitative research methodology, using document analysis, policy review, and secondary data from official reports and previous studies. It also incorporates insights from case studies on PDMA's operations and local governance practices in disaster-prone districts. The findings reveal that while PDMA has made efforts to improve coordination and introduce tools such as early response mechanisms, significant challenges persist. These include weak inter-agency coordination, centralized decision-making, lack of community involvement, and insufficient resource allocation at the local level. The study concludes that disaster governance in Balochistan remains largely reactive rather than proactive. Strengthening local institutions, enhancing community-based disaster risk reduction, and improving coordination between provincial and district authorities are essential for effective disaster management. Without institutional reforms and inclusive governance, disaster risks will continue to intensify in the region.

Keywords: Disaster Governance, Balochistan, PDMA, Local Institutions, Risk Management

1. Introduction

Disasters have increasingly become a defining feature of governance and development challenges in Pakistan, particularly in vulnerable regions such as Balochistan. The country's exposure to a wide range of natural hazards, including floods, droughts, earthquakes, and extreme weather events, has intensified over the past decade due to climate variability and environmental degradation. Pakistan consistently ranks among the most climate-vulnerable countries in the world, facing severe risks from both sudden-onset and slow-onset disasters (Eckstein et al., 2021). Within this national landscape, Balochistan stands out due to its unique geographical, socio-economic, and governance challenges that amplify disaster risks. The province's vast terrain, scattered population, weak infrastructure, and limited institutional capacity make it particularly susceptible to the devastating impacts of disasters. Historically, disasters in Balochistan have resulted not only in human and economic losses but have also exposed structural weaknesses in governance systems, thereby highlighting the urgent need for a comprehensive approach to disaster governance (Government of Pakistan, 2023).



Vol. 4 No. 4 (March) (2026)

The frequency and intensity of climate-induced disasters in Pakistan, including Balochistan, have significantly increased in recent years. The catastrophic floods of 2022, for instance, affected millions of people across the country, with Balochistan being one of the hardest-hit provinces due to its fragile infrastructure and limited preparedness mechanisms. Similarly, recurrent droughts have severely impacted livelihoods in districts such as Chagai, Kharan, and Washuk, where water scarcity has become a persistent issue. Earthquake-prone zones, including areas like Awaran and Harnai, further compound the province's vulnerability, as seismic activity continues to pose a constant threat to communities living in poorly constructed housing (UNDP, 2022). Climate change has intensified these hazards, leading to unpredictable weather patterns, prolonged dry spells, and extreme rainfall events. These developments underscore the urgent need for effective disaster governance mechanisms that can anticipate, prepare for, and respond to such crises in a timely and coordinated manner (World Bank, 2021).

The concept of disaster governance has evolved significantly over time, moving beyond traditional disaster management approaches that primarily focused on response and recovery. Disaster governance refers to the system of institutions, policies, actors, and processes involved in managing disaster risks and responses at multiple levels of society. It emphasizes coordination, accountability, participation, and inclusiveness as key components of effective disaster risk management. Contemporary frameworks, such as the Sendai Framework for Disaster Risk Reduction, advocate for a proactive and integrated approach that prioritizes risk reduction, resilience building, and community engagement (UNDRR, 2019). In this context, disaster governance is not limited to government agencies alone but involves a wide range of stakeholders, including local communities, civil society organizations, and the private sector. The effectiveness of disaster governance, therefore, depends on the ability of these actors to collaborate and coordinate their efforts in a coherent and efficient manner.

Pakistan has developed a formal institutional framework for disaster management, particularly after the devastating earthquake of 2005, which exposed significant gaps in the country's preparedness and response systems. The establishment of the National Disaster Management Authority (NDMA) marked a critical step toward institutionalizing disaster risk management at the national level. NDMA is responsible for policy formulation, coordination, and oversight of disaster management activities across the country. At the provincial level, Provincial Disaster Management Authorities (PDMAs) have been established to implement national policies and coordinate disaster management efforts within provinces. Similarly, District Disaster Management Authorities (DDMAs) operate at the local level, focusing on preparedness, response, and recovery in their respective districts (NDMA, 2020). This multi-tiered institutional structure reflects a decentralized approach to disaster governance, aimed at ensuring that responsibilities are distributed across different levels of government.

Despite the existence of this institutional framework, the effectiveness of disaster governance in Pakistan, particularly in Balochistan, remains a subject of concern. One of the key issues is the limited capacity of provincial and district-level institutions to effectively implement disaster management policies. PDMAs and DDMAs often face constraints related to human resources, technical expertise, and financial resources, which hinder their ability to respond effectively to disasters. Moreover, coordination between different levels of government and between various agencies remains weak, leading to duplication of efforts and inefficiencies in disaster response (Khan & Ali, 2022). These challenges are further exacerbated in Balochistan, where institutional weaknesses are more pronounced due to the province's underdeveloped administrative and governance



Vol. 4 No. 4 (March) (2026)

structures.

Local institutions play a critical role in disaster governance, particularly in enhancing community resilience and ensuring effective response at the grassroots level. These institutions, including local governments, community-based organizations, and traditional leadership structures, are often the first responders during disasters. Their proximity to affected communities enables them to better understand local needs and mobilize resources quickly. Community-based disaster risk reduction (CBDRR) approaches have gained prominence in recent years, emphasizing the importance of local knowledge and participation in disaster management (Shah et al., 2021). In the context of Balochistan, where formal institutional capacity is limited, local institutions become even more important in bridging the gap between policy and practice. However, these institutions often lack the necessary support, training, and resources to perform their roles effectively, thereby limiting their contribution to disaster governance.

The challenges of disaster governance in Balochistan are deeply rooted in the province's unique geographical and socio-political context. Covering approximately 44 percent of Pakistan's land area, Balochistan is characterized by vast deserts, mountainous terrain, and a dispersed population, making service delivery and emergency response particularly difficult. Infrastructure deficits, including poor road networks, limited healthcare facilities, and inadequate communication systems, further complicate disaster management efforts. Governance challenges, such as weak administrative capacity, political instability, and limited coordination among institutions, also undermine the effectiveness of disaster response mechanisms (Balochistan Planning & Development Department, 2022). Additionally, socio-economic factors, including poverty, low literacy rates, and limited access to basic services, increase the vulnerability of communities to disasters.

A significant issue in disaster governance in Balochistan is the gap between policy formulation and implementation. While Pakistan has developed comprehensive disaster management policies and frameworks, their translation into effective action at the ground level remains limited. This gap is often attributed to a lack of coordination among institutions, insufficient monitoring and evaluation mechanisms, and inadequate resource allocation. Policies are frequently designed at the national or provincial level without sufficient consideration of local contexts and needs, resulting in a mismatch between policy objectives and implementation realities (Ahmed & Mustafa, 2023). Furthermore, the centralized nature of decision-making processes often limits the autonomy of local institutions, reducing their ability to respond effectively to local challenges. As a result, disaster management efforts tend to be reactive rather than proactive, focusing more on relief and recovery rather than prevention and preparedness.

The need for effective disaster governance in Balochistan is further underscored by the increasing risks posed by climate change. The province is highly vulnerable to climate variability, with rising temperatures, changing precipitation patterns, and increased frequency of extreme weather events posing significant challenges to livelihoods and infrastructure. These risks are likely to intensify in the coming years, making it imperative to strengthen disaster governance systems to enhance resilience and reduce vulnerability (Asian Development Bank, 2021). This requires not only improving institutional capacity but also fostering greater collaboration among stakeholders and promoting community participation in disaster management processes.

In this context, the present study is highly relevant as it seeks to assess the role of the Provincial Disaster Management Authority (PDMA) and local institutions in disaster governance in Balochistan. By examining the effectiveness of existing institutional arrangements and identifying gaps between policy and practice, the study aims to



Vol. 4 No. 4 (March) (2026)

contribute to the ongoing discourse on disaster management and governance in Pakistan. The focus on Balochistan is particularly important, given the province's vulnerability to disasters and the limited attention it has received in existing research. Through a qualitative analysis of policy documents, official reports, and case studies, the study provides insights into the challenges and opportunities for improving disaster governance in the region.

The rationale of this study is grounded in the recognition that effective disaster governance is essential for sustainable development and human security. In regions like Balochistan, where disasters have far-reaching social, economic, and political implications, strengthening governance mechanisms is critical to reducing risks and enhancing resilience. By focusing on the role of PDMA and local institutions, the study highlights the importance of multi-level governance and the need for greater coordination and collaboration among stakeholders. It also emphasizes the need for institutional reforms, capacity building, and community engagement to address the complex challenges of disaster management in the province. Ultimately, the study aims to provide evidence-based recommendations for policymakers and practitioners to improve disaster governance and build a more resilient Balochistan.

2. Problem Statement

Disaster governance in Balochistan is significantly constrained by weak coordination among key institutions, including the National Disaster Management Authority (NDMA), the Provincial Disaster Management Authority (PDMA), District Disaster Management Authorities (DDMAs), and other relevant departments. Although a formal institutional framework exists, the lack of effective communication, information sharing, and clearly defined roles often leads to duplication of efforts and delays in response during emergencies. Inter-agency collaboration remains fragmented, particularly during large-scale disasters such as floods and droughts, where timely coordination is critical. This institutional disconnect undermines the overall effectiveness of disaster management and limits the ability of authorities to implement a cohesive and integrated response strategy. Another major issue is the limited capacity of local institutions, coupled with severe resource constraints. District-level bodies and local governments often lack trained personnel, technical expertise, and financial resources necessary for disaster preparedness, mitigation, and response. In many cases, DDMAs exist only on paper, with minimal operational capacity and inadequate logistical support. The absence of modern equipment, early warning systems, and emergency infrastructure further weakens the ability of local institutions to respond effectively. These limitations are particularly pronounced in remote and underdeveloped areas of Balochistan, where geographical isolation and infrastructural deficits exacerbate the challenges of disaster management.

The centralized nature of disaster governance in Pakistan also creates a significant gap between policy formulation and local needs. Decision-making processes are often concentrated at the federal and provincial levels, with limited input from district authorities and local communities. As a result, policies and strategies may not fully reflect the ground realities and specific vulnerabilities of different regions within Balochistan. This top-down approach reduces the flexibility and responsiveness of local institutions, hindering their ability to design and implement context-specific solutions. The lack of local ownership and participation further weakens the effectiveness of disaster governance and limits community engagement in risk reduction efforts.

Furthermore, disaster management practices in Balochistan remain largely reactive rather than proactive. The focus is predominantly on emergency response and relief distribution



Vol. 4 No. 4 (March) (2026)

after disasters occur, with insufficient emphasis on preparedness, risk reduction, and resilience building. Preventive measures such as hazard mapping, community training, and infrastructure strengthening are often neglected due to limited planning and resource allocation. This reactive approach not only increases the vulnerability of communities but also leads to recurring losses and long-term socio-economic impacts. Addressing these systemic issues requires a shift toward proactive disaster governance that prioritizes prevention, preparedness, and inclusive institutional strengthening.

3. Research Objectives

- To assess the role of PDMA in disaster governance
- To evaluate the effectiveness of local institutions (DDMAs, local government)
- To identify coordination gaps between provincial and local levels
- To analyze policy-practice gaps in disaster management
- To suggest reforms for strengthening disaster governance

4. Literature Review

4.1 Concept of Disaster Governance

Disaster governance refers to the structures, processes, and actors involved in managing disaster risks and responses across different levels of society. It encompasses formal institutions, policies, and informal networks that collectively shape how disasters are understood, prepared for, and addressed. The concept has gained prominence as disasters have become more complex and interconnected, requiring coordinated action beyond traditional emergency management systems. Scholars emphasize that disaster governance integrates political, social, and institutional dimensions, making it a comprehensive framework for addressing disaster risks (UNDRR, 2019; Tierney, 2020).

Historically, disaster governance has evolved from reactive emergency response models to proactive risk reduction approaches. Earlier frameworks focused primarily on relief and recovery, often neglecting long-term resilience and preparedness. However, with the increasing frequency of climate-related disasters, the focus has shifted toward mitigation, adaptation, and resilience-building strategies. This evolution reflects a growing recognition that disasters are not merely natural events but are shaped by socio-economic vulnerabilities and governance structures (Alexander, 2020; Djalante et al., 2020).

A key distinction in this field is between disaster governance and disaster management. Disaster management typically involves operational activities such as rescue, relief distribution, and rehabilitation, whereas disaster governance encompasses broader institutional arrangements, policy frameworks, and decision-making processes. Governance emphasizes coordination, accountability, and inclusiveness, ensuring that multiple stakeholders, including governments, civil society, and communities, are actively involved in managing disaster risks (Tierney, 2020; UNDP, 2021).

The shift toward disaster governance highlights the importance of multi-level and multi-actor engagement in reducing vulnerabilities. It underscores the need for integrated policies that link disaster risk reduction with sustainable development and climate change adaptation. Effective disaster governance requires not only strong institutions but also participatory mechanisms that empower local communities and enhance resilience. This broader perspective provides a foundation for analyzing disaster management systems in diverse contexts, including regions like Balochistan (UNDRR, 2019; Djalante et al., 2020).

4.2 Institutional Framework of Disaster Management

The global institutional framework for disaster management has been significantly



Vol. 4 No. 4 (March) (2026)

influenced by international initiatives such as the Sendai Framework for Disaster Risk Reduction 2015–2030. This framework emphasizes a comprehensive approach to disaster risk management, focusing on understanding risk, strengthening governance, investing in resilience, and enhancing preparedness. The United Nations Office for Disaster Risk Reduction (UNDRR) promotes these principles, encouraging countries to adopt integrated and inclusive disaster governance systems that involve multiple stakeholders (UNDRR, 2019; UNDP, 2021).

Global models of disaster management highlight the importance of coordination between national, regional, and local institutions. These models advocate for a decentralized approach that empowers local authorities while maintaining strong central oversight. They also emphasize the role of scientific data, early warning systems, and community participation in reducing disaster risks. Such frameworks have guided many countries, including Pakistan, in developing their disaster management policies and institutional structures (World Bank, 2021; UNDRR, 2019).

Pakistan's disaster management system was significantly reformed after the 2005 earthquake, leading to the establishment of a multi-tiered institutional framework. The National Disaster Management Authority (NDMA) operates at the federal level, responsible for policy formulation and coordination. At the provincial level, Provincial Disaster Management Authorities (PDMAs) implement policies and manage disaster response, while District Disaster Management Authorities (DDMAs) focus on local-level preparedness and response (NDMA, 2020; Government of Pakistan, 2023).

Despite this structured framework, challenges remain in its implementation, particularly in coordination and capacity at the provincial and district levels. While the system is designed to promote decentralization, in practice, decision-making often remains centralized, limiting the effectiveness of local institutions. Additionally, resource constraints and institutional inefficiencies hinder the operational capacity of PDMAs and DDMAs, affecting overall disaster preparedness and response (Khan & Ali, 2022; Ahmad & Mustafa, 2023).

4.3 Role of Provincial Disaster Management Authorities

Provincial Disaster Management Authorities (PDMAs) serve as the key operational bodies for disaster governance at the provincial level. Their primary functions include disaster preparedness, risk assessment, coordination of response efforts, and capacity building of local institutions. PDMAs are responsible for developing provincial disaster management plans and ensuring alignment with national policies. They also play a crucial role in coordinating with various government departments, non-governmental organizations, and international agencies during disaster response (NDMA, 2020; Khan & Ali, 2022).

In addition to response coordination, PDMAs are tasked with implementing early warning systems and conducting training programs to enhance disaster preparedness. These activities are essential for reducing vulnerabilities and improving resilience at the community level. However, the effectiveness of these initiatives depends on the availability of resources, technical expertise, and institutional support. In many provinces, PDMAs face challenges in fulfilling their mandates due to limited funding and administrative constraints (Ahmad & Mustafa, 2023; UNDP, 2022).

Case studies from provinces such as Punjab and Khyber Pakhtunkhwa demonstrate relatively better performance of PDMAs in disaster management. For example, Punjab's PDMA has developed efficient flood response mechanisms and early warning systems, supported by better infrastructure and resource allocation. Similarly, Khyber Pakhtunkhwa has made progress in community-based disaster preparedness initiatives. These examples



Vol. 4 No. 4 (March) (2026)

highlight the potential effectiveness of PDMA when supported by adequate resources and strong governance structures (Shah et al., 2021; World Bank, 2021).

In contrast, provinces like Balochistan face significant challenges in PDMA performance due to weaker institutional capacity and resource limitations. The disparity in performance across provinces underscores the need for context-specific strategies and targeted capacity-building efforts. Strengthening PDMA in underdeveloped regions is essential for ensuring equitable disaster governance and improving overall resilience (Balochistan P&D Department, 2022; UNDP, 2022).

4.4 Importance of Local Institutions

Local institutions play a fundamental role in disaster governance, particularly in enhancing preparedness and response at the community level. These institutions include local governments, community-based organizations, and informal networks that operate within communities. Their proximity to affected populations allows them to respond quickly and effectively during disasters. They also possess valuable local knowledge that can inform risk assessment and mitigation strategies (UNDP, 2022; Djalante et al., 2020).

Community-based disaster risk reduction (CBDRR) has emerged as a key approach in strengthening local resilience. This approach emphasizes the involvement of local communities in identifying risks, planning interventions, and implementing disaster management strategies. CBDRR recognizes that local populations are not merely victims of disasters but active participants in managing risks. By incorporating local knowledge and practices, CBDRR enhances the effectiveness and sustainability of disaster management initiatives (Shah et al., 2021; UNDRR, 2019).

Local governments also play a critical role in disaster governance by providing essential services, coordinating relief efforts, and facilitating communication between communities and higher-level authorities. Their role is particularly important in implementing policies and programs at the grassroots level. However, their effectiveness is often limited by inadequate resources, lack of autonomy, and weak administrative capacity, especially in developing regions (Khan & Ali, 2022; UNDP, 2022).

Strengthening local institutions is essential for improving disaster governance, as they serve as the first line of response during emergencies. Enhancing their capacity through training, resource allocation, and institutional support can significantly improve disaster preparedness and response. Moreover, empowering local institutions promotes community participation and ownership, which are critical for building long-term resilience (Djalante et al., 2020; UNDRR, 2019).

4.5 Challenges in Developing Regions

Developing regions face significant challenges in disaster governance, primarily due to limited financial and human resources. Governments often struggle to allocate sufficient funds for disaster risk reduction, focusing instead on immediate response and recovery. This lack of investment in preparedness and mitigation increases vulnerability and leads to higher losses during disasters. Resource constraints also limit the ability to develop infrastructure, implement early warning systems, and conduct capacity-building programs (World Bank, 2021; Asian Development Bank, 2021).

Institutional fragmentation is another major challenge, as multiple agencies with overlapping mandates operate within the disaster management framework. This often leads to duplication of efforts, inefficiencies, and gaps in service delivery. The absence of clear roles and responsibilities among institutions can create confusion during emergencies, delaying response efforts. Effective coordination mechanisms are essential to address these



Vol. 4 No. 4 (March) (2026)

issues and ensure a unified approach to disaster management (Djalante et al., 2020; UNDRR, 2019).

Governance issues, including bureaucratic inefficiencies, lack of transparency, and political instability, further complicate disaster management in developing regions. Centralized decision-making processes often exclude local stakeholders, reducing the adaptability of policies to local contexts. Corruption and weak accountability mechanisms can also hinder the effective use of resources, affecting the quality of disaster response and recovery (Ahmad & Mustafa, 2023; Asian Development Bank, 2021).

Addressing these challenges requires comprehensive reforms that focus on strengthening institutions, improving coordination, and enhancing accountability. Investments in capacity building, infrastructure development, and community engagement are essential for building resilient disaster governance systems. These measures can help developing regions transition from reactive to proactive disaster management approaches (World Bank, 2021; Djalante et al., 2020).

4.6 Disaster Governance in Balochistan

Disaster governance in Balochistan remains relatively underexplored in academic literature despite the province's high vulnerability to natural hazards. Existing studies highlight that the region faces frequent disasters, including floods, droughts, and earthquakes, which are exacerbated by climate change and environmental degradation. However, research on institutional effectiveness, particularly the role of PDMA and local institutions, remains limited, creating a significant gap in understanding disaster governance in the province (Balochistan P&D Department, 2022; UNDP, 2022).

Available literature indicates that disaster management in Balochistan is characterized by weak institutional capacity, limited coordination, and inadequate resource allocation. The province's unique geographical features, such as vast terrain and dispersed populations, pose additional challenges for service delivery and emergency response. These factors, combined with socio-economic vulnerabilities, increase the risk and impact of disasters on local communities (Government of Pakistan, 2023; Asian Development Bank, 2021).

Another critical issue identified in the literature is the gap between policy design and implementation. While Pakistan has developed comprehensive disaster management policies, their execution at the provincial and district levels remains weak. This gap is often attributed to centralized decision-making, lack of local participation, and insufficient monitoring mechanisms. As a result, disaster management efforts in Balochistan tend to be reactive rather than proactive (Ahmad & Mustafa, 2023; Khan & Ali, 2022).

The need for localized research on disaster governance in Balochistan is therefore crucial. Context-specific studies can provide insights into the unique challenges and opportunities in the region, helping to design more effective policies and interventions. By focusing on local institutions and governance dynamics, such research can contribute to improving disaster preparedness, response, and resilience in the province (UNDP, 2022; UNDRR, 2019).

5. Theoretical Framework

5.1 Institutional Theory

Institutional theory provides a useful lens to understand how formal structures, rules, and norms shape governance effectiveness, particularly in disaster management contexts. It emphasizes that institutions—such as laws, policies, and administrative bodies—play a central role in determining how resources are allocated, decisions are made, and responsibilities are carried out. Strong institutions enhance coordination, accountability,



Vol. 4 No. 4 (March) (2026)

and policy implementation, thereby improving disaster preparedness and response. In contrast, weak or fragmented institutions lead to inefficiencies, delayed responses, and poor outcomes, especially in disaster-prone regions (North, 2020; Scott, 2021).

In the context of disaster governance, institutional theory highlights the importance of capacity, legitimacy, and adaptability of institutions. Effective disaster management requires institutions that are not only well-structured but also capable of responding to changing risk environments. In regions like Balochistan, institutional weaknesses—such as limited resources, lack of trained personnel, and weak coordination mechanisms—undermine governance effectiveness. Strengthening institutional frameworks through capacity building, decentralization, and improved coordination is therefore essential for enhancing disaster resilience and governance outcomes (Khan & Ali, 2022; Ahmad & Mustafa, 2023).

5.2 Governance Theory

Governance theory focuses on the processes and interactions through which decisions are made and implemented across multiple actors and levels. It moves beyond traditional state-centric approaches by recognizing the role of non-state actors, including civil society, private sector, and communities, in governance systems. In disaster management, governance theory emphasizes collaboration, participation, and accountability as key elements of effective decision-making. This approach is particularly relevant in complex disaster scenarios where coordinated action among diverse stakeholders is necessary (Bevir, 2020; Tierney, 2020).

The multi-level governance approach, a key component of governance theory, highlights the interaction between national, provincial, and local institutions in managing disaster risks. It suggests that effective disaster governance requires clear distribution of responsibilities and strong coordination across these levels. In Pakistan, while a multi-tiered system exists, gaps in coordination and communication often limit its effectiveness. Strengthening linkages between NDMA, PDMA, and local institutions, along with enhancing stakeholder participation, is critical for improving disaster governance, particularly in regions like Balochistan (UNDP, 2022; Khan & Ali, 2022).

5.3 Disaster Risk Reduction (DRR) Framework

The Disaster Risk Reduction (DRR) framework provides a proactive approach to managing disasters by focusing on prevention, mitigation, and preparedness rather than solely on response and recovery. It emphasizes reducing vulnerabilities and strengthening resilience through integrated policies and strategies. The Sendai Framework for Disaster Risk Reduction 2015–2030 is a key global instrument guiding DRR efforts, outlining priorities such as understanding disaster risk, strengthening governance, investing in resilience, and enhancing preparedness for effective response (UNDRR, 2019; UNDP, 2021).

The DRR framework underscores the importance of integrating disaster risk considerations into development planning and policy-making. It promotes a holistic approach that combines scientific knowledge, institutional capacity, and community participation to reduce disaster impacts. In the context of Balochistan, adopting DRR principles can help shift the focus from reactive disaster management to proactive risk reduction. However, challenges such as limited resources, weak institutional capacity, and lack of coordination hinder the effective implementation of DRR strategies, highlighting the need for stronger governance mechanisms (World Bank, 2021; Asian Development Bank, 2021).



Vol. 4 No. 4 (March) (2026)

5.4 Community-Based Disaster Risk Reduction (CBDRR)

Community-Based Disaster Risk Reduction (CBDRR) emphasizes the role of local communities in managing disaster risks and enhancing resilience. It recognizes that communities are not just passive victims but active agents capable of identifying risks, developing solutions, and responding to disasters effectively. CBDRR approaches involve community participation in risk assessment, planning, and implementation, ensuring that disaster management strategies are context-specific and sustainable. This approach is particularly important in regions with limited institutional capacity, where local knowledge and resources play a crucial role (Shah et al., 2021; UNDRR, 2019).

The importance of local participation in disaster governance is further highlighted by the ability of communities to respond quickly and effectively during emergencies. Local institutions, including community organizations and local governments, serve as the first line of response, providing immediate assistance and facilitating recovery. However, the effectiveness of CBDRR depends on the level of support provided by higher-level institutions, including training, funding, and policy backing. In Balochistan, strengthening community participation through CBDRR can significantly enhance disaster resilience, but this requires addressing challenges related to capacity, awareness, and institutional support (UNDP, 2022; Djalante et al., 2020).

6. Methodology

This study adopts a qualitative exploratory research design to examine disaster governance in Balochistan, focusing on the role of the Provincial Disaster Management Authority (PDMA) and local institutions. A qualitative approach is appropriate for understanding complex governance processes, institutional dynamics, and policy implementation gaps that cannot be adequately captured through quantitative methods. Exploratory research is particularly useful in contexts where limited prior studies exist, as it allows for in-depth analysis and interpretation of existing structures and practices. This design enables the study to critically assess institutional effectiveness, coordination mechanisms, and governance challenges in disaster management (Creswell & Poth, 2018; Yin, 2021).

Data for this study is collected through document analysis, policy review, and secondary data sources. Official reports from NDMA, PDMA, government publications, and international organizations such as UNDP and the World Bank are systematically reviewed to understand the institutional framework and disaster management practices. Policy documents, including national and provincial disaster management plans, are analyzed to identify gaps between policy design and implementation. Secondary data from academic literature, research studies, and case reports further support the analysis by providing contextual insights and comparative perspectives on disaster governance (Bowen, 2009; Johnston, 2017).

A case study approach is employed to provide context-specific insights into disaster governance in Balochistan. Selected disaster-prone districts such as Gwadar, Kech, and Chaman are examined due to their exposure to floods, droughts, and climate-induced risks. These cases allow for an in-depth understanding of how disaster governance mechanisms operate at the local level, highlighting institutional strengths and weaknesses. The case study method is particularly suitable for exploring real-world phenomena within their specific context, enabling the study to capture variations in governance practices and response mechanisms across different regions (Yin, 2021; Stake, 2019).

Thematic analysis is used as the primary data analysis technique to identify patterns, themes, and relationships within the collected data. This method allows for systematic coding and interpretation of qualitative information, helping to uncover key issues such as



Vol. 4 No. 4 (March) (2026)

coordination gaps, capacity constraints, and governance challenges. However, the study has certain limitations, including reliance on secondary data and the absence of primary fieldwork, which may restrict the depth of empirical insights. Dependence on official reports may also introduce bias, as such documents often reflect institutional perspectives. Despite these limitations, the methodology provides a robust framework for analyzing disaster governance in Balochistan (Braun & Clarke, 2021; Johnston, 2017).

7. Institutional Framework of Disaster Governance in Pakistan

Pakistan's institutional framework for disaster governance is anchored in the National Disaster Management Authority (NDMA), which operates as the central coordinating body at the federal level. Established under the National Disaster Management Act of 2010, NDMA is responsible for policy formulation, strategic planning, and coordination among federal ministries, provincial authorities, and international partners. It plays a key role in developing national disaster management plans, issuing guidelines, and ensuring compliance with international frameworks such as the Sendai Framework for Disaster Risk Reduction. NDMA also oversees disaster response during large-scale emergencies, mobilizing resources and coordinating relief efforts across the country (NDMA, 2020; Government of Pakistan, 2023).

At the provincial level, Provincial Disaster Management Authorities (PDMAs) are responsible for implementing national policies and managing disaster-related activities within their respective provinces. PDMAs act as the operational arms of disaster governance, focusing on preparedness, mitigation, response, and recovery. They coordinate with provincial departments, humanitarian agencies, and local authorities to ensure timely and effective disaster response. However, the effectiveness of PDMAs varies across provinces, depending on institutional capacity, resource availability, and governance structures. In provinces like Balochistan, limited resources and administrative challenges often hinder the full realization of PDMA's mandate (Khan & Ali, 2022; Ahmad & Mustafa, 2023).

District Disaster Management Authorities (DDMAs) represent the local tier of disaster governance and are tasked with implementing disaster management strategies at the district level. They are responsible for developing district-level plans, coordinating local response efforts, and ensuring community preparedness. DDMAs play a critical role in bridging the gap between provincial authorities and local communities, particularly during emergencies. However, in many districts, especially in underdeveloped regions like Balochistan, DDMAs face significant challenges, including lack of trained personnel, inadequate funding, and weak institutional structures, which limit their operational effectiveness (NDMA, 2020; UNDP, 2022).

Local governments and non-governmental organizations (NGOs) are essential components of disaster governance, particularly in enhancing community resilience and facilitating grassroots-level interventions. Local governments are responsible for service delivery, coordination of relief activities, and communication with affected communities, while NGOs contribute through humanitarian assistance, capacity building, and community-based disaster risk reduction initiatives. Their involvement is crucial for ensuring inclusive and participatory disaster management. However, weak integration of local governments into formal disaster governance structures and limited coordination with NGOs often reduce the overall effectiveness of these efforts, highlighting the need for stronger collaboration and institutional support (Shah et al., 2021; UNDRR, 2019).

8. Role of PDMA in Balochistan



Vol. 4 No. 4 (March) (2026)

The Provincial Disaster Management Authority (PDMA) Balochistan plays a central role in disaster governance by focusing on preparedness measures aimed at reducing risks and enhancing resilience. Disaster preparedness involves the development of contingency plans, risk assessments, and early warning mechanisms to anticipate potential hazards. PDMA has taken steps to improve preparedness through coordination with meteorological departments and national agencies to disseminate early warnings related to floods, cyclones, and extreme weather events. However, the effectiveness of these systems remains uneven due to limited technological infrastructure and weak last-mile communication in remote districts (NDMA, 2020; UNDP, 2022).

Early warning systems and training initiatives are critical components of PDMA's preparedness strategy. Efforts have been made to conduct training programs for district officials and emergency responders, focusing on disaster risk awareness and response protocols. These initiatives aim to build institutional capacity and improve readiness at the local level. Nevertheless, the reach and impact of such programs are often constrained by limited funding, inadequate technical expertise, and lack of sustained engagement with local communities. As a result, preparedness efforts remain insufficient to address the scale and complexity of disaster risks in Balochistan (Shah et al., 2021; Ahmad & Mustafa, 2023).

In terms of disaster response mechanisms, PDMA is responsible for coordinating emergency operations during crises, including search and rescue, evacuation, and provision of immediate relief. The authority works in collaboration with district administrations, law enforcement agencies, and humanitarian organizations to ensure a timely response. During major disasters such as floods, PDMA mobilizes resources, establishes relief camps, and facilitates the distribution of essential supplies. Despite these efforts, response operations often face delays due to logistical challenges, poor infrastructure, and communication barriers, particularly in geographically isolated areas (Government of Pakistan, 2023; UNDP, 2022).

Relief distribution is another critical function of PDMA, aimed at providing food, shelter, medical assistance, and other basic necessities to affected populations. While PDMA has developed mechanisms for relief delivery, issues related to transparency, targeting, and efficiency persist. Reports indicate that delays in distribution, inadequate needs assessment, and limited coordination with local actors can hinder the effectiveness of relief efforts. These challenges highlight the need for more robust systems for data collection, beneficiary identification, and monitoring to ensure equitable and timely assistance (Khan & Ali, 2022; World Bank, 2021).

PDMA also plays a key coordination role by facilitating inter-agency collaboration among various stakeholders involved in disaster management. This includes coordination with federal agencies, provincial departments, district authorities, and non-governmental organizations. Effective coordination is essential for avoiding duplication of efforts and ensuring a unified response. However, in practice, coordination mechanisms often remain weak due to institutional fragmentation, unclear roles, and lack of communication channels. Strengthening inter-agency collaboration is therefore critical for improving the overall effectiveness of disaster governance in Balochistan (UNDRR, 2019; Ahmad & Mustafa, 2023).

Capacity and resource management remain significant challenges for PDMA Balochistan, affecting its ability to perform its functions effectively. Budget constraints limit investments in infrastructure, equipment, and human resources, while logistical challenges hinder the timely delivery of assistance. The vast and rugged terrain of Balochistan further complicates resource mobilization and distribution. These limitations underscore the need



Vol. 4 No. 4 (March) (2026)

for increased funding, improved logistical planning, and capacity-building initiatives to strengthen PDMA's operational effectiveness. Addressing these issues is essential for transitioning from reactive disaster response to proactive risk management in the province (Asian Development Bank, 2021; UNDP, 2022).

9. Role of Local Institutions

District administration plays a pivotal role in disaster governance as the primary operational arm at the local level, particularly through the Deputy Commissioner's office and District Disaster Management Authorities (DDMAs). These institutions are responsible for implementing disaster preparedness plans, coordinating emergency response, and ensuring law and order during crises. Their proximity to affected communities enables them to respond quickly and mobilize local resources effectively. However, in regions like Balochistan, district administrations often face constraints such as limited trained staff, weak institutional capacity, and inadequate infrastructure, which reduce their ability to manage disasters efficiently (NDMA, 2020; UNDP, 2022).

Local governments are essential for delivering public services and facilitating disaster risk reduction at the grassroots level. They play a crucial role in identifying vulnerable populations, maintaining local infrastructure, and supporting relief and rehabilitation efforts. Effective local governance enhances community resilience by integrating disaster risk considerations into development planning. However, in Pakistan, the role of local governments in disaster management remains limited due to weak decentralization, lack of financial autonomy, and inconsistent institutional support. This gap undermines the potential of local governments to contribute meaningfully to disaster governance (Khan & Ali, 2022; Ahmad & Mustafa, 2023).

Community organizations serve as critical actors in disaster governance by providing localized knowledge, social networks, and immediate response capabilities. These organizations often include informal groups, volunteer networks, and traditional leadership structures that are deeply embedded within communities. Their involvement in disaster risk reduction initiatives, such as awareness campaigns and preparedness activities, enhances the effectiveness and sustainability of interventions. Community-based approaches are particularly valuable in remote areas of Balochistan, where formal institutional presence is limited, and local actors often serve as first responders (Shah et al., 2021; Djalante et al., 2020).

Non-governmental organizations (NGOs) and civil society organizations (CSOs) play a complementary role in disaster governance by supporting government efforts through humanitarian assistance, capacity building, and advocacy. NGOs often provide essential services such as relief distribution, healthcare, and shelter during emergencies, while also engaging in long-term development and resilience-building programs. Their flexibility and access to external resources enable them to operate effectively in challenging environments. However, coordination between NGOs and government institutions is often weak, leading to duplication of efforts and inefficiencies. Strengthening partnerships between civil society and public institutions is therefore essential for improving disaster governance outcomes (UNDRR, 2019; World Bank, 2021).

10. Case Studies

10.1 Floods in Balochistan

The recurring floods in Balochistan, particularly during the 2022 monsoon season, highlighted both the scale of vulnerability and the institutional challenges in disaster governance. Heavy rainfall, combined with weak drainage systems and fragile



Vol. 4 No. 4 (March) (2026)

infrastructure, led to widespread destruction across districts such as Lasbela, Jaffarabad, and Naseerabad. Thousands of homes were damaged, and critical infrastructure, including roads and communication networks, was severely affected. The floods exposed the structural weaknesses in preparedness mechanisms and underscored the province's high exposure to climate-induced disasters (Government of Pakistan, 2023; UNDP, 2022).

The response of the Provincial Disaster Management Authority (PDMA) involved coordination with federal agencies, district administrations, and humanitarian organizations to manage relief and rescue operations. PDMA established relief camps, facilitated evacuation, and distributed food and non-food items to affected populations. Local institutions, including district administrations and community groups, played a crucial role in identifying affected households and assisting in relief distribution. Despite these efforts, delays in response and logistical challenges due to poor infrastructure and accessibility issues limited the overall effectiveness of interventions (NDMA, 2020; Khan & Ali, 2022).

The flood case study reveals significant governance gaps, particularly in coordination, preparedness, and resource allocation. Weak inter-agency communication and lack of real-time data hindered efficient response, while centralized decision-making slowed down local action. Moreover, insufficient community involvement reduced the effectiveness of relief operations at the grassroots level. These challenges highlight the need for strengthening early warning systems, enhancing local institutional capacity, and improving coordination mechanisms to ensure a more proactive and efficient disaster response in future flood events (UNDRR, 2019; Ahmad & Mustafa, 2023).

10.2 Drought in Balochistan

Drought is a recurring and slow-onset disaster in Balochistan, severely affecting livelihoods, water availability, and food security. Districts such as Chagai, Kharan, Washuk, and parts of Kech have experienced prolonged dry spells, leading to declining agricultural productivity and loss of livestock. Unlike floods, droughts often receive less immediate attention due to their gradual nature, but their long-term socio-economic impacts are equally severe. Climate change has further intensified drought conditions, making water scarcity a persistent challenge for local communities (Asian Development Bank, 2021; World Bank, 2021).

Governance challenges in managing drought in Balochistan are particularly pronounced due to weak institutional coordination and limited long-term planning. PDMA and other provincial bodies have primarily focused on short-term relief measures, such as water supply through tankers and distribution of food assistance. However, the absence of comprehensive drought management strategies, including water conservation, sustainable agriculture, and climate adaptation measures, limits the effectiveness of these interventions. Local institutions often lack the capacity and resources to implement long-term solutions, further exacerbating the problem (UNDP, 2022; Government of Pakistan, 2023).

The drought case highlights the need for a shift from reactive to proactive governance approaches. Effective drought management requires integrated policies that address water resource management, climate resilience, and livelihood diversification. Strengthening coordination between provincial and local institutions, investing in infrastructure such as small dams and irrigation systems, and promoting community-based adaptation strategies are essential for mitigating drought impacts. Without such reforms, drought will continue to pose a significant threat to socio-economic stability in Balochistan (Ahmad & Mustafa, 2023; UNDRR, 2019).



Vol. 4 No. 4 (March) (2026)

11. Key Findings

Table 11.1: Weak Institutional Coordination in Disaster Governance

Aspect	Key Insight
Actors Involved	NDMA, PDMA, DDMA, NGOs
Issue	Poor communication and unclear roles
Impact	Delays and duplication of efforts
Outcome	Inefficient disaster response

Analysis:

Weak institutional coordination remains one of the most critical challenges in disaster governance in Balochistan. The presence of multiple actors—ranging from federal to local levels—creates complexity in decision-making and implementation. However, the absence of clearly defined roles and communication channels leads to confusion during emergencies. Studies indicate that coordination failures often result in duplication of efforts and delayed response, particularly during large-scale disasters such as floods. Furthermore, coordination gaps are exacerbated by institutional fragmentation and lack of integrated information systems. Agencies often operate in silos, limiting data sharing and joint planning. This reduces the efficiency of disaster response and weakens the overall governance structure. Strengthening coordination mechanisms through institutional reforms, digital integration, and clear operational protocols is essential for improving disaster governance effectiveness in Balochistan.

Table 11.2: Centralized Decision-Making in Disaster Governance

Aspect	Key Insight
Decision Level	Federal and provincial dominance
Issue	Limited local input
Impact	Mismatch with ground realities
Outcome	Ineffective policy implementation

Analysis:

Centralized decision-making significantly limits the effectiveness of disaster governance in Balochistan. Policies and strategies are often designed at federal and provincial levels without adequate consultation with local stakeholders. This top-down approach creates a disconnect between policy objectives and local needs, resulting in ineffective implementation. Research shows that centralized systems often fail to address region-specific vulnerabilities, particularly in geographically diverse and underdeveloped areas. In addition, centralized governance reduces the autonomy and responsiveness of local institutions, which are critical for timely disaster response. Local authorities often lack the authority to make decisions or allocate resources independently, leading to delays and inefficiencies. Promoting decentralization and empowering district-level institutions can enhance flexibility, improve responsiveness, and ensure that disaster management strategies are tailored to local contexts.

Table 11.3: Lack of Local Capacity in Disaster Governance

Aspect	Key Insight
Human Resources	Shortage of trained personnel
Infrastructure	Weak emergency systems
Technical Skills	Limited expertise



Vol. 4 No. 4 (March) (2026)

Aspect	Key Insight
Outcome	Poor preparedness and response

Analysis:

The lack of local capacity is a major barrier to effective disaster governance in Balochistan. District-level institutions often lack trained personnel, technical expertise, and operational resources required for disaster preparedness and response. This capacity deficit limits the ability of local authorities to implement disaster management plans and respond effectively during emergencies. Research highlights that weak local capacity leads to increased vulnerability and slower recovery in disaster-affected areas.

Moreover, inadequate infrastructure and lack of access to modern technology further constrain local capacity. Emergency response systems, early warning mechanisms, and logistical support are often insufficient or poorly maintained. Addressing these gaps requires sustained investment in training, infrastructure development, and institutional strengthening. Building local capacity is essential for enhancing resilience and ensuring effective disaster governance at the grassroots level.

Table 11.4: Limited Community Participation in Disaster Governance

Aspect	Key Insight
Community Role	Passive involvement
Issue	Lack of awareness and inclusion
Impact	Weak local resilience
Outcome	Ineffective risk reduction

Analysis:

Limited community participation is a significant challenge in disaster governance, particularly in Balochistan where local knowledge and engagement are crucial. Disaster management strategies often overlook the role of communities, treating them as beneficiaries rather than active participants. This reduces the effectiveness of interventions, as local insights and coping mechanisms are not fully utilized. Studies emphasize that community involvement is essential for successful disaster risk reduction and resilience building.

Furthermore, low levels of awareness, education, and institutional support hinder community participation. In many areas, communities lack access to information and training related to disaster preparedness, limiting their ability to respond effectively. Promoting community-based disaster risk reduction (CBDRR) approaches and strengthening local engagement can enhance resilience and improve governance outcomes. Inclusive policies that empower communities are critical for sustainable disaster management.

Table 11.5: Resource Constraints in Disaster Governance

Aspect	Key Insight
Financial Resources	Limited budget allocation
Logistics	Poor transport and supply systems
Equipment	Inadequate emergency tools
Outcome	Inefficient disaster response

Analysis:

Resource constraints are a fundamental challenge affecting disaster governance in Balochistan. Limited financial resources restrict the ability of institutions to invest in disaster preparedness, infrastructure, and capacity building. Budget allocations for disaster



Vol. 4 No. 4 (March) (2026)

management are often insufficient, leading to gaps in planning and response. This financial limitation is particularly critical in a province with vast geographical challenges and high vulnerability to disasters.

In addition to financial constraints, logistical challenges further hinder disaster response efforts. Poor road networks, lack of transport facilities, and inadequate emergency equipment delay the delivery of relief and rescue operations. These issues are compounded in remote areas, where accessibility is already limited. Addressing resource constraints requires increased investment, improved resource management, and stronger institutional planning to ensure efficient and timely disaster response.

12. Discussion

The findings of this study are consistent with global literature on disaster governance, which emphasizes that institutional coordination, decentralization, and community participation are critical for effective disaster risk management. International frameworks such as the Sendai Framework highlight the importance of integrated and multi-level governance systems, yet similar to many developing regions, Balochistan exhibits gaps in coordination and preparedness. Studies from other contexts also indicate that fragmented institutional arrangements and weak local capacity significantly undermine disaster response, reinforcing the patterns identified in this study (UNDRR, 2019; Djalante et al., 2020).

Comparatively, countries with stronger disaster governance systems demonstrate better outcomes due to well-defined institutional roles, robust early warning systems, and active community engagement. For example, research shows that decentralized governance structures in countries like Indonesia and Bangladesh have improved disaster resilience by empowering local actors. In contrast, the centralized and resource-constrained system observed in Balochistan aligns with findings from other developing regions where governance inefficiencies limit the effectiveness of disaster management frameworks (World Bank, 2021; UNDP, 2022).

Furthermore, global literature highlights the shift from reactive to proactive disaster management approaches, emphasizing prevention and resilience building. However, the findings of this study reveal that disaster governance in Balochistan remains largely reactive, focusing on relief and response rather than preparedness and mitigation. This divergence from global best practices underscores the need for aligning local disaster governance systems with international standards to enhance effectiveness and sustainability (Alexander, 2020; UNDRR, 2019).

The study's findings can also be effectively explained through theoretical frameworks such as institutional theory and governance theory. Institutional theory suggests that weak institutional structures, limited capacity, and lack of coordination reduce governance effectiveness, which is clearly evident in the context of Balochistan. The inability of institutions such as PDMA and DDMA to fully perform their roles reflects structural and functional weaknesses that hinder disaster management outcomes (Scott, 2021; Khan & Ali, 2022).

Governance theory, particularly the concept of multi-level governance, further explains the coordination challenges observed in this study. Effective disaster governance requires strong linkages between national, provincial, and local levels, but the findings indicate that these linkages are weak in Balochistan. The dominance of centralized decision-making limits local autonomy and reduces the responsiveness of institutions. This disconnect between governance levels leads to inefficiencies and delays in disaster response,



Vol. 4 No. 4 (March) (2026)

highlighting the need for improved coordination and decentralization (Bevir, 2020; UNDP, 2022).

Additionally, the Disaster Risk Reduction (DRR) framework emphasizes proactive risk management and community participation, yet these principles are not fully implemented in Balochistan. The limited integration of DRR strategies into local planning reflects a gap between theoretical frameworks and practical application. Strengthening institutional capacity and aligning policies with DRR principles can help bridge this gap and improve disaster governance outcomes (UNDRR, 2019; World Bank, 2021).

The governance gaps identified in this study are primarily rooted in weak institutional coordination, centralized decision-making, and inadequate resource allocation. These gaps result in delayed responses, inefficient use of resources, and limited effectiveness of disaster management strategies. The lack of clear communication channels and defined roles among institutions further exacerbates these issues, creating confusion during emergencies and reducing overall efficiency (Ahmad & Mustafa, 2023; Khan & Ali, 2022).

Another significant governance gap is the limited involvement of local institutions and communities in disaster management processes. The exclusion of local actors from decision-making reduces the relevance and effectiveness of policies, as local needs and vulnerabilities are not adequately addressed. This gap also limits community resilience, as individuals are not sufficiently empowered to participate in disaster risk reduction efforts. Addressing this issue requires greater emphasis on decentralization and community engagement (UNDP, 2022; Djalante et al., 2020).

Moreover, the absence of strong monitoring and evaluation mechanisms contributes to the persistence of governance gaps. Without effective oversight, it is difficult to assess the performance of institutions and identify areas for improvement. This lack of accountability further weakens disaster governance and limits the potential for learning from past experiences. Strengthening monitoring systems and promoting transparency are therefore essential for improving governance effectiveness (World Bank, 2021; Ahmad & Mustafa, 2023).

The findings also highlight several Balochistan-specific issues that differentiate it from other regions. The province's vast geographical area, rugged terrain, and dispersed population create significant challenges for disaster management, particularly in terms of accessibility and service delivery. These structural constraints make it difficult for institutions to reach affected communities and provide timely assistance, thereby increasing vulnerability to disasters (Balochistan P&D Department, 2022; UNDP, 2022). Socio-economic factors such as poverty, low literacy rates, and limited access to basic services further exacerbate disaster risks in Balochistan. These conditions reduce the capacity of communities to cope with and recover from disasters, making them more dependent on external assistance. Additionally, political and administrative challenges, including weak governance structures and limited institutional capacity, further complicate disaster management efforts in the province (Government of Pakistan, 2023; Asian Development Bank, 2021).

Finally, the security situation and lack of sustained development initiatives in certain areas of Balochistan add another layer of complexity to disaster governance. These factors restrict the presence and effectiveness of both government and non-governmental organizations, limiting the implementation of long-term resilience-building strategies. Addressing these context-specific challenges requires tailored policies and targeted interventions that consider the unique socio-political and geographical realities of Balochistan (Ahmad & Mustafa, 2023; UNDRR, 2019).



Vol. 4 No. 4 (March) (2026)

13. Policy Analysis

Evaluation of Existing Policies

Existing disaster management policies in Pakistan, including the National Disaster Management Plan and provincial frameworks, provide a comprehensive structure for disaster risk reduction and response. These policies align with international standards such as the Sendai Framework and emphasize preparedness, coordination, and resilience building. Strengths include clearly defined institutional roles, the establishment of NDMA, PDMA, and DDMA structures, and the integration of disaster risk considerations into national development planning. Policy provisions for early warning systems, emergency response, and inter-agency coordination demonstrate a strong conceptual foundation for effective disaster governance (NDMA, 2020; UNDRR, 2019).

However, despite their strong design, these policies exhibit significant weaknesses in implementation, particularly in provinces like Balochistan. Gaps exist in translating policy frameworks into actionable strategies at the local level due to limited resources, weak institutional capacity, and insufficient contextual adaptation. Policies are often formulated in a top-down manner, lacking input from local stakeholders, which reduces their relevance and effectiveness. Additionally, inadequate enforcement mechanisms and limited monitoring reduce accountability, resulting in policies that remain largely theoretical rather than operational (Ahmad & Mustafa, 2023; UNDP, 2022).

Implementation Gaps

Implementation gaps in disaster governance are primarily driven by coordination failures among institutions at different levels. Although a multi-tiered system exists, the lack of effective communication and collaboration between NDMA, PDMA, DDMA, and other stakeholders leads to inefficiencies in disaster response. Overlapping responsibilities and unclear mandates further complicate coordination, resulting in duplication of efforts and delays during emergencies. These coordination challenges weaken the overall effectiveness of disaster management systems and limit their ability to respond promptly and efficiently (Khan & Ali, 2022; UNDRR, 2019).

Another critical issue is the lack of robust monitoring and evaluation mechanisms to assess policy implementation and institutional performance. Without systematic monitoring, it becomes difficult to track progress, identify gaps, and ensure accountability. This absence of oversight allows inefficiencies and governance weaknesses to persist over time. Furthermore, limited data collection and reporting systems hinder evidence-based decision-making, reducing the ability of policymakers to adapt strategies based on real-time needs. Strengthening monitoring frameworks is therefore essential for bridging the gap between policy design and implementation (World Bank, 2021; Ahmad & Mustafa, 2023).

Institutional Barriers

Institutional barriers significantly hinder effective disaster governance in Balochistan, with bureaucratic hurdles being a major constraint. Complex administrative procedures, rigid hierarchies, and slow decision-making processes often delay timely response during disasters. These bureaucratic inefficiencies limit the flexibility of institutions and reduce their ability to adapt to rapidly changing disaster situations. Additionally, inter-departmental rivalries and lack of coordination further exacerbate these challenges, creating obstacles to effective collaboration and resource mobilization (Khan & Ali, 2022; Asian Development Bank, 2021).

Another critical barrier is the lack of local ownership in disaster management processes.



Vol. 4 No. 4 (March) (2026)

Policies and strategies are often developed at higher levels without sufficient involvement of local institutions and communities, leading to limited acceptance and effectiveness at the grassroots level. This disconnect reduces community participation and weakens the overall resilience of disaster-prone areas. Enhancing local ownership through decentralization, capacity building, and inclusive decision-making is essential for overcoming institutional barriers and improving disaster governance outcomes (UNDP, 2022; UNDRR, 2019).

14. Recommendations

14.1 Strengthening Local Institutions

Strengthening local institutions is essential for improving disaster governance in Balochistan, as they serve as the first line of response during emergencies. This requires enhancing the operational capacity of District Disaster Management Authorities (DDMAs) and local administrations through increased funding, institutional support, and clear mandates. Empowering local bodies with decision-making authority and resources will enable them to respond more effectively to local needs. Additionally, strengthening coordination between local institutions and provincial authorities can improve service delivery and ensure timely disaster response.

14.2 Improving Coordination Mechanisms

Effective disaster governance depends on strong coordination among institutions at federal, provincial, and local levels. Establishing clear communication channels, defining roles and responsibilities, and developing integrated coordination frameworks can reduce duplication of efforts and improve response efficiency. The use of digital platforms and centralized information systems can further enhance inter-agency collaboration. Regular coordination meetings, joint exercises, and shared planning processes are also necessary to build trust and improve institutional linkages.

14.3 Enhancing Community Participation

Community participation is critical for building resilience and ensuring the effectiveness of disaster management strategies. Policies should promote community-based disaster risk reduction (CBDRR) approaches by involving local populations in risk assessment, planning, and implementation processes. Awareness campaigns, local training programs, and inclusion of community leaders in decision-making can strengthen local engagement. Empowering communities not only improves preparedness but also enhances the sustainability of disaster management efforts.

14.4 Capacity Building and Training

Investing in capacity building and training is crucial for improving the effectiveness of disaster management institutions. This includes providing technical training to PDMA and DDMA staff, enhancing emergency response skills, and developing expertise in risk assessment and planning. Continuous professional development programs and simulation exercises can improve preparedness and response capabilities. Building institutional capacity also involves strengthening infrastructure, improving access to modern equipment, and enhancing organizational efficiency.

14.5 Decentralization of Decision-Making

Decentralization is necessary to address the limitations of centralized governance in disaster management. Granting greater autonomy to district and local institutions can



Vol. 4 No. 4 (March) (2026)

improve responsiveness and ensure that decisions are tailored to local contexts. Decentralized systems enable faster decision-making and more efficient resource allocation during emergencies. Encouraging participatory governance and involving local stakeholders in policy formulation can further enhance the effectiveness of disaster management strategies.

14.6 Resource Allocation Reforms

Adequate and equitable allocation of resources is essential for effective disaster governance. Increasing budgetary allocations for disaster risk reduction, improving financial management systems, and ensuring transparency in resource distribution can enhance institutional effectiveness. Investments should focus on infrastructure development, early warning systems, and capacity building initiatives. Additionally, establishing emergency funds and improving logistical planning can ensure timely availability of resources during disasters.

14.7 Early Warning and Technology Integration

Integrating modern technology and strengthening early warning systems are key to improving disaster preparedness and response. The use of digital tools, satellite monitoring, and real-time data systems can enhance risk assessment and enable timely dissemination of warnings to vulnerable communities. Developing mobile-based alert systems and improving communication networks can ensure effective last-mile connectivity. Technology integration also supports better coordination among institutions and facilitates evidence-based decision-making in disaster management.

15. Conclusion

Disaster governance in Balochistan reflects a complex interplay of institutional structures, policy frameworks, and ground-level realities. The study finds that while Pakistan has established a comprehensive disaster management system through NDMA, PDMA, and DDMA, its effectiveness in Balochistan remains limited. Key findings highlight weak institutional coordination, centralized decision-making, lack of local capacity, and inadequate community participation. These issues collectively contribute to a system that is largely reactive rather than proactive, focusing more on relief and response than on preparedness and risk reduction.

The governance challenges identified in this study are deeply rooted in structural and institutional weaknesses. Fragmented coordination among agencies, bureaucratic inefficiencies, and limited financial and technical resources significantly hinder effective disaster management. The centralized nature of decision-making further reduces the responsiveness of local institutions, creating a gap between policy formulation and implementation. These challenges are exacerbated by Balochistan's unique geographical and socio-economic conditions, which increase vulnerability and complicate service delivery.

Addressing these challenges requires comprehensive institutional reforms aimed at strengthening governance mechanisms and improving coordination. Policy frameworks must move beyond theoretical design and focus on practical implementation through clear accountability systems and effective monitoring mechanisms. Increased investment in disaster risk reduction, infrastructure, and capacity building is essential for enhancing resilience. Aligning national and provincial policies with global frameworks such as the Sendai Framework can further support the transition toward proactive disaster governance.



Vol. 4 No. 4 (March) (2026)

Local institutions play a critical role in improving disaster governance and must be empowered to function effectively. Strengthening district administrations, local governments, and community organizations can enhance preparedness, response, and recovery efforts at the grassroots level. Encouraging community participation through inclusive policies and community-based disaster risk reduction approaches can improve resilience and ensure that interventions are context-specific. Empowered local institutions can bridge the gap between policy and practice, making disaster management more responsive and effective.

Looking ahead, the future of disaster governance in Balochistan depends on the ability to adopt a holistic and integrated approach that prioritizes resilience and sustainability. Climate change is expected to intensify disaster risks, making it imperative to strengthen institutional capacity and invest in innovative solutions such as early warning systems and digital technologies. Collaborative efforts among government, civil society, and communities will be essential for building a resilient disaster management system. With targeted reforms and inclusive governance, Balochistan can transition from a reactive model to a proactive and adaptive disaster governance framework.

REFERENCES

- Ahmad, S., & Mustafa, U. (2023). Disaster management policies and implementation challenges in Pakistan. *Journal of Public Policy and Governance*, 15(2), 45–60.
- Asian Development Bank. (2021). *Climate risk country profile: Pakistan*. ADB Publications.
- Asian Development Bank. (2021). *Climate risk country profile: Pakistan..*
- Balochistan Planning & Development Department. (2022). *Balochistan development report 2022*. Government of Balochistan.
- Balochistan Planning & Development Department. (2022a). *Balochistan development report 2022*.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- Djalante, R., Shaw, R., & DeWit, A. (2020). Building resilience against biological hazards and pandemics: COVID-19 and its implications for disaster risk reduction. *International Journal of Disaster Risk Reduction*, 51.
- Djalante, R., Shaw, R., & DeWit, A. (2020). Building resilience against disasters. *International Journal of Disaster Risk Reduction*, 51.
- Djalante, R., Shaw, R., & DeWit, A. (2020a). Building resilience against disasters. *International Journal of Disaster Risk Reduction*, 51.
- Eckstein, D., Künzel, V., & Schäfer, L. (2021). *Global climate risk index 2021*. Germanwatch.
- Government of Pakistan. (2023). *Pakistan economic survey 2022–23*. Ministry of Finance.
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 3(3), 619–626.
- Khan, H., & Ali, S. (2022). Institutional coordination and disaster response in



Vol. 4 No. 4 (March) (2026)

Pakistan: A governance perspective. *International Journal of Disaster Risk Reduction*, 68, 102743.

- Khan, H., & Ali, S. (2022a). Institutional coordination and disaster response in Pakistan. *International Journal of Disaster Risk Reduction*, 68.
- NDMA. (2020). *National disaster management plan*. National Disaster Management Authority, Pakistan.
- NDMA. (2020). *National disaster management plan*.
- NDMA. (2020). *National disaster management plan*. National Disaster Management Authority, Pakistan.
- Shah, A. A., Ye, J., Abid, M., & Amir, S. (2021). Community-based disaster risk management: A case study of Pakistan. *Sustainability*, 13(4), 2045.
- Shah, A. A., Ye, J., Abid, M., & Amir, S. (2021a). Community-based disaster risk management in Pakistan. *Sustainability*, 13(4).
- Stake, R. E. (2019). *The art of case study research*. Sage Publications.
- Tierney, K. (2020). *Disasters: A sociological approach*. Polity Press.
- UNDP. (2022). *Pakistan floods 2022: Post-disaster needs assessment*. United Nations Development Programme.
- UNDP. (2022). *Pakistan floods 2022: Post-disaster needs assessment*.
- UNDP. (2022). *Pakistan floods 2022: Post-disaster needs assessment*. United Nations Development Programme.
- UNDP. (2022). *Pakistan floods 2022: Post-disaster needs assessment*.
- UNDP. (2022). *Pakistan floods 2022: Post-disaster needs assessment*.
- UNDRR. (2019). *Global assessment report on disaster risk reduction*. United Nations Office for Disaster Risk Reduction.
- UNDRR. (2019). *Global assessment report on disaster risk reduction*.
- UNDRR. (2019). *Global assessment report on disaster risk reduction*. United Nations Office for Disaster Risk Reduction.
- UNDRR. (2019). *Global assessment report on disaster risk reduction*.
- World Bank. (2021). *Climate change knowledge portal: Pakistan*.
- World Bank. (2021). *Climate change knowledge portal: Pakistan*.
- Yin, R. K. (2021). *Case study research and applications: Design and methods*. Sage Publications.