

**LOCAL GOVERNANCE, HUMAN SECURITY AND REMAKING OF SOCIETY
IN NEPAL**

A Dissertation

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Degree of Doctor of Philosophy in Political Science**

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LETTER OF RECOMMENDATION

We certify that this dissertation entitled “**Local Governance, Human Security and Remaking of Society in Nepal**” was prepared by **Netra Bahadur Karki** under our guidance. We hereby recommend this dissertation for final examinations by the Research Committee of the Faculty of Humanities and Social Sciences, Tribhuvan University in fulfillment of the requirements for the Degree of Doctor of Philosophy in Political Science.

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DECLARATION

I hereby declare that this dissertation entitled “**Local Governance, Human Security and Remaking of Society in Nepal**” is my own work and that it contains no materials previously published. I have not used its materials for the award of any kind and any other degree. Where other authors’ sources of information have been used, they have been acknowledged.

.....

Netra Bahadur Karki

Date: March 2025

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ABSTRACT

The interplay between politics and socioeconomic development is a central concern in comparative politics. This study extends this tradition into the realm of disasters, focusing on local governance in Nepal. The devastating 2015 earthquake led to profound socioeconomic changes in the affected districts, including physical destruction unleashing complex challenges affecting the society and wellbeing. In the aftermath, Nepal introduced a new constitution and successfully held local, provincial and federal elections, bringing new political leadership to the local level after a two-decade gap.

The study primarily revolves around examining local governance approaches in addressing human security concerns, assessing the post-disaster governance impact on institutionalizing human security and exploring the way local government initiatives contribute to remaking of society, exploring the multifaceted challenges and opportunities in disaster governance after the seismic event. This dissertation defines the remaking of society as the restoration of the disaster-affected community in a manner that reduces perceived human insecurity, ultimately improving the living conditions of those affected to a level equal to or better than their pre-disaster state.

Employing a qualitative research approach, the study utilizes an exploratory and analytical research design. The qualitative technique has allowed the study to explain the comprehensive causes and relations among the human security and remaking of society. This study examines the important theoretical relations based on the elite analysis and new institutionalism, with special focus on the four local governments namely Dhulikhel and Namobuddha Municipalities, and Bhumlu and Roshi Rural Municipalities of Kavrepalanchowk district. The dissertation utilizes both primary and secondary data, and the case studies, interviews and observations for multidimensional analysis.

The findings of the study include the mixed yet critical role of elites and institutions in local governance approaches. The arrangement of laws, policies and programs significantly influences the addressing of human security concerns, while coordination and local empowerment remain under-prioritized. The study also reveals that fragmented policy and legal framework at the federal level hampers the institutionalization of human security at the local level. Feeble institutional practices, such as insufficient disaster incident reviews, lacking accountability and transparency, inadequate monitoring and evaluation, and

ineffective subject committees, further obstruct the institutionalization of human security. Notably, the 2017 local elections marked a turning point in formalizing human security issues, as local levels began adopting similar initiatives in democratic governance, participation, inclusion, transparency and accountability.

Despite some progress in areas like private housing recovery, social cohesion and cultural preservation, significant gaps remain in disaster risk reduction, livelihood retrieval and service restoration. The persistence of perceived human insecurities within communities, even years after the earthquake, points to deep-rooted issues hindering societal remaking. The analysis of local government initiatives highlights the complexity of addressing human insecurity, necessitating comprehensive interventions that encompass socioeconomic factors such as livelihood improvement, economic diversification and income generation, alongside physical reconstruction. The study emphasizes the importance of a synergistic relationship between proactive elected elites and institutions in aligning local needs with technical expertise for successful post-disaster recovery. Ultimately, the dissertation asserts that successful post-disaster remaking of society depends on robust local disaster governance with a central focus on human security, providing a valuable contribution to the political science discipline for the effective recovery in the face of disasters.

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LIST OF ABBREVIATIONS AND ACRONYMS

APF	Armed Police Force, Nepal
AU	African Union
CAO	Chief Administrative Officer
CBDRM	Community-Based Disaster Risk Management
CBOs	Community-based Organizations
CDMC	Central Disaster Management Committee
CDO	Chief District Officer
CEAPRED	Center for Environmental and Agricultural Policy Research, Extension and Development
CHS	Commission on Human Security
CLPIU	Central Level Project Implementation Unit
CVI	Content Validity Index
DAO	District Administration Office
DCC	District Coordination Committee
DDC	District Development Committee
DDMC	District Disaster Management Committee
DDRC	District Disaster Response Committees
DEOC	District Emergency Operation Center
DLPIU	District Level Project Implementation Unit
DPRP	Disaster Preparedness and Response Plan
DRR	Disaster Risk Reduction
DSC	District Security Committee
FCHVs	Female Community Health Volunteers
FEMA	Federal Emergency Management Agency
FNCCI	Federation of Nepali Chambers of Commerce and Industry
GoN	Government of Nepal
HADR	Humanitarian Assistance and Disaster Relief
HCT	Humanitarian Country Team
HDR	Human Development Report
HSI	Human Security Index
HSN	Human Security Network

HSU	Human Security Unit
ICBDRR	Inclusive Community-Based Disaster Risk Reduction
ICIMOD	Integrated Mountain Development
IDMC	Internal Displacement Monitoring Center
IDP	Internally Displaced Person
INGOs	International Non-Governmental Organizations
IOM	International Organization for Migration
IRR	Impoverishment Risks and Reconstruction
LAPA	National Framework on Local Adaptation Plans for Action
LDMC	Local Disaster Management Committee
LDO	Local Development Officer
LEOC	Local Emergency Operations Center
LGOA	Local Government Operation Act
LISA	Local Government Institutional Self-Assessment
MNMCC	Multi National Military Coordination Center
MoFAGA	Ministry of Federal Affairs and General Administration
MoFE	Ministry of Forest and Environment
MoHA	Ministry of Home Affairs
MoPR	Ministry of Peace and Reconstruction
NA	Nepali Army
NAPA	National Adaptation Programme of Action
NCDRRM	National Council for Disaster Risk Reduction and Management
NDRF	National Disaster Response Framework
NDRRMA	National Disaster Risk Reduction and Management Authority
NDRRMC	National Disaster Risk Reduction and Management Council
NEOC	National Emergency Operation Center
NGOs	Non-Governmental Organizations
NHIP	National Health Insurance Program
NID	National investigation Department
NIDM	National Institute of Disaster Management
NP	Nepal Police
NPC	National Planning Commission
NRA	National Reconstruction Authority

NRB	Nepal Rastra Bank
NRCS	Nepal Red Cross Society
NSDRM	National Strategy for Disaster Risk Management
OHF	Operation Hope Foundation
OPMCM	Office of the Prime Minister and Council of Ministers
OSOCC	On-Site Operations Coordination Center
PDMC	Provincial Disaster Management Committee
PDNA	Post-Disaster Needs Assessment
PDRF	Post-Disaster Recovery Framework
RMI	Risk Management Index
SFDRR	Sendai Framework Disaster Risk Reduction
SSN	Social Safety Nets
TLO	Tole Lane Organization
UN	United Nations
UNDP	United Nations Development Program
UNDRR	United Nations Office for Disaster Risk Reduction
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children Fund
UNSG	UN Secretary General
UNTFHS	United Nations Trust Fund for Human Security
VDC	Village Development Committee
WB	World Bank
WFP	World Food Programme

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

1.1.1 Study Context

Local governance plays a crucial role in shaping security dynamics and the overall transformation of society (Shah & Shah, 2006), making the interplay between governance structures and human security inevitably significant. This study explores the way local disaster governance influences human security and contributes to the remaking of the post-disaster society in Nepal. By examining policies, institutional mechanisms and grassroots practices, this study aims to provide insights into strengthening governance for a more resilient society.

Nepal's stunning landscapes, majestic Himalayas, lush forests and beautiful rivers, make it a paradise for nature lovers. However, the same nature sometimes puts people into agony causing losses and damages. Seemingly, being nestled in a seismically active region, Nepal is also prone to natural disasters like earthquake (MoHA, 2017; Vij et al., 2020). The year 2015 witnessed a devastating earthquake that struck Nepal, leaving in its wake a trail of destruction that continues to affect the nation even seven years after the event. The earthquake, which registered a magnitude of 7.6 on the Richter Scale on April 25th, was followed by a significant aftershock of 7.3 on May 12th (NRA, 2020). This seismic catastrophe caused havoc in thirty-one districts across the country, with fourteen districts severely affected (NRA, 2018). The earthquake resulted in the tragic loss of nearly nine thousand lives, leaving over twenty-two thousand individuals seriously injured, and damaging more than eight hundred thousand private houses (GSC, 2015; NRA, 2018). Consequently, over 2.6 million people were displaced, becoming internally displaced persons (IDPs) within Nepal ("Nepal Third in Internal Displacement by Natural Disasters," 2016; NRA, 2016).

The 2015 earthquake severely disrupted various sectors, including economic, social, political, informational, infrastructural, environmental, health, and tourism areas (Karki, 2019; NPC, 2015a; Ulak, 2016). Despite initial plans for a comprehensive recovery and reconstruction process, progress in rebuilding disrupted communities has been slower than anticipated (Rayamajhee et al., 2020; Vij et al., 2020). The extensive damage highlighted the need for effective recovery and reconstruction efforts, but the emphasis on physical infrastructure often overshadowed the critical aspect of human security for the affected population (Acharya et al.,

2022; Adhikari & D'Ayala, 2020). The primary responsibility of the state is to ensure the safeguarding of human security, a concept articulated by the United Nations Development Programme (UNDP) in 1994 that refers to the condition of people being protected from a wide range of threats. The 2015 earthquake exacerbated these human insecurities, with widespread displacement and the destruction of infrastructure further intensifying threats to wellbeing.

The promulgation of the Constitution of Nepal in 2015 restructured the nation into a federal state, pursuing the intention of establishing robust local governments tasked with delivering services at the grassroots level (The Constitution of Nepal, 2015). The Local Government Operation Act (LGOA), 2017 further empowered local governments with the authority to manage natural disasters, including earthquakes (LGOA, 2017). However, the effectiveness of local governance in addressing the needs of earthquake-affected communities and ensuring human security remains a critical area of investigation at the backdrop of prevailing challenges during response and recovery phases. Revitalizing these communities involves addressing the persisting challenges arising from disaster displacement and ensuring effective governance (Bolton, 2014; Çaki & Uzun, 2023). Thus, holistic recovery of these affected communities becomes inevitable in the face of slower reconstruction progress making remaking of these societies a crucial matter of this study.

Nepal has a long history of devastating natural disasters, including earthquakes that have caused significant loss of life and damage (MoHA, 2017; UN, 2009a). The 1833 and 1934 earthquakes resulted in the deaths of approximately 6500 and 9000 people, respectively (Rana, 2013). Besides earthquakes, other natural disasters have also caused chaos in Nepal, emphasizing the urgent need for continuous preparedness to address their aftermaths. Despite this, recovery efforts following the 2015 earthquake primarily focused on physical reconstruction, often overlooking the broader socio-economic revitalization essential for holistic recovery.

Providing a foundational framework for understanding political systems, Almond (1956) emphasized the importance of both institutions and their functions, and advocated for a holistic view of governance that includes state and non-state actors, rather than focusing solely on government institutions, to better understand and improve political processes. By underscoring the value of diverse stakeholder involvement, Almond (1956) highlighted the dynamic interplay that influences political stability and change. Thus, studying the governance dynamics becomes apparent for holistic understanding. Whereas, political science studies have historically paid little attention to disaster governance, although some notable dissertations

have recently begun to address this gap. A study argued that disasters can significantly influence the nature and practice of disaster governance (N. Dhungana, 2019). Likewise, Duda (2021) emphasized the importance of informal disaster governance, while Fuentealba (2021) highlighted the ongoing reproduction of disaster risks due to ineffective governance. Similarly, Bakema (2019) suggested that disasters could be used to transition toward resilience and sustainable development, necessitating effective institutionalization of disaster governance. Yuldashev (2018) pointed out that poor disaster governance leads to domination by external players in response and recovery activities.

Several scholarly articles also discuss disaster governance and its intersection with human security. Noteworthy, Bacon and Hobson (2014) noted that political systems are profoundly affected by disasters, and addressing the insecurities stemming from these crises should be considered an integral part of everyday politics. They further highlighted the critical importance of aligning human security for effective disaster management. Later, Artiningsih et al. (2016) and Bae et al. (2016) studied disaster governance in Indonesia and South Korea, respectively, while Çaki and Uzun (2023) argued for a shift from centralized to decentralized disaster governance, noting challenges in countries like Turkey. Cook et al. (2019) found integration challenges in Timor-Leste, and Douglass (2016) called for innovations in disaster governance in Asia.

In the same way, Lam and Kuipers (2018) urged for comprehensive disaster governance following the 2015 Nepal earthquake. Likewise, Melis and Apthorpe (2020) highlighted the importance of localizing disaster governance, considering the diversity between communities and variations within state institutions. In a study, Sandoval and Voss (2016) advocated for effective disaster governance to protect vulnerable populations, and Suzuki and Kaneko (2013) presented Japan's disaster governance as a model for other countries. Tierney (2012) discussed the political dimensions of disaster governance, while Trias and Cook (2019, 2021) emphasized its necessity in Indonesia. Similarly, Vij et al. (2020) and Vij (2023) underscored the importance of disaster governance in Nepal, particularly in the context of federal restructuring and natural disasters.

Despite the critical need for disaster governance, studies in Nepal have largely neglected this area within political science. A review of the e-library of the Tribhuvan University Central Library (TUCL) reveals that out of 8878 studies between 1999 to May 2024 in the Faculty of Humanities and Social Sciences, only fourteen are related to disasters, with none from the political science department (TUCL, 2024). This lack of focus on disaster governance is

concerning given Nepal's vulnerability to such disasters and the necessity for effective governance to ensure human security and resilient recovery.

In this backdrop, this dissertation aims to explore the role of effective local disaster governance and the institutionalization of human security in the remaking of society after the 2015 earthquake in Nepal. By examining global practices, we seek to understand how addressing human insecurities can ensure sustainable recovery. This involves looking beyond physical reconstruction to include comprehensive socio-economic revitalization and enhancement of local governance capabilities, ensuring that affected communities are rebuilt in a way that addresses both immediate needs and long-term human security.

1.1.2 Local Governance

As Fukuyama (2013) defines governance as the capacity of a government to make and enforce rules, and to deliver services, it needs to focus on the performance to effectively address everyday civic concerns. Local governance refers to the management of public affairs within specific units of a country, involving the exercise of political, administrative, and economic authority to handle local matters (Shah & Shah, 2006; UNDP, 1997). This form of governance aims to ensure participation, transparency, accountability, effectiveness, equity and the promotion of the rule of law (Burhanudin et al., 2022; Johnston, 2000). Governance extends beyond the political sphere, impacting social and economic realms, and involves various stakeholders including governments, civil society organizations, and the private sector (UNDP, 1997). Ndreu (2016) defines local government as comprising elected bodies with administrative, legislative, and executive functions within their jurisdictions, responsible for making decisions on local measures. Vitálišová et al. (2021) further describe local governance as a polycentric system in which numerous stakeholders participate in local public policy decision-making processes. This broad involvement ensures that governance is not solely the purview of government officials but also includes inputs from the wider community.

In Nepal, local governance involves the exercise of political, economic, and administrative powers as outlined in the LGOA and the Constitution of Nepal 2015 (LGOA, 2017; The Constitution of Nepal, 2015). These legal frameworks grant local governments the authority to manage a range of local issues, ensuring that decision-making is closer to the citizens it affects. This decentralized approach is intended to foster more responsive and effective governance by allowing local authorities to address specific needs and conditions unique to their areas. The local governance system is designed to facilitate inclusive and involved processes, ensuring

that diverse voices are considered in policy-making (Acharya, 2018a). By empowering local governments, Nepal aims to enhance the overall quality of governance, promote sustainable development, and improve the delivery of public services at the grassroots level. For this study, local governance refers to the exercise of the political, economic and administrative powers by the local levels of Nepal as per the LGOA and the Constitution of Nepal, 2015.

1.1.3 Local Disaster Governance

Disaster governance encompasses a holistic approach to addressing disasters across all phases: before, during, and after the event. This comprehensive strategy involves coordination, processes, and interactions among individuals and organizations involved in disaster management, emphasizing their critical roles in preparation, response, and recovery activities (Shahat et al., 2020). It includes a wide range of measures, from prevention and emergency response to recovery and rehabilitation (Suzuki & Kaneko, 2013; Zurita et al., 2018). The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030 outlines three key actions for effective disaster governance: aligning legal frameworks and policies, defining clear roles and responsibilities for public and private sectors, and motivating stakeholders to address disaster risks (UN, 2015). Tierney (2012) defines disaster governance as a blend of norms, organizational and institutional actors, and practices that span all disaster phases, aimed at mitigating impacts and losses from various hazards, including natural events including technological and intentional incidents (Sandoval & Voss, 2016). Thus, disaster governance involves a comprehensive set of strategies, policies and collaborative efforts among state and non-state actors to effectively manage all disaster phases aimed to reduce impacts and losses.

Moreover, local disaster governance refers to the management and coordination of disaster risk reduction, preparedness, response, recovery, and rehabilitation at the local level. It involves the processes, structures, and interactions among various stakeholders, including local government authorities, community organizations, private sector entities, and citizens. The goal is to effectively address and mitigate the impacts of disasters, ensuring the safety and resilience of local communities. In Nepal, local disaster governance is particularly critical given the country's vulnerability to natural disasters. The constitution and the LGOA grant local governments the authority to manage natural disasters, including tasks related to recovery and ensuring human security (LGOA, 2017; The Constitution of Nepal, 2015).

Furthermore, effective local governance plays a pivotal role in disaster management by addressing human security and aiding in the recovery of societies disrupted by disasters

(LaMonica, 2020; Quinn, 2008). This local approach ensures that disaster management activities are tailored to the specific needs and conditions of local communities, enhancing resilience and recovery efforts. The involvement of local authorities is crucial in synchronizing disaster management activities with national and international efforts, ensuring a coordinated and comprehensive response to disaster risks (Atkinson, 2022; Dzigbede et al., 2020; Gencer, 2017). For this study, local disaster governance is defined as the coordinated management and execution of disaster risk reduction, preparedness, response, recovery, and rehabilitation efforts at the local level, involving local government authorities, state and non-state actors to ensure the local communities' safety and resilience.

1.1.4 Human Security

Human security is a comprehensive concept that focuses on protecting individuals from a wide range of threats, including hunger, disease, environmental degradation, natural disasters, violence, and more (CHS, 2003; UNDP, 1994). Introduced by the UNDP in 1994, human security emphasizes a profound shift in thinking towards a universal, interdependent, and people-centered concern. It addresses common threats such as unemployment, crime, pollution, and human rights violations, as well as interrelated challenges like famine, disease, drug trafficking, terrorism, and social disintegration. By mitigating these threats through early prevention, human security aims to ensure the wellbeing and safety of individuals by addressing both immediate threats and underlying vulnerabilities arising from various sources, including natural and non-natural disasters (UNDP, 1994).

The Commission on Human Security (CHS) further broadens this concept, defining it as protecting the vital core of all human lives in ways that enhance human freedoms and fulfillment (CHS, 2003). Human security involves safeguarding fundamental freedoms and protecting people from critical and pervasive threats using processes that build on their strengths and aspirations. This approach creates political, social, environmental, economic, and cultural systems that collectively provide the building blocks of survival, livelihood, and dignity. The purpose of human security is to address challenges to the survival, livelihood, and dignity of people, ensuring they can live in freedom and dignity, free from poverty and despair (CHS, 2003; UNDP, 1994). This includes providing equal opportunities for individuals to enjoy their rights and develop their potential through comprehensive, context-specific, and prevention-oriented responses. The 2015 earthquake in Nepal, which caused widespread displacement and heightened human insecurity, exemplifies the need for such an approach,

highlighting the importance of addressing basic needs, healthcare, and protection from further threats during recovery and reconstruction (Dinh, 2009; IDMC, 2019; Lindstaedt, 2021). Particularly for this study, human security means the condition of people being protected from hunger, famine, deadly infectious diseases, unsafe food, malnutrition, lack of access to basic health care, environmental degradation, resource depletion, natural disasters, physical violence, crime, domestic violence, political repression, and human rights abuses.

1.1.5 Remaking of Society

Remaking of society involves a systematic approach to addressing and mitigating existing societal problems through careful planning, social engineering, and institutional changes (Akdoğan, 2016; Shaw, 1971). This process aims to elevate the standard of living by improving recovery, reconstruction, restoration, and implementing effective institutional arrangements. Shaw (1971) described this transformation as a scientific method to resolve societal issues, while Bookchin (1990) emphasized the need for a vision of social reconstruction that benefits both nature and humanity. Srinivasan (2019) highlighted that remaking society is about creating a better place for survival. The ultimate goal is to revitalize society in a way that reduces human security risks and ensures sustainable development, addressing both immediate needs and long-term resilience (Srinivasan, 2019; Thompson, 1992). The remaking of society refers to the process of transforming and improving the conditions of communities affected by disasters into a more favorable and resilient one (Akdoğan, 2016).

The devastating 2015 earthquake in Nepal stressed the urgent need for such a comprehensive approach. The earthquake caused widespread disruption and heightened various human security threats, necessitating extensive recovery and reconstruction efforts. Remaking of society in this context involves planning and executing processes aimed at improving living conditions for disaster-affected communities through recovery, reconstruction, and restoration. Institutional arrangements are also critical to ensuring long-term resilience and security (Bookchin, 1990; Srinivasan, 2019). The goal is to reduce perceived human insecurities, ultimately restoring or enhancing the living conditions of affected individuals to better or at least pre-disaster levels. This comprehensive approach is essential for promoting sustainable development and ensuring that societies can withstand future risks.

Thus, the operational explanation of remaking of society for this study includes the procedures of planning and execution so as to improve the living condition of the disaster-affected people through recovery, reconstruction, restoration and institutional arrangements. The overall

expectation of the remaking process in this study is revival of the society in such a way that perceived human insecurity becomes lesser, so that the living condition of the affected people becomes better or at least as it was before the disaster.

1.1.6 Interlinkage of Local Governance, Human Security and Remaking of Society

The restructuring of Nepal into a federal state aimed to empower local governments with the authority to handle natural disasters, underscoring the importance of local governance in the remaking process (LGOA, 2017; The Constitution of Nepal, 2015). Schedule 8 of the Constitution of Nepal grants exclusive disaster management powers to local levels. This schedule also outlines various essential societal functions that support human security, such as town policing, local planning, education, health, environmental protection, local development, justice, economic development, agriculture, support for seniors and disabled persons, poverty alleviation, water supply, disaster management, conservation of natural resources, and cultural protection (The Constitution of Nepal, 2015). Therefore, remaking of society disrupted by disasters, such as the 2015 earthquake in Nepal, must align with these responsibilities of local governments. Hence, these responsibilities are encompassed within the broader framework of disaster governance. Effective local governance, characterized by participation, transparency, accountability, and adherence to the rule of law, is crucial for mitigating human security threats and facilitating comprehensive recovery and reconstruction efforts (Burhanudin et al., 2022; Johnston, 2000).

Consequently, the 2015 earthquake in Nepal highlighted the critical interconnectedness of local governance, human security, and societal remaking in the face of disaster-induced displacement and reconstruction challenges. Local disaster governance is pivotal in managing these issues through effective recovery, reconstruction, and ensuring human security. Human security, as defined by Thomas (2000) and Hampson et al. (2002), encompasses protection from threats to fundamental human values such as physical integrity and economic welfare, rooted in sustainable development, human rights, and public good. Ensuring human security is vital for human development, requiring government efforts to meet basic living standards (Leaning & Arie, 2000). Local governments play a crucial role in safeguarding human security, especially during disasters, by integrating policies and engaging communities (Alkire, 2003; Shaw, 2006). Due to their pivotal role, local governments must address accountability issues to prevent human insecurity and underdevelopment (Howe, 2013a).

To effectively integrate human security into local governance, a people-centered approach is necessary, prioritizing public welfare in decision-making (UN, 2009b). This involves community engagement, policy formulation focused on healthcare, food security, shelter, and disaster management, and adequate resource allocation (Gencer, 2017; Putra & Matsuyuki, 2020). Collaboration with social organizations and inclusive decision-making processes further enhance local governance effectiveness (Dzigbede et al., 2020; Lee, 2019). Studies show that locally led disaster responses yield better results, emphasizing the need to enhance local government capacity for effective disaster management (Melis & Apthorpe, 2020; Vij et al., 2020). Despite challenges, successful examples from various countries highlight the importance of operational local disaster plans and community-level interventions (Atkinson, 2022; Dzigbede et al., 2020), that is crucial measure for building resilient and secure communities (Lee, 2019; Putra & Matsuyuki, 2020).

Remarkably, renowned political scientists argued for interlinking social groups, social networks, interest groups and leaders with their interest of public good for effective governance. Emphasizing the government's function in balancing the interests of various groups, Dahl (1961) illustrated government authority's role as a mediator. Governance, as Dahl suggests, is fundamentally about progressing collectively, involving interest groups, elites, masses, and leaders in the decision-making process. Similarly, Putnam (2000) highlights the importance of social capital, defining it as the connections among individuals, social networks, and social norms. These elements are essential for building and sustaining democracy. Thus, effective governance cannot be achieved solely through government authorities. Instead, it requires the active participation of non-state actors such as civil society, community-based organizations, and social capital, which are crucial for addressing local government affairs comprehensively even in case of disaster governance. In sum, the systematic interconnectedness of local disaster governance, human security, and remaking of society is essential for revitalizing communities in the aftermath of the disaster. Effective disaster management at the grassroots level can only be achieved through the integration of these elements, leading to resilient communities.

1.2 Statement of the Problem

Despite the critical importance of disaster governance in ensuring human security and resilient recovery, scholarly research in Nepal has largely overlooked this area within political science. Studies have demonstrated that disasters profoundly impact political systems (Bacon &

Hobson, 2014), necessitating the integration of human security into disaster governance. While researchers have explored disaster governance in countries such as Indonesia (Artiningsih et al., 2016), South Korea (Bae et al., 2016), and Turkey (Çaki & Uzun, 2023), Nepal remains underrepresented in this discourse. Vij et al. (2020) and Vij (2023) emphasized the need for disaster governance in Nepal, particularly in the context of federal restructuring, yet a review of the TUCL's e-library shows that out of 8878 studies in the Faculty of Humanities and Social Sciences between 1999 to May 2024, only fourteen are related to disasters, with none from the political science department (TUCL, 2024). This gap in research is alarming given Nepal's high disaster vulnerability and the crucial requirement for effective governance mechanisms.

Further, the earthquake that struck Nepal in 2015 was a seismic catastrophe that left a profound and lasting impact on the nation. As of 10 March 2021, the data provided by the National Reconstruction Authority (NRA) paints a stark picture of the ongoing challenges stemming from this disaster. Among the figures, there were 1037291 households surveyed, of which 854992 were deemed eligible for grants (NRA, 2021a). It is noteworthy that 95.4 percent of these eligible households signed grant agreements. Furthermore, 99.2 percent of those who signed these agreements received the first tranche of the private housing grant. However, the situation takes a different turn when examining the progress of the third tranche of the grant, which stood at a mere 77.2 percent completion by the end of the fifth year following the earthquake. Even after five years of recovery efforts, less than 70 percent of private houses were fully reconstructed. Beyond residential buildings, the challenges extended to reconstructing other structures as well. Around 20 percent of the schools and more than 30 percent of the higher educational institutions were under reconstruction. Nearly, 12 percent of the health institutions were to be completed. Nearly 30 percent of the cultural heritage and above 9 percent of the public buildings were not finished (NRA, 2020).

The lethargic progress in reconstruction, as outlined above, casts doubt on the effectiveness of the recovery process after the 2015 earthquake. The NRA, established as the dedicated government agency for post-earthquake reconstruction, had the arduous task of enforcing and overseeing these efforts. Regrettably, the reconstruction process has not unfolded as expected, and this has far-reaching implications. In their examination of the responses and resilience exhibited in the wake of the 2015 earthquake, Rayamajhee et al. (2020) uncovered significant challenges facing post-disaster policy approaches in addressing wellbeing-related issues. Similarly, Kotani et al. (2020) emphasized the formidable challenge of rebuilding communities that were uprooted by the earthquake. The social and economic repercussions of the 2015

earthquake have been extensive, affecting people's lives in multifaceted ways (Beirman et al., 2018; Sharma et al., 2018). Moreover, Ponserre and Ginnetti (2019) brought attention to the stark reality that the earthquake rendered many people propertyless, homeless, and landless.

The earthquake's repercussions transcended the physical realm, causing notable shifts in residential and financial statuses (Kotani et al., 2020; Rayamajhee et al., 2020). Alarming observations regarding the deteriorating conditions of disaster-displaced individuals have been made (Popp, 2006; Rayamajhee et al., 2020). Furthermore, Rayamajhee et al. (2020) noted that the earthquake had a profound impact on social dynamics within affected communities in Nepal. Consequently, the significant number of IDPs within Nepal has been a source of concern for authorities (Karki, 2017). Further, research by Lischer (2008) has highlighted that displacements can have a detrimental effect on law and order within society. Thus, the issue of disaster displacement has emerged as a pressing security concern (Cohen, 2004a), presenting severe challenges for both IDPs and the state (Kälin, 2018).

Moreover, numerous challenges related to the wellbeing, security, and protection of affected people persisted. These individuals face issues such as protection, discrimination, access to basic necessities such as food, shelter, healthcare (Karki, 2019; Kotani et al., 2020; Pyakurel & Adhikari, 2015; Rayamajhee et al., 2020; Sharma et al., 2018). A preliminary pilot study has revealed that the restoration of disrupted societies remains inadequately prioritized, leaving displaced persons in a state of distress. While the primary responsibility for addressing these challenges rests with the Government of Nepal (GoN), all stakeholders, including citizens, share a collective responsibility for effective management. National and international agencies, in collaboration with the GoN, have diligently worked to address issues related to this displacement. As the government body for reconstruction, the NRA was tasked with the monumental responsibility of rebuilding infrastructure in the aftermath of the 2015 earthquake. However, despite the continuous efforts of state and non-state actors, the concerns and challenges facing the affected communities persist undiminished.

Furthermore, the preliminary investigations and personal communication with affected individuals have indicated that the predominant focus since the 2015 earthquake has been on physical reconstruction, often at the expense of non-physical aspects, thus weakening the human security of those affected. This emphasis on physical restructuring, despite the suboptimal progress, has left the affected people grappling with unresolved issues. Consequently, the various approaches adopted by local governance entities in addressing human security concerns in the post-2015 earthquake landscape of Nepal have become a topic

in need of rigorous examination. Moreover, it is crucial to assess how post-disaster governance efforts following the 2015 earthquake have influenced the institutionalization of human security governance at the local government level. Furthermore, the contribution of local government initiatives in Nepal following the 2015 earthquake to the process of remaking society represents a key problem requiring comprehensive study. Thus, exploring the impact of local disaster governance in the remaking of society after the 2015 earthquake emerges as a central problem to be investigated.

1.3 Research Questions

In the aftermath of the devastating 2015 earthquake in Nepal, a complex web of challenges and opportunities emerged, prompting the formulation of three pivotal research questions that lie at the heart of this study. Through rigorous inquiry into those questions, this study aspired to provide subtle insights into the intricate dynamics of post-disaster recovery and governance, ultimately paving the way for more effective and inclusive approaches to disaster resilience and remaking of society. Those research questions were as follows:

- (a) What were the different approaches of the local governance in addressing human security concerns after the 2015 earthquake in Nepal?
- (b) How did the post-disaster governance efforts following the 2015 earthquake in Nepal matter the institutionalization of human security governance at the local government level?
- (c) How did the local government initiatives after the 2015 earthquake in Nepal contribute to the remaking of society?

1.4 Objectives of the Study

This research endeavored to achieve three overarching objectives on the basis of the statement of the problem and the research questions thereafter. By pursuing these objectives, the research aimed to shed light on critical aspects of disaster recovery and governance that hold profound implications for the wellbeing and resilience of affected communities. The objectives of the study were as follows:

- (a) To identify the different approaches of the local governance in addressing human security concerns after the 2015 earthquake in Nepal.

- (b) To examine the ways post-disaster governance efforts following the 2015 earthquake in Nepal matter the institutionalization of human security governance at the local government level.
- (c) To analyze the contribution of the local government initiatives after the 2015 earthquake in Nepal to the remaking of society.

1.5 Significance of the Study

The significance of this study is underscored by the profound and enduring impact of the 2015 earthquake on Nepal, a catastrophe that reverberated far beyond physical destruction and left a lasting imprint. The seismic disaster exposed critical gaps and challenges in the realm of post-disaster governance, human security, and societal remaking. As such, this research holds substantial importance in offering a comprehensive examination of the complexities surrounding these issues. By delving into the varying approaches of local governance bodies in addressing human security concerns, this study contributes to a deeper understanding of the decision-making processes and strategies employed by local levels during crises of this magnitude. Furthermore, by assessing the influence of post-disaster governance efforts on the institutionalization of human security governance at the local government level, it sheds light on the capacity of local institutions to safeguard the wellbeing and security of their communities in the face of adversity. Most significantly, this study unravels the contributions made by local government initiatives in the remaking of affected society, offering insights into the transformations that occurred in the aftermath of the earthquake.

Moreover, this research holds practical significance as it can inform policy formulation and implementation in Nepal and potentially in other regions prone to seismic activity and natural disasters. The findings of this study can guide policymakers, government agencies, non-governmental organizations, and disaster management authorities in crafting more effective and inclusive strategies for post-disaster recovery and governance. By focusing not only on physical reconstruction but also on the often-neglected non-physical aspects of human security, this research offers a holistic perspective that can lead to more resilient, responsive, and human-centered approaches. Ultimately, the aim is to contribute to the betterment of the lives of those affected by disasters, enhance their security, and facilitate the remaking of society in a more inclusive and resilient manner. In this context, this study serves as a vital step toward addressing the enduring challenges posed by seismic catastrophes and advancing the understanding of disaster governance and human security in Nepal and beyond.

1.6 Limitation of the Study

This study, while aiming to provide valuable insights into the intricate dynamics of local disaster governance, human security, and societal remaking in Nepal, is not without certain limitations. Most substantial limitation of this dissertation is the context of the study that covers the situation resulted from the 2015 earthquake in Nepal. Another significant limitation of this study is its narrow concentration on local disaster governance within the broader local governance paradigm. Moreover, this narrow focus may restrict the examination of how local governments balance competing priorities and allocate resources in the aftermath of a disaster, hindering a comprehensive understanding of how local governance operates holistically in the face of multifaceted challenges.

Likewise, one notable limitation of this study is its geographic scope. The research is exclusively conducted in the Kavrepalanchowk district, which is one of the fourteen severely affected districts by the earthquake. While Kavrepalanchowk provides valuable insights into the challenges and responses within a particular context, it may not fully represent the diverse experiences and approaches to disaster governance and societal remaking across all earthquake-affected districts of Nepal. The study's temporal boundaries are another limitation as it covers the period from the occurrence of the 2015 Nepal earthquake to the end of March 2021. Given the dynamic nature of post-disaster recovery and governance, focusing on this specific time frame may not capture the long-term effects and changes that could continue to evolve beyond the study's end date.

Similarly, another limitation may be the methods as interviews and observations conducted years after the earthquake may be subject to recall bias and may not fully capture the nuances of the immediate post-disaster responses. Another limitation is exclusion of extraneous variables as it does not encompass the influence of extraneous variables, such as the COVID-19 pandemic, which affected the same earthquake-affected communities. Due to these limitations of this study, the findings and conclusions may have limited generalizability. They may be applicable primarily to contexts that share similarities with Kavrepalanchowk district and the earthquake-affected regions during the specified time period. Attempting to extrapolate the study's findings to other disaster contexts or locations with different characteristics should be done cautiously, considering potential variations in local governance structures, disaster responses, and societal dynamics.

1.7 Organization of the Study

The dissertation is meticulously organized into seven chapters, each serving a specific purpose and contributing to the overall research framework. Chapter 1 is 'Introduction' that provides a foundational overview of the research. It commences with a comprehensive exploration of the background of the study, elucidating the context in which the research is situated, and operationalizing and interlinking the key concepts of this dissertation. Subsequently, it articulates the statement of the problem, delineating the central issue that the study seeks to address. It further formulates the research questions, which serve as guiding inquiries throughout the study. The chapter expounds on the objectives of the study, outlining the research's primary goals and aims. The chapter underscores the significance of the study, emphasizing the importance of the research within the broader academic and practical context. It is followed by an honest acknowledgment of the limitations of the study, shedding light on the scope and constraints of the research.

Secondly, Chapter 2 'Review of the Literature' delves into the existing body of knowledge and scholarship relevant to the research. It begins with an exploration of understanding local governance, human security and remaking of society. This is followed by the review of the theories and models associated with disaster governance, highlighting areas where theoretical development is required. Likewise, the chapter conducts an empirical review, identifying gaps and deficiencies in the current literature that necessitate further investigation. Furthermore, it explores the methodological landscape in review of the methods used in disaster governance related studies, outlining the methods and approaches used in similar research. The chapter concludes by presenting the conceptual framework for the study, providing readers with a structured overview of the research's conceptual foundations.

Thirdly, 'Research Methodology' in Chapter 3 offers a detailed insight into the methodological approach undertaken in the study. It elucidates the variables central to the dissertation. The chapter also includes the intricacies of the research process, encompassing a pilot study, research approach, research design, source and collection of data, area and population of study, sampling technique, research methods and tools, data presentation, analysis, and interpretation. Ethical consideration is also addressed, ensuring adherence to ethical principles throughout the research process.

Next Chapter 4 is 'The 2015 Earthquake and Approaches of Local Governance in Addressing Human Security Concern' that explores into the earthquake's aftermath and explores the

diverse approaches employed by local governments in responding to the disaster while considering human security concerns. The chapter further includes the approaches of the local levels in integrating human security into governance through laws, programs and policies.

Subsequently, Chapter 5 'Post-Disaster Governance and Institutionalization of Human Security Governance' initiating with institutional and legal arrangements for the disaster governance. It further examines the post-disaster institutional practices of the local levels. It further includes the institutionalization of human security governance.

Similarly, Chapter 6 'Local Government in the Remaking of Society' critically examines various facets of the remaking of society in the wake of the 2015 earthquake. It covers topics such as physical reconstruction, perceived human insecurity, remaking of society, and reconstruction pace. Each is analyzed and interpreted to provide a comprehensive understanding of the post-earthquake dynamics. At the end of this chapter, the findings of the whole study are presented followed by the discussion on the key findings.

Finally, Chapter 7 'Summary and Conclusion' serves as the culmination of the research expedition. It contains the summary drawn from the research with the prominent contribution to the body of knowledge. Additionally, it offers some critical areas requiring further research endeavors in this domain. At the end of the study, there are appendices including interview schedule, list of the interviewees, observation checklist, locations for observation, checklist for case study, case studies conducted in the local levels and two tables incorporating laws, programs and plans relating to human security, followed by the extensive list of references utilized in the study.

CHAPTER 2

REVIEW OF THE LITERATURE

As this dissertation has three major concepts, local governance, human security and remaking of society, within its scope, the review of the literature part has tried best to incorporate the related literatures. This chapter first involves the conceptual reviews of the key ideas. Then after, it reviews academic discussions including theoretical discussions and researches on the related issues from different places of the world and Nepal as well, and presents research gap at the end of empirical review. Then, it presents theoretical underpinnings of various theories, models and frameworks related to the study of causes and consequences regarding disaster governance. Lastly, there is methodological review followed by methodological plan for this study. These reviewed literatures have particularly covered the history, evolution, empirical studies, theoretical viewpoints and methodological analysis associated with those key variables in the succeeding subheadings.

2.1 Understanding Local Governance, Human Security and Remaking of Society

2.1.1 Conceptualizing Local Governance

The term ‘governance’ is widely debated in the studies of political science. Fukuyama (2013) defines governance as a government’s capacity to establish and enforce rules and deliver services, focusing on the procedure, capacity and output necessary for effectively managing public affairs. Hence, governance refers to the practical political activity of continuously changing and conditional nature (Bevir, 2011). Moreover, governance has been a major notion in contemporary social studies (Zumbansen, 2012). The concept of governance is very old, but has been recently revitalized with various meanings (Rhodes, 1997; Vymětal, 2007). UNESCAP (2009) sees the idea of governance as old as the development of humankind, which means “the process of decision-making and the process by which decisions are implemented or not implemented” (p. 1). Here, exercising the authority remains at the hub of the process. According to the UNDP (1997), governance is the use of economic, political, and administrative power to manage a country’s affairs at all levels. It includes the systems, processes and institutions through which citizens express their interests, exercise rights, fulfill obligations, and resolve conflicts.

Similarly, in 1994, World Bank defined governance as “the method through which power is exercised in the management of a country’s political, economic and social resources for development” (World Bank, 1994, p. xiv). Significantly, various formal and informal actors

come within most of the definitions however government remains the major one. Thus, governance refers to maintaining coordination and coherence amongst assorted actors (Pierre, 2000). Negating the reduced number of the actors in the structure, Kooiman (1999) defines governance as “the pattern or structure that emerges in a socio-political system as a common result or outcome of the interacting intervention efforts of all involved actors” (p. 258). Governance entails government together with other spheres including public policies, institutions, a system of economic relationships, or non-governmental sector in statecraft (Smith, 2007). Evolution of the concept of governance has been shifting from conventional to maximized role of the non-state actors. Those actors in rural areas may include “influential land lords, associations of peasant farmers, cooperatives, NGOs, research institutes, religious leaders, finance institutions political parties, the military” (UNESCAP, 2009, p. 1). Accepting as the shifting idea, Rhodes (2007) opines that governance refers to an evolving process by which society is governed. He further viewed “governance broader than government, covering non-state actors” (p. 4). Thus, governance today involves a degree of interdependence between governments and non-state actors (Smith, 2007).

As the definition by UNDP suggests the exercise of authority at all levels, local governance lies in the same basket of governance, but relatively in smaller geographical area of a state. More particularly, UNDP (1997) defines local governance as the efficient and effective services within an area-based framework such as urban areas, metropolis and so on. In this regard, Crawford (1999) emphasizes in living together in a community and having adequately intimate interaction of the people for local governance to happen. Here, local governance as a broader concept refers to the creation and implementation of collective actions at the local level. It involves formal local government institutions, government hierarchies, informal norms, networks, community organizations, and neighborhood associations. These entities shape citizen interactions, collective decision-making, and the provision of local public services (Shah & Shah, 2006).

Thus, local governance has a wider perspective on objectives, process, structure, and engagement of the actors to achieve the collective interests. In particular, local governance includes democratic participation of the stakeholders in local development through local governments (Kharel, 2019). According to Shah and Shah (2006), local government refers to specific institutions established by national or state constitutions, legislation, or executive orders to provide services to a specific geographic area. These institutions are created by national constitutions, state constitutions, higher-level legislation, provincial or state legislation, or executive orders.

Hence, local government is a leading actor of local governance constituted by a law of a country. Likewise, local governments are directly elected and have defined geographical boundaries (Hampton, 1991). The local governments generally have a specific population, defined surface area, legal status and authority, a continuous organization and capacity to collect taxes determine budget (Humes & Martin, 1961). Later, Ndreu (2016) presented the main features that local governments have: statutory status, autonomy to decide about local taxes, right of local community participation in decision making process, autonomy, common interests, capacity of delivering public services, accountability and development. Considerably, the preamble of the LGOA of Nepal purpose of local governance is to "...deliver efficient and quality services by ensuring people's participation, accountability and transparency, ... as per the principle of the rule of law and sustainable development through proportionally inclusive and just distribution of the fruits of democracy" (LGOA, 2017, p. 1).

2.1.2 Good Governance

Good governance has been a hot topic of political debate and social demand. Due to the emerging issues in the societies, governments of most of the states encounter challenges during dealing with the people's concerns. Today, governance systems "seem to be less effective in the face of pressing problems and are criticized for being unaccountable to citizens" (Taylor, 2016, p. 2). In 2009, UNESCAP concludes that "very few countries and societies have come close to achieving good governance in its totality" (p. 3). Even though viewed as relative concept, good governance remains as a substantial idea most societies have been striving to achieve. Presently, good governance is regarded as systematic instrument for recognizing successes and failures (Taylor, 2016).

Presenting good governance as the desirable apparatus for the public administration, Addink (2019) accepts it as about providing optimum benefits to the society by averting maladministration and minimizing corruption. Similarly, Johnston (2000) defines good governance as "legitimate, accountable, and effective ways of obtaining and using public power and resources in the pursuit of widely-accepted social goals" (p. 2). To define the concept simply, good governance is participatory, consensus-oriented, accountable, transparent, responsive, effective, efficient, equitable, inclusive, and follows the rule of law. It minimizes corruption, considers minority views, and ensures the vulnerable are heard in decision-making, addressing both present and future societal needs (UNESCAP, 2009).

From the legal perspective, Nepal has enacted good governance act in 2008 incorporating wide range of the provisions on how quality of governance ought to be ensured. Looking into the

Nepali perspective, preamble of the Good Governance Act (2008) states the definition, concept and characteristics of good governance as making public administration pro-people, accountable, transparent, inclusive, and participatory. It emphasizes rule of law, corruption-free and efficient administration, financial discipline, and effective public resource management to provide speedy and cost-effective public services. It aims to enforce citizens' rights to good governance and transform the administrative system into a service delivery and facilitation mechanism.

Explaining good governance, UNESCAP (2009) characterized eight major pillars or ingredients as participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and rule of law. Similarly, Castro (2019) condensed the definition of good governance on the study as it creates such circumstances where principles of properness, transparency, participation, accountability, and effectiveness are acknowledged. In the same way, naming it “good democratic governance”, Council of Europe (2008) presented twelve principles of good governance as participation, representation, fair conduct of elections; responsiveness; efficiency and effectiveness; openness and transparency; rule of law; ethical conduct; competence and capacity; innovation and openness to change; sustainability and long-term orientation; sound financial management; human rights, cultural diversity and social cohesion; and accountability. Consistently, Vymětal (2007) summarizes the characteristics of “good” or “proper” governance as participatory, accountable, responsible, transparent and effective. Presenting the attributes of good local governance, Roberts and Lindfield (2013) proposed some features similar to the components of good governance.

Markedly, preamble of the Constitution of Nepal, 2015 highlights “good governance” as one of the key purposes and writes “...pass and promulgate this Constitution ... in order to fulfil the aspirations for ... good governance...” (The Constitution of Nepal, 2015, p. 2). Similarly, the constitution includes “to guarantee good governance by ensuring the equal and easy access of the people to the services and facilities...” within the “policies of the state” (The Constitution of Nepal, 2015, p. 30). Later in 2016, *National Security Policy* incorporated good governance within the matters of strategic interests and concerns of the state as “enhancement of good governance and effectiveness of public administration” (p. 9). The same *National Security Policy* (2016) apparently accepted good governance as the prominent state action to empower state mechanism for combating the challenges and threats to national security through “good governance and development of administrative system; and good governance for good of the people” (p. 15). Significantly, LGOA stated the aspect of good local governance

in the form of oath as “...always thinking the good of the country and the people, without fear, biasness, prejudice or ill-will...” (LGOA, 2017, p. 92).

Moreover, the features of good governance at the local level are extensively preferred in any society. Thus, good governance is considered as the prerequisite constituent of modern state (Addink, 2019). Furthermore, good governance need to be deemed as an ideal for promoting quality lives (Johnston, 2000; Nag, 2018). Uniformly, Rahim (2019) considers good governance as the dynamic source in any governing system of offering quality outcomes for achieving social goals. Though “idea of good governance has to face various types of challenges in the developing as well as underdeveloped societies” (Nag, 2018, p. 122), the social objective of quality life is essentially unachievable unless the system of governance lacks the characteristics of good governance.

2.1.3 Local Governance in Nepal

Local governance system in Nepal has been changing as per the changes in political system since the ancient times. Institutionalizing such governance practices at the grassroots level is exercised through local governments (Acharya, 2018b). Thus, looking simultaneously into the local governance and local government in Nepal is essential for wider understanding. In ancient Nepal, small autonomous principalities called *Janapad* such as *Videh* and *Kapilvastu* were in practice (Nepal, 1983). Chaudhary (2019) stated that the system of collective decision making by the elite group of people called *Panchayat* (group of five people) was followed for law and order in the society. The governance in that period was guided by the utopian idea and moral education. Similarly, local governance was exercised through local governments named *Thum* (area level local body) and *Panchali* (lowest local body) in *Kirat* era. The elected chairperson of the local body was called *Paantimyanga* (Kharel & Tharu, 2019).

Thereafter, decentralization to some extent could be observed in *Lichchhavi* period in Nepal (Chaudhary, 2019). In *Lichchhavi* era, local governance was practiced through three layers of rules called *Gram* (village committee), *Tol* (block) and *Drank* (higher populated area), where *Talawami* was assigned as authority chief (*Talukdar Adhikari*) to look after the affairs in each designated village (Regmī, 2019). Comparably, local units were classified as *Bhukti*, *Bishaya* and *Gramkeshtra*. In Malla period, *Panchali* and *Panchaasamuchchaa* were the traditional practice for local affairs (Bhattarai & Pasa, 2021; Kharel, 2019; Kharel & Tharu, 2019).

After the unification by King Prithivi Narayan Shah, the small principalities were merged and centralized political system of governance practiced, whereas local sociocultural practices like

Kipat in eastern hills were left as they were (Chaudhary, 2019). During Rana regime, oligarchic system of governance continued for 104 years until it was ended up by the 1950 revolution. The democratic period of 1950-1960 remained with political transition with new constitution conceptualizing separation of power in the governance system of the country. During this time, *Gram Panchayat Block and Tribhuvan Gram Bikas Samiti* were formed as local bodies (Kharel & Tharu, 2019). In 1961, King Mahendra overthrew the elected government and enforced *Panchayati* system of government.

At the same time, *Gadi, Gauda and Goshwara* system was demolished and replaced by District, City and Village *Panchayat*, which remained milestone for decentralization and local governance in Nepal (Kharel & Tharu, 2019). In the period, 14 zones and 75 districts as administrative units of the country were advanced. Later, District Development Committee (DDC), Municipality and Village Development Committee (VDC) Act was enacted in 1971, which further institutionalized the concept of local government and governance in Nepal. *Panchayat* was found to be less favorable period from the perspective of people's participation in governance (Bhattarai & Pasa, 2021).

In 1990, multiparty democracy with constitutional monarchy was reestablished by the people's movement and the Constitution of Kingdom of Nepal, 1990 was declared. Soon after, separate DDC, Municipality and VDC Act were legislated in 1991 instituting the local bodies for local governance in Nepal. Later, local bodies found thorough lawful powers for managing resources in local level by the laws Local Governance Act, 1999 and its Regulation, 2000. Local governance initiatives in this time were relatively better than before. However, local governance was powerless in terms of authority and resource utilization (Chaudhary, 2019) and weakened due to the armed conflict regardless of those initiatives (World Bank, 2014).

Following the promulgation of the Constitution of Nepal in 2015, local governance system has been restructured together with the state. The smaller VDCs and Municipalities are merged to form Municipalities, Rural Municipalities, Sub-Metropolitan Cities and Metropolitan Cities. Advocating the implementation of federalism through the new constitution in Nepal, Chaudhary (2019) claimed that it addresses diversity and enrich sub-national areas through local governance. Similarly, the constitution entails the principles of decentralization like devolution of powers, institutional mechanism and people's participation at local level. Likewise, LGOA (2017) urges the participation of the stakeholders like community organizations, private sector, civil society, media, political parties including major three branches of local government namely legislative, executive and judiciary in planning and

application of activities. Further, local government today in Nepal has three approaches that are leadership, public service delivery and economic development (Chaudhary, 2019).

State restructuring in Nepal has brought ample of opportunities for local governance, where the mounting challenges for the smooth implementation of federalism through local governments remain underlining concern. The mechanism for administrative service delivery in the local levels have been more accessible though there is need of capacity building on roles and responsibilities of the local representatives, and they have been facing challenges regarding poor infrastructure, financial and human resources (Dhital, 2018; Kharel & Tharu, 2019). Likewise, Chaudhary (2019) found that there is conflict between the elected leaders and bureaucrats, the leaders have low level of expertise and education. Similarly, lack of understanding of local governance and technically sound human resources is leading to low budget expenditure capacity (Acharya, 2018a; Chaudhary, 2019).

Significantly, Acharya (2018b), Chaudhary (2019) and Dhital (2018) noticed the local governments are still poor in formulation of the laws. As the major challenge, a diagnostic study of local governance in Nepal found that devolution of powers in the local levels has heightened the chances of corruption (Chaudhary, 2019), where bribery is identified as a facilitating way for receiving public services from the local government (Asia Foundation, 2017). Thus, elected leaders and civil service personnel both need to be committed to accountability and transparency in local government (H. P. Dhungana, 2019).

Focusing on local governance rather than merely local government is crucial for this study. The federal restructuring of Nepal, aimed at sustainable political, social and economic development, has transformed power dynamics, transferring significant authority to local governments. Moreover, this modification encompasses the shift on the roles and interactions of various actors, including informal institutions and elites at the grassroot level focusing on their geographic and social entities. Local governance provides a more comprehensive framework for understanding the complex processes of disaster recovery and societal remaking. Fukuyama (2004) emphasized the importance of state capacity and institutional quality in achieving sustainable development. By focusing on local governance, this study can assess not just the formal structures and capacities of local governments, but also the informal networks, social capital, and community engagement that are essential for effective disaster management and recovery.

Similarly, Huntington (1968) underscored the significance of institutional development and the balance of power among different societal actors. In the context of Nepal's federal

restructuring, it is vital to examine how local elites, civil society, and community organizations interact with formal governmental institutions. This approach allows for a more nuanced understanding of power dynamics at the grassroots level and their impact on disaster recovery efforts. Moreover, the emphasis on local governance aligns with the need for wider participation and constructive engagement of all concerned actors in disaster-related affairs. Effective governance involves not only the execution of policies by local governments but also the active involvement of citizens and community leaders in decision-making processes. This participatory approach is crucial for ensuring that recovery efforts are inclusive, context-sensitive and responsive to the needs of affected populations.

Thus, studying local governance rather than merely local government provides a holistic perspective on the processes of recovery and reconstruction in post-earthquake Nepal. It allows for an analysis that includes the roles of various actors, institutional quality, and participatory mechanisms, which are essential for achieving sustainable and resilient communities. This approach is supported by the insights of political scientists like Fukuyama and Huntington, who highlight the importance of institutional capacity and the interplay of societal forces in shaping effective governance.

2.1.4 Understanding Human Security

Threats of famine, war, flood, earthquake, diseases and so on remain in the society since time immemorial. Alkire (2003) nicely presented these perils as ancient phenomenon of human insecurity found in ancient writings across the world. Talking about the perception of security, it has conventionally been the concern of state, where arms and armed forces were heavily used to achieve it. This narrow interpretation of the concept of security contains the protection of territory from external aggression or safeguarding national interests (UNDP, 1994). In early 1990s, emphasis on guarding state boundaries with weapons including devastating nuclear munitions took turn with the fall of Soviet Union and thereafter end of Cold War. On this, Benedek (2016) claims that the focus shifted from national or state security to security of the people and individual person after the collapse of Berlin wall in 1990s. Thus, continued advocacy of United Nations (UN) on the vital freedoms of human beings since 1948 caught a major pathway to human security in 1994. The publication of Human Development Report (HDR) in 1994 by United Nations Development Program (UNDP) conceived the concept of human security that focuses on the individual, individual wellbeing and livelihood, which can be taken as the paradigm shift (Benedek, 2016).

Formally, UNDP (1994) introduced the concept of human security by defining it as “safety from such chronic threats as hunger, disease and repression, and protection from sudden and hurtful disruptions in the patterns of daily life – whether in homes, in jobs or in communities” (p. 23). Thus, human security entails the wellbeing of the individual’s everyday life. Progressively, the Government of Canada officially recognized human security as an international political agenda, defining it as the protection of people from violent and non-violent threats. Human security means being free from pervasive threats to rights, safety, and lives. It involves preventive measures to reduce vulnerability and risks, and remedial actions when prevention fails (Government of Canada, 1999).

Similarly, Leaning and Arie (2000) broadly discussed human security as essential for sustainable human development. It arises from the social, psychological, economic, and political aspects of life, safeguarding individual survival during crises or deprivation, supporting the ability to achieve basic living standards, and fostering positive group cohesion and continuity over time. Likewise, King and Murray (2001) emphasized that individual wellbeing is the primary concern of human security. They defined human security as the expected number of future years a person will live above the threshold of ‘generalized poverty’, which occurs when someone falls below the standard in any key area of wellbeing. Their definition is described as “simple, rigorous, and measurable.” More broad definition of human security comes from the CHS (2003) on human security as protecting the essential aspects of human lives to enhance freedoms and fulfillment. It involves safeguarding fundamental freedoms from severe and widespread threats, leveraging people’s strengths and aspirations, and establishing systems - political, social, environmental, economic, military and cultural - that provide the foundations for survival, livelihood, and dignity.

Consequently, protection and empowerment are identified as the major strategic concerns for dealing with threats to human security. Here, preserving and expanding individual’s vital freedoms is the key interest of human security. Hence, safeguarding people from acute threats and empowering them for continuing their lives are the requisites (CHS, 2003). Authors presented ‘freedom from fear’, ‘freedom from want’ and ‘freedom from indignity’ as three major components of human security. The first means protecting individuals from violence against their security and physical integrity that may occur from external states, or acts of state against its citizen, or acts of one group or individual against another group or individual (CHS, 2003; UNDP, 1994). Second refers to freedom from poverty by satisfying individual’s fundamental needs, and by protecting economic, social and environmental aspects of life and livelihoods (CHS, 2003; UNDP, 1994). Third implies the advancement of better quality of life

and welfare enabling individuals and community to develop their capabilities and make choices of their interest (CHS, 2003; UN, 2016; UNDP, 1994).

The human security as the comprehensive approach has five underlying principles: “people-centered, comprehensive, context-specific, prevention-oriented, and protection and empowerment” (UN, 2016, p. 7). Previously, the HDR presented broad seven categories namely “economic, food, health, environmental, personal, community and political security” (UNDP, 1994, pp. 24–33) under which the threats to human security can be grouped. Further, UNDP (1994) offered four essential characteristics of human security that “it is a universal concern, its components are interdependent, it is easier to ensure through early prevention, and it is people-centered” (pp. 22–23). As the widely adopted concept, human security does not replace ‘state security’ or ‘national security’, rather compliments it. Since, human security focuses on individuals and communities rather than the state. It addresses threats not traditionally seen as state security issues, involves a broader range of actors, and aims to both protect and empower people to safeguard themselves (CHS, 2003).

Thus, the concept of human security provides the states with a broader perspective on safeguarding individuals and community through proactive and preventive measures. Development of this concept does not have prolonged chronicle, which is presented by UN (2014) as “genesis and evolution of human security” in a paper. The genesis of the term was coined by UNDP in HDR 1994 by highlighting human security as “new dimension” of security debate. Subsequently, the Human Security Network (HSN) and the United Nations Trust Fund for Human Security (UNTFHS) were founded in 1999 for promoting human security, where Government of Japan has contributed for the second one. Shortly in 2000, then Secretary-General Kofi Annan appealed the international community for better responses to prevailing and emerging challenges by furthering the agendas of “freedom from fear” and “freedom from want” at the United Nations Millennium Summit. Remarkably, the Commission on Human Security (CHS) was established in 2001 with the aim of expanding the concept as an operational tool and outline a concrete action plan for its implementation. The Commission published its notable final report ‘Human security now’ in 2003. Shortly, the Human Security Unit (HSU) was established in 2004 with the major intention of mainstreaming human security in actions (UN, 2014).

In 2005, three components of human security “freedom from fear”, “freedom from want” and “freedom to live in dignity” were emphasized by then Secretary-General Kofi Annan. Likewise, Informal Thematic Debate on Human Security was organized in 2008 by the Office

of the President of the General Assembly that focused on the notion of human security, its multidimensional scope and its added value. Later in 2010, the Report of the Secretary-General on Human Security was published drawing the principles and approach for applying human security in practice. Similarly in 2011, the Office of the President of the General Assembly convened an Informal Thematic Debate and Panel Discussion on Human Security. Significantly in 2012, the second Report of the Secretary-General on human security was released proposing a common understanding on human security. On 10 September, Member States of UN agreed on a common understanding on human security and ensures that its implementation is rooted in the Charter of the United Nations through the adoption of the General Assembly resolution 66/290 entitled *Follow-up to Paragraph 143 on Human Security of the 2005 World Summit Outcome*. Likewise, a high-level event on Human Security was summoned on 8 May 2013 in New York that discussed on the added value, lessons learned from implementing the human security approach, and integrating human security approach into the work of the United Nations and beyond (UN, 2014).

The debate on human security in Nepal has short narrative. In the unfolding study on human security of trafficked persons in Nepal, NIDS (2005) underlined poverty, caste discrimination, discrimination against female, lack of adequate property right, lack of educational opportunities, limited access to basic health care, underrepresentation of women in the political process as the significant threat to human security. Soon after, Baral (2006) has initiated the debate of nontraditional security indirectly discusses the issues relating to human insecurities. Similarly, Bharadwaj et al. (2007), in their book, concluded human security vital for “collective wellbeing and a peaceful and prosperous society” (p. 63) and conducted ample discussion on community security. On the other hand, Kumar (2008) claimed that human insecurity of “dignity of citizenry” emerged in Nepal due to misgovernance by its political leaderships. Significantly, Bhattari and Cave (2009) came with an edited book, in which Bhattarai (2009) wrote a chapter arguing for critical necessity of providing good governance, protecting basic rights and needs of citizen.

Afterward, discussing the nontraditional security challenges in Nepal, Khatri (2012) indicated on the requisite quality governance for ensuring human security. In the same book, Upreti (2012) showed the chances of exploiting the poor and marginalized people during by politicians owing to human insecurities. Prominently, Upreti et al. (2013) came with an edited book that debated on the issues regarding human security in Nepal as the pertinent one. Within this substantial volume, eleven chapters by different authors have discussed “human security” and associated issues like “poverty, social protection, food security, health, migration, climate

change, environmental security and political security”. In this significant work, they made a remarkable effort to discuss the increasingly changing security dynamics of Nepal (Upreti et al., 2013). Similarly, Khawas (2014) concluded the study article arguing that human security in Nepal is frequently challenged by the contemporary environmental insecurities. Likewise, Khatiwada (2014) continued highlighting the importance of human security perspective stating that poverty, exclusion, inequality, high unemployment disrupt people’s building blocks for survival, livelihoods, and dignity. Recently, a study pointed out the inevitability of proactive and coordinated disaster management strategies to bring the human insecurities down in Nepal (NPC & UNDP, 2020).

After the promulgation of the Constitution of Nepal in 2015, human security has been officially endorsed as an agenda of everyday concern. Significantly, the Constitution of Nepal, 2015 highlights human security as one of the key policies of the state by including “to guarantee the overall human security system” (The Constitution of Nepal, 2015, p. 29). Schedule 8 of the constitution offers the list of local level powers that directly and indirectly incorporates the features of human security into local governance in structure. Some of those provisions that integrates the human security perspective are town police, local plans, education, health, environment protection, local development, justice system, local economic development, agriculture and animal husbandry, management of senior citizens, persons with disabilities and the incapacitated, poverty alleviation, water supply, disaster management, conservation of watersheds, wildlife, mines and minerals, and cultural protection (The Constitution of Nepal, 2015, pp. 200–201). Soon after, *National Security Policy* (2016) emphasized guaranteeing equality, freedom, welfare and just system stating “attainment of all-round human security, social good-will, tolerance and cohesion” (p. 7) within its bases for guiding National Security Policy, and included “to prioritize human security and to guarantee Nepali peoples freedoms from threats and poverty” (p. 24) inside its working policies.

2.1.5 Natural Disaster and Remaking of Society

Prince (1920) is attributed for conducting through disaster study (as cited in Perry, 2018, p. 3) pursuing the study in Department of Political Science, Columbia University. The author specially focused on defining ‘catastrophe’ claiming that frequency of disasters grows every year. Further, Prince (1920) claimed that disasters can be natural or human made that have prolonged effect on communities with obvious records of social change. Later in 1932, Carr contextualized the term disaster that was discussed by Prince. The disaster study was significantly “accelerated by the founding of the Disaster Research Center (DRC) in 1963”

(Perry, 2018, p. 3). Further, Drabek (1986) presented categories of disaster after extensive review of literatures as “(1) technological and man-made hazards; (2) natural disasters; and (3) internal disturbances, e.g., acts of terrorism” (Drabek, 1986, p. 7). More significantly, Quarantelli (1986) presented a paper with substantial discussion on the definition and conceptualization of the term ‘disaster’. Further, Quarantelli (2000) outlined the defining characteristics of disasters as follows: sudden onset events, significant disruptions to collective routines, adoption of unplanned actions to cope with the disruption, unexpected changes in social dynamics, and threats to valued social elements.

Markedly, Mayner and Arbon (2015) looked at numerous literatures and offered a precise definition of disaster as “the widespread disruption and damage to a community that exceeds its ability to cope and overwhelms its resources” (p. 24). Similarly, National Institute of Disaster Management (NIDM) India defines a disaster as a natural or man-made event that abruptly disrupts the regular functioning of society, resulting in significant loss of life and property. The extent of damage is such that the usual social and economic resources are insufficient to restore normal conditions afterward (NIDM, 2020). Widely prescribed definition comes from United Nations that describes disaster as a significant disturbance to the operations of a community or society caused by hazardous events, influenced by factors such as exposure, vulnerability, and capacity. This results in various types of losses and impacts, including human, material, economic, and environmental (WHO, 2020).

Coming to Nepali legal framework, Disaster Risk Reduction and Management Act (DRRMA) characterizes disaster as “a natural or non-natural disaster causing a threatening situation in any place that results in loss of lives and properties and makes severe impacts on livelihood and the environment” (DRRMA, 2017, p. 3). Here, all the definitions have common characteristics of disaster as these can be natural or non-natural, causes disruption of the functioning of the society, results in loss and severe impacts. As we observe, the individuals and the societies worldwide have been being affected by several sorts of incidents since the human origin. Most of such incidents can be confronted and managed by the affected ones, whereas few lack the capability demanding external support for relief and revival from the effects. Thus, daily life interrupting incidents become disasters once the affected persons or societies require external assistance to overcome.

Likewise, different writers broadly classify disasters into ‘natural’ and ‘non-natural’ or ‘human-made’. Hoffman (2019) categorizes disasters into ‘natural’ and ‘technological’ ones. The further claims that disasters of any kind are the results of faulty deeds of humankind, and

we are responsible for creating the hazards and the calamities (Hoffman, 2019, p. 3). Differently, Perry (2018) opined that natural disasters have natural drivers to occur the events. Likewise, DRRMA illuminates natural disasters as events such as snowfall, hailstorms, avalanches, glacial lake outburst floods (GLOFs), heavy rainfall, droughts, floods, landslides, soil erosion, inundation, storms, cyclones, cold waves, heatwaves, lightning, earthquakes, volcanic eruptions, wildfires, or similar occurrences resulting from natural causes (DRRMA, 2017). Oxford advanced learner's dictionary defines the term 'remake' as 'make (something) again or differently' or 'to make a new or different version of something' or 'to make something again' (Hornby, 2020). Similarly, as per Collins English dictionary, 'remake' means 'the act of making again or anew' (O'Neill et al., 2018).

Discussing on remaking society, Shaw (1971) observes it as a procedure of "...construct a society which is radically different from, and better than, the one we have now" (p. 306). Moreover, Shaw (1971) found remaking of society as the scientific way of changing society where a specific problem is attempted to solve through planning, social engineering and some institutional change. Consequently, remaking incorporates the complete process of finding solutions to contemporary social issues. Later, Hare (1976) wrote a play entitled *Fanshen* meaning 'to turn over' on the process of making new world in China for landless peasants where remaking of society is characterized as "turning over the established order and introducing an alternative system" (Akdoğan, 2016, p. 3).

In the significant work, Bookchin (1990) indicates the necessity of social reconstruction that benefits nature and humanity. The author advocates remaking society in such a way that can yield for the forthcoming generations through sustainable path of green future. Furthermore, remaking of society requires ordinary standard of life, continuing increment of real earnings for sound family life and reducing poverty (Thompson, 1992). Differently, Ward (2002) accepts replacing and rearranging some of society's previous actors for remaking society. Moreover, such process demands rearrangement, renaming existing entities and realigning into new configurations, where people and things are placed in conceptual categories (Ward, 2002, p. 234). Likewise, Schulz (2010) visualizes the process of remaking society by transforming through emphasis on the socially constitutive effects, capacity building with practical experience of empowerment and harmony. Similarly, Jeffery et al. (2014) viewed remaking of society as reimagining a better life through addressing issues, solving problems or generating alternatives for contributing to wellbeing from the lack of their basic requirements. In addition, Srinivasan (2019) dreams remaking of society more suitable for all kind of creatures to survive.

Recently in the study, Fahm (2020) relates ‘remaking society’ to building a society better with enhanced prosperity, reduced poverty and social endurance.

Here, this study examines the destruction and subsequent remaking of society following the 2015 earthquake in Nepal. It focuses on the involvement of both state and non-state actors in the relief and reconstruction efforts. The matter of argument is whether societies are being built better as per the spirit of remaking of society. For this study, “remaking of society” encompasses the planning and execution processes aimed at enhancing the living conditions of disaster-affected individuals through recovery, reconstruction, restoration, and institutional arrangements. The overarching goal of this remaking process is to revive society in a manner that reduces perceived human insecurity, ensuring that the living conditions of those affected are improved or at least restored to their pre-disaster state.

2.2 Review of the Theories and Models Associated with Disaster Governance

This subchapter creates a theoretical framework for the purpose of studying, exploring and analyzing disaster governance and remaking of society. This review helps to conceive broad understanding on the theories, models and frameworks that are associated with resettlement after displacement. These theories can be used to inform, explain and escort the remaking of society after disaster thus making it the integral segment of disaster governance. Disaster governance signifies the procedures, systems, policies, strategies, institutions and frameworks that state and non-state actors use to prepare for, respond to, and recover from disasters. It also denotes the institutional arrangements, management and decision-making processes that are put in place to manage disasters and their impacts.

While discussing the disaster governance, the gravity of the reviews revolves around the forced displacement due to disasters. Concerning forced displacement, the issues related to refugees are concurrently associated with the IDPs. The prevalence of deplorable forced displacement in Europe was given a way out with the 1951 Refugee Convention and its 1967 Protocol. At that period, internal displacements were overlooked even though the courses and sources of origin for both were similar in nature, where distinction is the refugees cross the state border. Thus, need for the international instruments for the IDPs’ protection was must in the 1990s as the estimated number of the IDPs was 25 million, almost double the number of refugees in 1995 (ECOSOC, 1995). Unlike refugees, there is still lack of legally binding instruments for the protection of the internally displaced persons. Guiding principles were adopted in 1998 extended the hope of protection of the displaced persons. Cohen (2004b) sees the significance of the academic studies on internal displacement for its healthier resolutions.

Lately, internal displacement entered academic discourse simultaneously with the concern of the international community for the protection of mounting number of IDPs in nineties. UN Secretary General (UNSG) Boutros Boutros-Ghali decidedly prioritized for addressing the internal displacement and appointed Francis Mading Deng in 1992, at the beginning of the term of office, the first Representative of the Secretary-General on Internally Displaced Persons. UNSG Boutros-Ghali affirmed the internal displacement as the “global crisis” while proposing Deng the post of Representative (Deng, 2001, p. 141). The issues of internal displacement were well-discussed by the first representative and thereafter. Highlighting the crisis, UNSG Kofi Annan rightly raised the issue with the statement “Internal displacement is the great tragedy of our time. The internally displaced people are among the most vulnerable of the human family” (UNOCHA, 2004).

While discussing the theories relating to governance human displacement, one should remember the landmark involvement of David Warwick Brokensha. In 1963, Brokensha (as cited in Scudder, 2005, p. 31) identified the need for ‘a sociology of resettlement’ focusing on the resettlement of the displaced persons by the Volta Dam Project in Ghana. Subsequently, various works of Thayer Scudder in late 1970s and early 80s brought a light on the issues of involuntary resettlement. Scudder came with the Four-stage Model of Resettlement for the successful resettlement of those displaced due to the developmental projects (Scudder, 2005; Scudder & Colson, 1982). In 1990s, Michael M. Cernea highlighted the impoverishment risks that the displaced persons usually go through. Cernea developed the impoverishment risks and reconstruction (IRR) model advocating the practice of risk reduction measures (Cernea, 1995, 2004). In 2002, McDowell came with elaborated model focusing on the sustainable livelihoods of the displaced persons to confirm successful resettlement process.

Hence, the concept of disaster governance has been discussed in academia, emphasizing the multi-dimensional nature of managing disasters. Tierney (2014) highlighted the social, political and economic dimensions of disaster governance, pointing out the interconnectedness of these factors in effectively managing disasters. Tierney further argued that disasters are not only physical events but also social constructs influenced by existing societal vulnerabilities and inequalities. Similarly, Duda et al. (2020) underscored the significance of informal aspects of disaster governance, such as local knowledge, community networks, and grassroots organizations, which are often overlooked in formal governance structures but are crucial for effective disaster response and recovery. Additionally, authors like Comfort et al. (2010) and Pelling (2003) have argued that the politics and governance of disasters are deeply embedded in power relations and resource allocations, affecting how risks are managed and who benefits

from disaster mitigation efforts. This focus on the informal aspects of governance highlights the critical role of local governments in fostering resilience and ensuring that disaster management strategies are inclusive and equitable. The following are such theories, models or frameworks that have been developed to discuss, describe and explain disaster governance directly or indirectly.

2.2.1 Elite Analysis Theory

Disaster governance involves multiple decision-making processes in all phases of disaster management. Some institutions, individuals or groups may have influential role during taking those decisions, which is studied through the mirror of elite analysis theory in disaster governance. This theory advocates that disaster governance is not only a procedural or administrative process, but rather a political one, shaped by the interests and actions of powerful actors called elites like political leaders, bureaucrats, corporate leaders, and other influential individuals. These players may have different priorities and interests than the general public.

One of the key theorists of elite analysis theory, Barkun (1986) focused on the elites' role on shaping disaster governance and how disasters are used to consolidate their power and influence, often at the expense of marginalized communities. He further claimed that disasters offer opportunities for elites to proclaim own legitimacy and authority, and to justify the imposition of new policies and regulations, that often prioritizes the interests of the powerful neglecting the necessities of marginalized groups of people. Likewise, Brunsma et al. (2010) focused on the analysis of the complex social and political factors that influence disaster governance, including the ways in which elites and power structures shape disaster response and recovery efforts.

Further, Clarke (2006) emphasized in the work on studying the social and organizational aspects that shape the public perceptions of risk and vulnerability. He argued that supremacy of elites in decision-making and resource allocation forms the disaster response and recovery efforts in disaster governance. Discussing some worst cases of terror and catastrophe, Clarke (2006) moreover claimed that the media and other cultural institutions often subsidize to a sense of elite panic and fear, which can lead to overreaction and misguided strategies.

Similarly, Tierney et al. (2001) studied the character of political elites in determining disaster policy and response, including the influence of interest groups and political ideology. Additionally, they explored the concept of "disaster myths," which are common

misapprehensions about disasters that can lead to ineffective policies and inadequate preparedness efforts. They concluded that disasters are not the equalizers affecting all members of society equally, but disasters often aggravate existing societal and economic variations (Tierney et al., 2001).

In a slightly different study, Schnaiberg (1980) debated on the decisive role of elites in formulating environmental policies, focusing on the behavior of the economic and political elites overruling the interests of marginalized communities. The author prospected the idea of “treadmill of production” referring to profit-generating ideas of capitalist economies often at the cost of social welfare and sustainable environment, which may prioritize economic interests over ecological worries thus weakening the preparedness and response to disasters (Schnaiberg, 1980). Likewise, studying the politics of disaster management, Sylves (2008) examined the series of factors manipulating disaster policies, including economic interests, political beliefs and the moves of the elites. The author further argued that disaster policies often represent the interests of the authoritative groups of the society and can be used as political tools by the elites trying to fulfill their benefits and by the policymakers to rationalize their policy choices (Sylves, 2008). Elite analysis theory suggests that some individuals, group of individuals or organizations known as elites have influential role on shaping disaster policies and decision-making through their access to administrators, institutions, funding agencies, expertise and information, that can affect disaster response and recovery efforts neglecting the larger portion of the population. This can result in unequal distribution of resources profiting the elites from the strategies more than it ought to as elites can have dissimilar priorities than the disaster affected groups, such as marginalized people or impoverished individuals.

In the context of disaster governance, elite analysis theory can be useful to comprehend how power dynamics and decision-making structures impact disaster response and recovery efforts. This theory is also applied to understand the way powerful players shape disaster policies and strategies, thus providing a framework for realizing the ascendancy of influencing factors and decision-making arrangements on disaster governance. This theory can be supportive for recognizing prospects to encourage more equitable and inclusive approaches to disaster response and recovery, and to find possible power disparities in disaster governance, that can have substantial consequences for vulnerable people.

2.2.2 New Institutionalism Theory

The new institutionalism theory advocates that institutions are dynamic and continuously evolving entities that can concurrently pose constraints and prospects for decision-makers,

including the capacity of influencing the interactions of the individuals and organizations. The theory “is not a single animal but rather a genus with a number of specific species within it” (Peters, 2019, p. 2). Its dynamic and comprehensive features make the theory preferred by authors. The theory is principally concerned with the construction of policy by governing institutions with the purpose of behavioral control (Carrigan & Coglianese, 2011). It primarily focuses on the activities and behaviors of the agencies, individuals and societies, offering a framework to “address a common set of problems from a unified perspective” (Immergut, 1998, p. 25). It provides a shared framework to see the problems to reach to the public good.

Discussing the new institutionalism theory, Steinmo (2001) claimed that organized politics is impossible without institutions as institutions, either formal with constitutional rules or informal with cultural norms, are merely rules in broader sense and are the they are the basis of the political behavior. Thus, institutions provide the foundations for governing all political and social conduct. In fact, institutions define the qualifications of the political participations, frame the political strategies and actors, and influence the desirable and likely actors consequently structuring the politics (Steinmo, 2001, p. 570). In the study, Przeworski (2004) precisely offered two propositions of the new institutionalism theory: firstly, the significance of institutions was emphasized, arguing that they play a crucial role in shaping norms, beliefs, and behaviors, consequently impacting outcomes. Secondly, the endogeneity of institutions was highlighted, asserting that their structure and operation are determined by the circumstances in which they arise and persist.

Further, Przeworski (2004) argued the institutions that gives some definite outcomes are viable within the specified conditions as the institutions are shaped by those conditions and the institutions only convey the causal effects of those conditions. Therefore, new institutionalism is a theoretical framework used to study how formal and informal institutions shape decision-making and behavior in organizations and society. In the context of disaster governance, the theory can be useful to comprehend the ways formal and informal rules and norms, and institutional settings guide efforts of disaster response and recovery. Working on the common-pool resources, Ostrom (1990) focused on examining how institutions can expedite or hamper collective actions, emphasizing the critical significance of the local institutions and community-based governance in managing common resources. Similarly, Ostrom (1990) emphasized on adaptive and resilient local institutions for effective disaster management, examining withing the framework of new institutionalism. Likewise, Boin et al. (2021) focused on the need of interaction and collaboration among institutions and leadership for determining the response of the organizations and societies to crises.

Therefore, concept of crisis management becomes a social process, making it more than a technical exercise involving diverse actors and institutions interacting. Here, the institutions possess tremendous value in offering guidance to those interactional responses to disasters through the rules and norms (Boin & Christensen, 2008). Developing a theoretical framework for analyzing the dynamics of institutional change, Cunningham (2014) emphasized the important role of formal and informal institutions in forming situations of cooperation and conflict. The author further argued that power dynamics can influence the responses of the institutions and communities, and the distribution of that authority can impact the equity and effectiveness (Cunningham, 2014).

Similarly, Latour (2004) contended that disasters are the consequence of multifaceted social and technological structures, where power, politics and institutions shape the communities' responses to disasters. Focusing on the development of the institutional arrangements in the context of welfare states, Thelen (1999) recommended constructing adaptive and flexible institutional arrangements to handle changing circumstances. Recognizing the gravity of institutional memory and learning, the author argued that the historical evolution of institutions and institutional change can have substantial implications to their disaster response capabilities (Thelen, 1999). Likewise, Levi-Faur (2012) concentrated the study on the role of regulatory organizations in shaping social and economic outcomes. Thus, it becomes important to understand the institutional structures, frameworks and processes that influence disaster governance. The rules, norms and regulatory institutions have greater role on shaping policy outcomes. Arguing for the regulatory governance, Ansell et al. (2016) strongly suggested for a regulatory approach to disaster management that is responsive, proactive, flexible and adaptive to changing circumstances.

As a theoretical framework, new institutionalism focuses on the way institutions influence behavior and decision-making. In the context of disaster governance, new institutionalism can offer an outline to study the roles of formal and informal rules, protocols, norms, procedures and arrangements in disaster response and recovery efforts. Various governmental and non-governmental institutions, groups and individuals can work under an established protocol in the aftermath of a natural disaster. For example, National Emergency Operation Center (NEOC) and National Disaster Risk Reduction and Management Authority (NDRRMA) in Nepal, and Federal Emergency Management Agency (FEMA) in USA are the formal institutions playing major role in managing disasters. The theory also identifies the worth of informal institutions like social norms, culture and power dynamics, that have the power to shape the behavior of the performers engaged in disaster governance, including bureaucracy,

community leaders, and other organizations involved in disaster response. Particularly, community-based organizations with their own informal norms, culture and rules have very important role on providing relief to the affected people.

The theory also realizes the consequences of power and politics in forming institutional behavior, which can influence the decision-making process, resource allocation and distribution of social benefits. The framework highlights the need to understand the underlying power dynamics and interests that shape institutional behavior in order to promote more effective and equitable disaster governance. The theory also offers a valuable outline for considering the ways institutions and institutional structures shape disaster governance, thus providing decision-makers, policymakers and practitioners the opportunities to identify and endorse more effective, efficient and equitable strategies for disaster response and recovery.

2.2.3 Human Security Perspective

In 1994, *UNDP Report on Human Development* brought a conceptual turn on defining security. The notion of security has been defined narrowly for long time as “security of territory from external aggression, or as protection of national interests in foreign policy or as global security from the threat of a nuclear holocaust. It has been related more to nation-states than to people” (UNDP, 1994, p. 22). Today, individuals as the people have been the hub of all activities of the state and non-state actors (Howe, 2013b). Consequently, paradigm shift “from an exclusive stress on territorial security to a much greater stress on people’s security” and “from security through armaments to security through sustainable human development” have been urgency of the day (UNDP, 1994, p. 24).

In the same way, Benedek (2016) claims that human security perspective has supersede all other concepts due to its holistic nature, and uniting the freedom from fear and freedom from want. Discussing on the conceptual framework for human security, Alkire (2003) argued that the issues of everyday life like hunger, diseases, livelihood, shelter have been of paramount importance for people. Symmetrically, Tadjbakhsh and Chenoy (2007) opined that security threats today have changed paradigm to weaken human development aspect of the people. In 2010, Nishikawa found similar sorts of human security threats in Southeast Asia. Likewise, Nepal as a country suffering from poverty and unemployment, human security challenges associated with basics like food, shelter, livelihood, health are crucial (Bhattarai, 2013; Carlton, 2013; Upreti et al., 2013).

As per the UN (2009b), human security principles and approaches are people-centered, multi-sectoral, comprehensive, context-specific, and prevention-oriented. This framework emphasizes inclusivity and participatory methods, empowering individuals and communities to define their needs and act as change agents. It promotes dialogue among various sectors to ensure coordinated responses and assesses the overall impact on human security. A holistic approach is adopted, considering the wide spectrum of threats and capacities, and developing multi-sectoral responses. Context-specific strategies require an in-depth analysis of local situations, focusing on threatened freedoms and rights, and identifying concrete needs to create appropriate solutions. Prevention-oriented measures identify and address root causes of risks, threats, and hazards, emphasizing preventative responses through protection and empowerment frameworks.

UN (2012), through its resolution, accepts human security as an approach to assist states “in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people” (p. 1). Issues in today’s intricate society are complex requiring joint efforts of state and non-state actors for solutions. For addressing such broad range of complications, UN (2016) found human security approach a multidimensional analytical framework which is useful to assess, develop and implement integrated responses.

Discussing on the theoretical and practical aspects of human security, UN (2009) presented the human security principles and approaches, that were further advanced in detail (UN, 2010a). Human security seeks to tackle challenging security situations by using a collaborative, responsive, and sustainable approach by prioritizing principles such as centered on people, involve multiple sectors, are comprehensive, tailored to the specific context, and focused on prevention. To achieve this, human security employs a protection and empowerment framework. Therefore, each principle is vital to the human security approach and must be incorporated into any human security program design. To effectively apply the human security approach, it is necessary to conduct two types of assessments. Firstly, a comprehensive evaluation of the vulnerabilities and capacities of the affected community(ies) is essential. Secondly, an assessment of the strategies required to prevent and mitigate the reoccurrence of insecurities is crucial. By conducting both assessments, it becomes possible to understand the interplay between threats, vulnerabilities, capacities, and strategies in a more effective manner. UN (2009) presented the human security strategies incorporating the required parameters as shown in the table 2.1.

Table 2.1***Examples of Strategies and Capacities Needed for Addressing Human Insecurities***

Human security components	Strategies to enhance protection and empowerment	Capacities needed
Economic security	<ul style="list-style-type: none"> ▪ Assured access to basic income ▪ Public and private sector employment, wage employment, self-employment ▪ When necessary, government financed social safety nets (SSN) ▪ Diversify agriculture and economy 	<ul style="list-style-type: none"> ▪ Economic capital ▪ Human capital ▪ Public finance ▪ Financial reserves ▪ Diversified agriculture and economy
Food security	<ul style="list-style-type: none"> ▪ Entitlement to food, by growing it themselves, having the ability to purchase it or through a public food distribution system 	<ul style="list-style-type: none"> ▪ Diversified agriculture and economy ▪ Local and national distribution systems
Health security	<ul style="list-style-type: none"> ▪ Access to basic health care and health services ▪ Risk-sharing arrangements that pool membership funds and promote community-based insurance schemes ▪ Interconnected surveillance systems to identify disease outbreaks at all levels 	<ul style="list-style-type: none"> ▪ Universal basic education and knowledge on health-related matters ▪ Indigenous/traditional health practices ▪ Access to information and community-based knowledge creation
Environmental security	<ul style="list-style-type: none"> ▪ Sustainable practices that take into account natural resource and environmental degradation (deforestation, desertification) ▪ Early warning and response mechanisms for natural hazards and/or man-made disasters at all levels 	<ul style="list-style-type: none"> ▪ Natural resource capital ▪ Natural barriers to storm action ▪ Natural environmental recovery processes ▪ Biodiversity ▪ Indigenous/traditional practices that respect the environment
Personal security	<ul style="list-style-type: none"> ▪ Rule of law ▪ Explicit and enforced protection of human rights and civil liberties 	<ul style="list-style-type: none"> ▪ Coping mechanisms ▪ Adaptive strategies ▪ Memory of past disasters
Community security	<ul style="list-style-type: none"> ▪ Explicit and enforced protection of ethnic groups and community identity ▪ Protection from oppressive traditional practices, harsh treatment towards women, or discrimination against ethnic/indigenous/refugee groups 	<ul style="list-style-type: none"> ▪ Social capital ▪ Coping mechanisms ▪ Adaptive strategies ▪ Memory of past disasters ▪ Local NGOs or traditional organisms
Political security	<ul style="list-style-type: none"> ▪ Protection of human rights ▪ Protection from military dictatorships and abuse ▪ Protection from political or state repression, torture, ill treatment, unlawful detention and imprisonment 	<ul style="list-style-type: none"> ▪ Good governance ▪ Ethical standards ▪ Local leadership ▪ Accountability mechanisms

Note. The source of the table is *Human security in theory and practice* (UN, 2009b, pp. 15–16), https://www.undp.org/content/dam/turkey/docs/news-from-new-horizons/issue-41/UNDP-TR-HSHandbook_2009.pdf

Working on the development of defined extent of human security, the Human Security Report Project came with the Human Security Index (HSI) first in the Human Security Report 2005: War and Peace in the 21st Century and refining later in Human Security Report 2009/2010 (Human Security Center, 2005; Human Security Report Project, 2011). The report offered a range of specific indicators within HSI to measure different dimensions of human security

consisting economic, food, health, environmental, personal, community and political security, also including ranking of countries on the basis of HSI scores (Human Security Center, 2005). Later, subsequent report discussed the strengths and limitations of the index as a tool to measure human security (Human Security Report Project, 2011).

The Human Security Index (HSI), as developed by both the Human Security Center (2005) and Human Security Report Project (2011), includes seven key components: economic security, food security, health security, environmental security, personal security, community security, and political security. The economic security index measures access to basic resources like food, housing, and income. The food security index assesses the availability, accessibility, and affordability of food. The health security index evaluates the availability and accessibility of healthcare services and the impact of diseases. The environmental security index gauges exposure to environmental hazards and mitigation measures. The personal security index tracks protection from physical violence, including crime, conflict and abuse. The community security index measures community resilience to and recovery from stresses such as natural disasters, conflict, and economic downturns. Lastly, the political security index assesses access to political rights and freedoms, that includes expression, association and peaceful assembly.

The HSI may incorporate the country-specific indicators as all the indicators may not be available elsewhere. The HSI can also adopt good modern indicators (Hastings, 2013). Thus, HSI represents composite sets of parameters (Martin, 2022) as comprehensive as possible in order to make the results reliable. Discussing on the challenges of the HSI, Bajpai (2000) emphasized on making it valid and reliable through constructing cross-nationally and cross-temporally so that human security can be measured. The researcher further claimed that HSI is an objective tool for measuring human security that needs to be complemented with some other methods such as public opinion survey so that social reality can be interpreted adequately. The author presented five possible uses of HSI as “developing a social early warning system, focusing attention on problem areas, redefining national and international policy priorities, setting national and international standards, and generating new social scientific knowledge” (Bajpai, 2000, pp. 55–56). Focusing on the significance of HSI, Koundouri and Dellis (2022) recommended for further research on probing interrelationship between 169 targets of sustainable development goals and human security measures. Forming a more specific HSI, Hastings (2009) presented three key components in the index including various indicators, which was later offered as an enhanced version (Hastings, 2011, 2013). Hastings (2011) presented an example of similar indicators in HSI USA Version. Later, Hastings (2013) presented a refined index and named it global HSI version 2, that is as shown in the table 2.2.

Table 2.2***Data and Component of Global HSI Version 2***

Input data indicator fields	Components	Index
Income resources in the pocket of typical people: - GDP per capita at purchasing power parity - Income equality	Economic Fabric Index	H u m a n
Protection from financial catastrophe: - Foreign exchange reserves (percentage of imports) - External debt percentage of GDP - Current account balance percentage of GDP		
Health-care delivery financing		
National savings rate		
<<Wish list: better indicators of “money in the person’s pocket”, poverty, unemployment, underemployment, income equality etc. >>		
Environmental Vulnerability Index	Environmental Fabric Index	S e c u r i t y
Environmental Performance Index		
Greenhouse gas emissions per capita		
Population growth rate 2010-2050 <<Wish list: better indices on outcomes, vulnerabilities with respect to environmental disasters and on delivery of environmental protections to people, communities >>		
Literacy rate	<i>Education and info empowerment</i> Social Fabric Index	
Connection index: - Telephone fixed lines per capita - Mobile telephone accounts per capita - Internet users per capita		
Press Freedom Index <<Wish list: press Effectiveness Index >>		
Gender Gap index <<Wish list: indices on race, ethnicity, religion, age, “disability” issues >>	<i>Diversity</i> Social Fabric Index	
Global Peace Index	<i>Peacefulness</i> Social Fabric Index	
World Prison Population List		
Political Terror Scale		
Percentage of people undernourished	<i>Food security</i> Social Fabric Index	I n d e x
Percentage of people below local poverty index		
Food imports compared to exports and GDP		
Percentage of population food insecure		
Percentage of productive land per capita		
Percentage of change in productive land <<Wish list: a better developed/ documented discussion, indicator on food security >>		
Life expectancy at birth	<i>Health</i> Social Fabric Index	
Percentage of life expectancy that is unhealthy		
Percentage of population using improved water source		
Health outcome equality <<Wish list: better indicators on malnutrition, overconsumption- including over and under-intake of calories, sodium, fat, cholesterol, carbohydrates etc., a better indicator of access to healthy lifestyle, and a separate one for access to medical care >>		
Political stability, no violence	<i>Governance</i> Social Fabric Index	
Control of illegal corruption		
Legal corruption		
<<Wish list: better indicators on governance outcomes for all the people >>		

Note. The index is presented by Hastings (2013, p. 69) in the work “The Human Security Index: Pursuing enriched characterization of development”.

Slight differently, in the special report, UNDP (2022) presented index of perceived human insecurity incorporating three dimensions and twelve subdimensions as shown in the table 2.3. The parameters within the index are adopted from the waves 6 of 2010–2016 and 7 of 2017–2020 of the World Values Survey (UNDP, 2022). The table shows that the subdimensions in the list are touching the practical aspects of people’s daily life.

Table 2.3

The Index of Perceived Human Insecurity

Weights			Freedom from:		
Dimensions	Subdimensions		Want	Fear	Indignity
(1/3)		Fear of violent conflict			
	(1/3)	War			
	(1/3)	Civil war			
	(1/3)	Terrorist attack			
(1/3)		Socioeconomic insecurity			
	(1/5)	No cash income (experience over last 12 months)			
	(1/5)	No access to needed medicines or treatment (experience over last 12 months)			
	(1/5)	Not enough food to eat (experience over last 12 months)			
	(1/5)	Worried about giving children a good education			
	(1/5)	Worried about losing/finding job			
(1/3)		Personal and community insecurity			
	(1/4)	Incidents of insecurity in neighbourhood (robbery, enforcement abuse, racist behavior, alcohol on the streets, drug sale)			
	(1/4)	Felt unsafe from crime (experience over last 12 months)			
	(1/4)	Changed behavior because of insecurity (carrying money, mobility at night)			
	(1/4)	Overall insecurity in neighbourhood			

Note. The index is presented by UNDP (2022) in the special report on human security entitled “New threats to human security in the Anthropocene: Demanding greater solidarity”.

Today, human security perspective has been a policy framework for most of the governments in the world. Some countries like Canada and Japan have adopted the human security as the foundation and guiding theory for governance (Koundouri & Dellis, 2022). Thus, human security perspective becomes critical and multifaceted conceptual framework that provides the guiding principles, approaches and strategies to implement. Overall goal of this notion spins around the wellbeing and safety of the individuals and societies. The indicators and parameters incorporated in the HSI are meant to objectively measure the degree to which the individuals and communities are secure from a range of threats, including terrorism, poverty, crime, human

rights violations, disaster risk, and economic disruptions. The HSI is being used to measure the degree of human security prevailing in different countries, and it can be utilized to regional, country or local level as well (Bajpai, 2000; Hastings, 2013). On the other hand, the Index of Perceived Human Insecurity can be utilized to measure the degree of professed human insecurity at the individual and community level.

2.2.4 Some Other Theories Connecting to Disaster Governance

Here are some other theories briefly discussed that can be connected to the disaster governance affairs:

(a) Cernea’s Impoverishment Risks and Reconstruction (IRR) Model: In 1990s, Michael M. Cernea introduced IRR model to systematically deal with the issues of forced displacement due to development projects. The model purposes resettling displaced populations through avoidance of major impoverishment risks during displacement (Cernea, 1995, 2004). Cernea (2004) argues that IRR model is a conceptual framework for recognizing and examining the integral risks of impoverishments that displaced people suffer. The IRR model is developed to describe the challenges during displacement and resettlement in general (Aboda et al., 2019).

Furthermore, Cernea (2004) enlisted essential impoverishment risks that the displaced people are exposed to as: landlessness; joblessness; homelessness; marginalization; food insecurity; education loss; increased morbidity; loss of access to common property resources; and community disarticulation. While suffering from these risks, the displaced persons may simultaneously be exposed to some or all of them resulting in a crisis. The IRR model focuses the displacement related governance that mainly concerned with the social and economic content of the forced displacement and reestablishment process. Cernea suggests that preventing or overcoming the impoverishment risks of displacement requires targeted risk mitigation. To deal with these impoverishment risks, the author further recommended the counter-risk strategies namely: land-based reestablishment; reemployment; house reconstruction; social inclusion; adequate nutrition; better health care; restoration of common assets; and community reconstruction. The model diagnoses the impoverishment risks and compliments the procedure of socioeconomic reestablishment of the displaced.

(b) Complexity Theory: Complexity theory posits that systems are composed of independent individuals acting as a unified whole. Kauffman (1996) suggests that life thrives at the “edge of chaos”, balancing order and unpredictability, emphasizing the importance of understanding system components. In 2002, Bar-Yam describes complexity theory as the study of collective

behaviors arising from interrelated system parts, identifying adaptive processes for effective behavior in a complex world. The author further argues that understanding complex systems' dynamics is crucial for effective governance, including disaster response and management (Bar-Yam, 2003; 2004). Likewise, Tierney (1999) emphasizes the need to understand social, economic, and political factors shaping disaster vulnerability, viewing complexity theory as a framework for comprehending these dynamic interactions. The author argues for adaptive governance systems to respond to disasters' changing nature, criticizing traditional disaster management approaches as inadequate (Tierney, 2012).

Similarly, Etkin (2015) applies complexity theory to disaster governance, focusing on the interactions between system components and the causes and consequences of disasters. The writer advocates a systems approach to address the complex factors contributing to disaster risk (Etkin, 2016). Perrow (2011) asserts that understanding the interactions within a system is crucial for effective disaster governance, claiming traditional approaches are insufficient and advocating a holistic, system-based approach (Perrow, 2014). Furthermore, Mitchell (2011) explains that complexity theory can reveal hidden patterns and order in disasters, aiding in understanding their randomness and unpredictability. Disasters are not merely cause-and-effect events but products of interrelated complex systems. Complexity theory argues that disasters are beyond full anticipation or control, highlighting the need for flexible and adaptive disaster governance systems to respond to complex, dynamic situations. This theory offers a lens to comprehend disaster dynamics, decision-making challenges in complex systems, and how governance systems can be designed to address this complexity effectively.

(c) Crisis Management Theory: The derivation of crisis management theory is credited to the discipline of organizational management. The theory primarily emphasizes the timely decision-making and effective coordination. Focusing on the response phase of the disaster, this theory highlights the need of rapid and effective managerial and communication skill through learning from past crises to improve future responses.

One of the prominent theorists of crisis management theory, Sutcliffe (2018) underscored the importance of building resilience in organizations and communities that can adapt to changing circumstances and recover from disasters, and the need for effective coordination and communication among stakeholders during a crisis. Previously, Weick and Sutcliffe (2007) wrote on a comprehensive framework for understanding and managing unexpected events, where they studies cases from a range of industries and organizations to explore how high-performing organizations navigate unexpected challenges and emerge stronger as a result.

Similarly, Pearson and Mitroff (1993) argued that effective crisis management is possible through such leadership that is adaptive and has ability to build trust and credibility with stakeholders. Examining the role of leadership in managing crises, Pearson et al. (2007) stressed on the need of organizations engaging in continuous learning and improvement, where characteristics and competencies of an effective crisis leaders count a lot.

Likewise, Weick (1995) wrote on the sense-making processes during a crisis arguing that effective crisis management requires a deep understanding of the context and the ability to quickly adapt and respond to changing circumstances, which involves gathering and interpreting information in rapidly changing and uncertain circumstances. In the same way, Stern (2003) accentuated the significance of political leadership in setting the tone for disaster response, and the need for effective coordination among different levels of government and between government and non-governmental organizations. Similarly, Boin et al. (2016) focused on the value of institutional capacity and resilience in responding to disasters, and the need for governance systems that can adapt to changing circumstances and uncertainties. Discussing extensively on the social and organizational dimensions of crisis management, Clarke (1999) emphasized the importance of understanding how organizations and communities respond to disasters, and the need for effective coordination and communication among responders.

(d) Forced Displacement, Sustainable Livelihoods and Impoverishment Risks

Framework: Following Cernea's IRR model developed from the study of the development-induced displacement, McDowell (2002) offered an extensive methodological model for the analysis that is "forced displacement, sustainable livelihoods and impoverishment risks framework". In fact, this model is the combination of the IRR model and the elements of the sustainable livelihoods approach (Sapkota & Ferguson, 2017) which incorporates the concept of disaster governance. Elaborating McDowell's framework, Sapkota and Ferguson (2017) argued that the sustainable livelihoods as the outcomes rely on multiple sets of factors, including impoverishment risks, livelihood strategies that operate in specific political and social context, livelihood resources, and institutional processes.

Similarly, institutions as the hub of system of the subprocesses interacting with resources to enforce the strategies. McDowell (2002) argues that the uprooted people can only be relieved with the sustainable livelihoods which is possible only through precise institutional intervention to ensure the access of the displaced to the multiple resources. Discussing on the impacts of the forced displacement, McDowell (2002) sees the concepts of sustainable

livelihoods and impoverishment risks compatible for the study of disaster-induced displacement. The framework is appropriate in order to understand the impacts of disasters and forced displacement on the livelihoods of affected populations (McDowell, 2002). As per the framework, the outcome of the whole process should be sustainable livelihoods.

(e) Network Theory: Network theory emphasizes robust cooperation and collaboration among various actors - civil society, interest groups, private agencies, government institutions, and non-governmental players - for effective disaster governance (Aldrich, 2012; Granovetter, 2017). This theory suggests that building operative networks among these actors enhances disaster response through extensive networking, cooperation, and collaboration. It highlights the need for strong, flexible partnerships among involved organizations, including local communities, through effective communication, decision-making, and sharing of roles, resources, and information to adapt to contingencies. Aldrich (2012), through fieldwork in disaster-affected areas like Haiti and Japan, explored the role of social networks in recovery and resilience. The writer argued that societies with strong social networks and trust have a higher capacity to recover from disasters, achieving quicker recovery and building resilience through high social capital and networks. Granovetter (1977) found that associations among people play a significant role in circulating resources and information for disaster response and recovery. The author concluded that individual connections within networks are critical for meeting disaster-related goals. Later, Granovetter (2017) emphasized that social norms, influence, and expectations are crucial in determining collective behavior.

Burt (2007) highlighted the role of individuals who connect multiple groups within social networks, easing communication and coordination during disasters. The writer argued that gaps in these networks, or structural holes, provide opportunities for accessing resources and information, facilitating synergized disaster responses. In an earlier study, Burt (2004) saw the value of social capital and networks in spreading good ideas and innovation, impacting disaster governance. Ostrom (1990) argued that decentralized networks of actors are more effective in managing common resources than centralized government control. The author emphasized collective effort, with a polycentric system of authority in decision-making, mutuality, trust, and communication to manage complex situations. This suggests the need for strong bonds and collaboration among various stakeholders, including government agencies, non-governmental organizations, and local communities, to meet the challenges of disaster response and recovery.

Klinenberg (2003) studied the social dimensions of disasters, focusing on social resilience and networks' importance in mitigating disaster effects. The author found that traditional

centralized, top-down disaster response approaches are often insufficient, advocating for a decentralized, networked approach emphasizing partnership, communication, and local experiences. Quarantelli (1988) highlighted the importance of considering societal and structural aspects impacting disaster response and recovery, arguing that social dynamics, including relationships and networks, can either hinder or facilitate disaster response activities. Network theory, in the context of disaster governance, can offer a framework for examining the complex interactions among diverse actors involved in disaster management, emphasizing the value of strong social networks and decentralized, collaborative approaches.

(f) Political Economy Theory: Political economy theory examines the interplay between politics and economics, exploring how these systems influence each other in shaping power and wealth distribution in society (Cutter, 2018; Klein, 2014). This theory seeks to understand how political, economic, and social factors affect decision-making and outcomes, providing insights into sustainable and equitable economic development. In disaster governance, political economy theory highlights how disasters are not merely natural events but are influenced by political, economic, and social dimensions. Cutter (2001) argued that disasters can exacerbate or mitigate existing inequalities, emphasizing the importance of equitable power and resource distribution. Cutter (2018) further asserted that understanding these contributing factors is essential for effective disaster management, particularly for addressing the needs of marginalized communities.

Likewise, Klein (2014) argued that disasters can create opportunities for capitalism through privatization and deregulation, often exploiting vulnerable populations. The author suggested challenging dominant economic paradigms by prioritizing social justice, sustainability, and equity in disaster responses. Swyngedouw (2010) noted that disasters can be opportunities for economic and urban restructuring, with significant social and political implications. Likewise, Oliver-Smith (1990) contended that social, economic, and cultural factors often cause disasters, which can either reinforce or challenge existing power structures. The author emphasized that vulnerability to disasters is shaped by power structures, social inequalities, marginalization, and environmental factors.

Similarly, Klinenberg (2003) used a political economy lens to evaluate how systemic social inequalities contributed to the impact of a heatwave on low-income individuals lacking access to healthcare and social networks. This perspective highlights that disasters result from broader political and economic processes, including neoliberal policies, dismantling public services,

and deindustrialization. Addressing these underlying inequalities is crucial for building more equitable and resilient societies (Klinenberg, 2003; Smith, 1996).

Political economy theory can be applied to disaster governance to understand how political and economic interests shape disaster preparedness, response, and recovery decisions. It provides a framework to predict how power and resource distribution affects ability of the societies and individuals to prepare for and recover from disasters. By exploring how disasters create new economic opportunities or exacerbate existing inequalities, political economy theory offers valuable insights for practitioners and policymakers.

(g) Rational Choice Theory: Rational choice theory is often applied in political science, economics and sociology to describe an extensive range of behaviors of individuals like criminal or social activities, consumer or seller choices, voting or election behavior. The theory assumes that persons' actions are the product of their rational calculations on the basis of complete information for maximizing own benefits and their self-interests (Boudon, 2003; Jevons, 1866; Wilson, 2000). The individuals' choices are self-motivated owing to their self-interest, desires, utility and satisfaction by assessing the costs and benefits. Rational choice theory can be applied in disaster governance that assumes that decision-making of institutions, individuals and groups will depend upon their motive of maximizing their self-interest through a cost-benefit analysis, including disaster preparedness, response and recovery efforts.

Explaining the decision-making processes of public officials and their rational calculations, Wilson (2000) argued that public officials are rational actors who make decisions based on their self-interest, goals, and constraints shaped by various factors like politics, economics or legal limitations. The researcher applied the rational choice insights to the study of disaster governance and concluded that government agencies make decisions about disaster affairs based on their analysis of risks, benefits and costs. Challenging the general assumption that individuals act in their self-benefits, Ostrom (1990) argued that individuals and communities can create their systems of disaster governance through collective action and social norms.

Similarly, people can make illogical decisions regarding disasters due to its nature of uncertain and risky. In this regard, Slovic's (2000b) study showed that people's tendency of becoming risk aversion can result in irrational decision-making, thus influencing disaster preparedness to recovery. Consequently, policymakers and concerned agencies may fail to take required steps mitigate and respond disasters. Differently, Slovic (2000a) argued that people's perception of risk can be shaped by the various psychological and social factors such as personal experiences,

cultural beliefs and media coverage, that can influence the decision-making of policymakers occasionally leading to misguided disaster responses.

In the context of disaster governance, this theory can be useful to study the ways individuals and organizations prioritize their responses to disasters based on their costs and benefits. The theoretical framework provides a lens to see how people make choices in circumstances where there is ambiguity or inadequate information about a disaster. The framework would predict that investment on disaster preparedness measures will be prioritized if concerned institutions think that the benefits outweigh the expenses. However, the theory is criticized for its assumption that individuals often act for their self-interests. In fact, information about disasters can be inadequate or untrustworthy, and it is difficult to quantify the costs effectiveness of all the alternatives. Moreover, decision-making in the context of disasters may also be influenced by other factors like social norms, beliefs and emotions.

(h) Rawlsian Theory of Justice: In 1971, John Rawls presented the “general conception of justice” claiming that social values - liberty and opportunity, income and wealth, and the bases of self-respect - need to be equally distributed to all who are entitled to (Rawls, 2005). Arneson (2011) names Rawls’ theory ‘egalitarian vision of justice’ while examining the shift in the conception of justice after John Rawls. Furthermore, Rawls advocated firstly on guaranteeing fully adequate equal political liberties, and this is called ‘equal liberty principle’. Secondly, Rawls (2005) opines that social and economic inequalities should be based on the ‘principle of fair equality of opportunity’ and ‘difference principle’, where the first focuses on equally ensuring to positions and offices open to all under conditions of fair equality of opportunity; and second focuses on the utmost benefit of the underprivileged members of society (Arneson, 2011; Rawls, 2005).

From the Rawlsian school of thought, displaced persons in the society are those within the risk of impoverishment who are equally entitled to the adequate political liberties as other members of the state. Impoverished uprooted people need to be prioritized while distributing essential resources by the state where ‘difference’ is accepted. Distributed otherwise becomes not only injustice but also re-impoverishing the displaced persons and their families.

Similarly, Rawls (2005) conceptualized ‘justice’ for those impoverished displaced persons as the best interpretation and assigning the rights and duties, and the appropriate division of social advantages (p. 10). Depriving people from income, wealth and social goods can generate new inequalities as per Rawls. Rawls’ theory of justice contributes on the planning and execution of the management schemes for the greatest advantage of the displaced persons in the process

of relief, protection and return or resettlement. Displaced persons as the individuals of the state need to have the assurance that their problems have solutions, fairness prevails and social benefits will justifiably be distributed. Otherwise, it can be detrimental to the social harmony that becomes the apparent source of insecurity. This is the conception of justice that ensures ingredients of human security in the society and can be linked to disaster governance.

(i) Scudder-Colson Model: In 1960s and 70s, immense number of populations was obliged to resettle due to the large-scale development projects. Scudder and Colson introduced a model for the successful resettlement process of those voluntary resettlers. Later, Scudder and Colson (1982) refined the four-stage model for the involuntary resettlers who were forced to leave their original place of residence. Each displaced community traverses through four stages to accomplish the successful resettlement process namely: planning and recruitment, adjustment and coping, community formation and economic development, and handing over and incorporation (Scudder, 2005, pp. 33–41; Scudder & Colson, 1982).

Moreover, Scudder (2005) calls the first stage ‘lengthy pre-resettlement period’. Planning and recruitment stage demands the involvement of affected people in the planning and decision-making process focusing on the development opportunities for the displaced and host community. The second stage starts with the instigation of displacement followed by amplified psychological tension. In third stage, actual displacement takes place, and the restructuring of social and economic system of the displaced people can be observed. At the final stage, second generation of the resettlers takes over the community system and they are thus incorporated in the political economy of the country. Sapkota and Ferguson (2017) observed that resettlement programs are sustainable for the next generations of the displaced persons when they smoothly pass through all the four stages. Evidences showed that the model can hardly be applied in cases of involuntary resettlement (Sapkota & Ferguson, 2017). This modal offers a prior glimpse of disaster governance on the part of resettlement of the displaced population.

2.2.5 Theoretical Gap

The theoretical literature reviews in the preceding subheadings specify that the authors have crucial contribution for explaining the key concepts relating to disaster displacement and disaster governance in particular. These reviews presented theories, models and frameworks associated with disaster governance that provide a theoretical outline in studying disaster governance, including remaking of society after disaster. Further, it became beneficial for understanding the theories and frameworks explaining disaster displacement and of course

disaster governance thereafter. In this regard, Scudder-Colson model offered a foundation concept for the resettlement of the provided voluntary resettlers, refining the four-stage model for the involuntary resettlement of the displaced population.

Similarly, Cernea's IRR model offered broader perspective for the management of the displaced people through the systematic analysis of the impoverishment risks and their combating strategies. Likewise, complexity theory provided a framework to understand the dynamics of disasters, the ways disasters are shaped by complex social and environmental factors, and the challenges of decision-making in such complex systems. Similarly, crisis management theory focused on the response phase of the disaster and highlighted the need of prompt communication and managerial skill for effective disaster governance. Likewise, elite analysis theory can be applicable to examine the ways power dynamics and decision-making structures influence the disaster prepared, response and recovery efforts. This theoretical framework can be useful to comprehend how powerful and influential players shape disaster policies, strategies, frameworks and practices.

Likewise, McDowell's forced displacement, sustainable livelihoods, and impoverishment risks framework combined the IRR model and the elements of the sustainable livelihoods approach suggesting a methodological model for disaster governance. In the same way, network theory in disaster governance can be applied to understand the dynamic interactions of the diverse players associated to disaster planning and implementations, including preparedness, response and recovery. On the other hand, new institutionalism theory offered a significant framework for understanding how institutions and institutional structures influence disaster governance, thus offering policymakers, decision-makers and practitioners the spaces to recognize and implement more effective and equitable approaches for disaster management.

Further, the theory can be used to examine the consequences of power dynamics, politics and interests in shaping institutional behavior, consequently influencing the decision-making and resource allocation processes. Likewise, political economy theory in disaster governance offers a framework to realize how political and economic interests influence decisions about disaster preparedness, response and recovery, and the ways power and resources are disseminated during disasters. The framework can be applied to predict the ways distribution of power and resources influence the communities and individuals to prepare for and recover from disasters, offering a perspective to understand how economic factors influence disaster governance.

Likewise, rational choice theory in disaster governance can be applied to examine how the individuals and institutions prioritize their disaster responses on the basis of their cost and

benefit analysis. This framework can be useful for predicting the patterns of prioritizing resources for disaster preparedness, response and recovery, that adequate resources will be allocated if concerned institution accepts that the benefits outweigh the costs. In the same way, Rawlsian theory of justice provides a theoretical framework to understand how social values – liberty and opportunity, income and wealth, and the bases of self-respect – need to be equally distributed to all who are entitled to. The theory, with reference to disaster governance, offers a lens through the “general conception of justice” that affected people need to receive equal priority of the state to solve their problems with justifiable distribution of social benefits.

The reviews indicate that development-induced displacement related subjects are methodically considered by different writers during studies presenting various models/frameworks while disaster displacement issues require further studies (Cernea, 2004; McDowell, 2002). Thus, issues directly associated with the governance of disaster-induced displacement and human security concerns could rarely draw the attention of the authors, which has weakening effects on theorizing the problems. The aforementioned theoretical frameworks can provide valuable outlines for understanding and improving disaster governance. However, it is vital to identify that each disaster is peculiar and may require a customized approach according to its unique characteristics and context. These theories offer lenses to comprehend the development of disaster governance policies, strategies and practices at different levels, including local, national, and international levels. However, effective disaster governance entails a blend of some theoretical frameworks to address the complex and multifaceted nature of disasters like the 2015 earthquake in Nepal.

Dealing with the prevailing security circumstances, disaster displacement has been one of the biggest concerns for the states and the international communities, consequently making it hub of international politics. In between mounting universal worry on disaster governance, addressing traditional security matters alone creates vacuum in problem-solving process. As security apparatus today feels overstretched due to non-traditional threats, that demanding the broader discussion on the human security threats of everyday life. At this juncture of review, researches indicate that the disaster displacement exposes the displaced people to assorted threats to human security compelling them to stay in impoverishment. Such threats need to be succeeded through pragmatic strategies. Here, the researcher sees gap on the study and plans to move forward by linking human security perspective as the mediating variable together with the combination of two theories, namely elite analysis and new institutionalism to study the local disaster governance and remaking of society after 2015 earthquake in Nepal.

2.3 Empirical Review

This subheading covers reviews particularly from empirical studies on subject matters related to this dissertation. The paragraphs below effort to present reviews on ‘local government in remaking of society after disasters, incorporating human security in local governance, practices after 2015 Nepal earthquake’ and so on.

2.3.1 Local Disaster Governance in Remaking of Society

Disaster governance has been an emergent concept that covers pursuits to deal with disasters whether in the pre, during or post-disaster phase. Hence, it is concentrated on the procedures, arrangements and interactions of the actors engaged in the disaster management (Shahat et al., 2020). The roles of the actors in the preparation and response activities bring them under the disaster governance umbrella with a broader sense. Thus, crucial aspect of disaster governance is building and harmonizing capacity of the disaster managers to counter disasters (Zurita et al., 2018). Moreover, disaster governance involves various disaster management measures as “...disaster prevention measures, emergency disaster control measures, and disaster recovery and rehabilitation measures” (Suzuki & Kaneko, 2013, p. 25).

In the same way, Sendai framework for disaster risk reduction 2015-2030 prioritizes three actions for effective disaster governance i.e. guaranteeing the coherence of frameworks of laws, regulations and public policies at local to international level; defining roles and responsibilities of the all public and private sectors; and guide, encourage and incentivize them to take action and address disaster risk (UN, 2015). Similarly, Sandoval and Voss (2016) opines that disaster governance embraces polycentric, adaptive, bottom-up and assorted forms of actions that decrease vulnerability and risks (Sandoval & Voss, 2016). Thus, disaster governance encompasses perfected structures of preparation, response, relief, recovery, and reconstruction (Suzuki & Kaneko, 2013). So, the conception of disaster governance entails the synergized disaster management activities of the state and non-state, or national and international actors. In 2012, Tierney extensively discussed the term and presented more specific definition as the interconnected framework of norms, actors, and practices spanning before, during, and after disasters, aimed at mitigating the impacts and losses caused by natural and technological disasters, as well as intentional acts of terrorism.

In case of disaster management, affected people have obvious expectations from local governments as they are straightly attached. Hence, local governments have crucial role on effective disaster management “as they have better understanding of unique local needs and

assets than the higher levels of government, and are the first ones to react to the disasters affecting their localities” (Bae et al., 2016, p. 51). They emphasize localized and decentralized disaster governance. Additionally, Melis and Apthorpe (2020) argued that locally led disaster response can have better result. On top of that, Vij et al. (2020) emphasized on the locally coordinated disaster preparedness and response mechanism for effective disaster management.

Let us find out significant Nepali legal provisions on the local disaster governance. The Constitution of Nepal (2015) restructured Nepal into federalized local governance system with constitutional power of disaster to local levels. In article 51 of the constitution, the policies of the state aim “to make advance warning, preparedness, rescue, relief and rehabilitation in order to mitigate risks from natural disasters” (p. 36). Though, schedules 5, 6 and 7 does not enlist ‘disaster management’ within the list of federal, state or concurrent powers of federation and state. Unlikely, list of local level power in schedule 8 incorporates the significant power of disaster management. Similarly, the list of concurrent powers of federation, state and local level in schedule 9 contains disaster management. Significantly, the constitution solely conferred disaster management responsibility to local levels. This new constitution has offered huge power of disaster risk reduction and management to local governments that further got statutory weight through an act in 2017 (Vij et al., 2020).

The DRRMA (2017) has established “Local Disaster Management Committee” of maximum fifteen members chaired by the head of the village body or mayor of municipality as prescribed in section 17 with the functions, duties and powers for creating and funding a local disaster management plan, conducting training, and enforcing standards. It forms community-level disaster preparedness and response committees, conducts drills, oversees rescue and relief operations, and develops disaster information and early-warning systems. It also manages the Local Emergency Operations Center (LEOC), assesses the impact on households, issue identity cards, prepares response units like fire brigades, and performs other disaster management duties. Similarly, section 23 has the provision of disaster management fund in local levels. As per section 45, Local Disaster Committee has the responsibility of preparing an annual report with a true and full account of disaster management activities in the respective local levels.

In the same year, LGOA (2017) was enacted with the right to arrange municipal police for Disaster management related search, rescue, relief and rehabilitation. The act extensively makes local levels accountable for controlling agriculture and livestock borne natural disasters and epidemics. Section 11 of the LGOA (2017) empowers local levels to handle disaster management by formulating, implementing, monitoring, evaluating, and regulating local

policies, laws, standards, and plans. Responsibilities include creating disaster preparedness and response plans, early warning systems, and search and rescue operations; managing relief materials; controlling local dams, rivers, and landslides; mapping risk areas and relocating settlements; coordinating with various entities for disaster management; establishing and managing disaster funds; overseeing local disaster risk reduction projects; conducting rehabilitation and reconstruction; managing data and research on local disasters; operating emergency systems; and running community-based disaster management programs.

The act referred “disaster management as the matter of joint partnership and management for the purpose of cost minimization, maximum utilization of resources and effective service delivery” in section 26 (LGOA, 2017, p. 42). Likewise, section 27 of the act provides the tasks of reconstruction, retrofitting, or dismantling of buildings vulnerable in terms of earthquake or disaster to the local levels. As the procedural expansion of the act, Disaster Risk Reduction and Management Rules (DRRMR), 2019 further extended the functions, duties and powers of the Local Disaster Management Committee in section 8. They include planning disaster risk reduction and management, ensuring disaster risk reduction in development projects, building staff and volunteer capacity, providing safety equipment and insurance for rescue personnel, supplying search and rescue materials to security agencies, mobilizing local communities, establishing disaster risk reduction methods and processes including insurance and social security, and forming sector-specific teams (DRRM, 2019).

In the same way, there is the stipulation to assign minimum eighty percent of the allocated budget in local level for the disaster risk reduction and management activities through National Adaptation Programme of Action (NAPA) and National Framework on Local Adaptation Plans for Action (LAPA) on climate change (GoN, 2011b). Nepal also ratified Sendai Framework Disaster Risk Reduction (SFDRR). The SFDRR aims to local disaster governance for sound recovery, rehabilitation and reconstruction with the principle of ‘build back better’ (UN, 2015). In a study on the practices of local disaster governance in Nepal, Bhandari et al. (2020) observed that maximum elected representatives in local levels are unaware of the necessary disaster risk reduction and management capacities they need to have for tackling challenges. Similar research explained about the absence of disaster response competencies in Nepali local authorities due to the deficient awareness (Malla et al., 2020a). They noted positive perception of the local elected leaders but with terrible gap of disaster response capacity building. Likewise, Vij et al. (2020) argue that local government bodies still face unclarity of roles which is additionally intensified by the poor resources and human capacity.

In 2018, MoHA published the disaster risk reduction national strategic plan of action 2018–2030 that lacks to design the approaches for strengthening local levels as the constitutional spirit of empowering local governments for disaster management. Equally, rural municipalities and municipalities are struggling to plan and implement local disaster management plans in their respective jurisdiction. Local levels still have preoccupied idea that disaster management is the business of the district administration (Malla et al., 2020b). Bhandari et al. (2020) strongly advocated that “local government must be prepared to manage some level of disasters independently and be at the frontline of managing disasters occurring within their political jurisdiction” (p. 23). Comparably, Malla et al. (2020b) realized that “over-reliance on security forces from relief and rescue to rehabilitation and reconstruction have also garnered lethargy amongst civil administration and public service offices wearing away their capacity” (p. 17).

Let us start discussing international practices on local disaster governance in remaking of society from United States. Dzigbede et al. (2020) met local government authorities on the front lines of response and recovery to deal with the natural disasters. They further found that weak response of the resource-poor local governments boosts social inequities. It was observed that most of the local government have managed devastating disasters by mutual learning from past disasters with determination of the leadership (Dzigbede et al., 2020). United Nations Office for Disaster Risk Reduction (UNDRR) study report found that local governments have adequate powers to formulate plans for resilience, risk reduction and disaster management (Gencer, 2017). Such powers are commonly exercised for exploring risks and responding together with other institutions.

Contrastingly, the study pointed out the lacking powers of the local governments for planning and implementation of the building codes and early warning systems (Gencer, 2017). As per the National Disaster Recovery Framework in the United States, local governments plan and respond emergencies. They are also responsible for collaboration, coordination and communication. Local governments ask for the assistance from higher level only when they are overwhelmed (Atkinson, 2022). In this regard, Gerber and Robinson (2009) warns that local governments can face situations overwhelming their capability even though they are capable of managing most of the emergencies.

Similarly, municipal governments aligned national and local actors to handle an earthquake event with leading role in Peru (UN, 2010b). Likewise, local disaster plans have become more operational in Bangladesh these days (Bhandari et al., 2020). Responding to the 2005 Pakistan earthquake, interventions of community level governments proved to be beneficial for

promoting disaster risk management (UN, 2010b). In a study, Dariagan et al. (2021) suggested for good disaster preparedness plans for the local governments in Philippines as they were found extremely susceptible to natural disasters.

In disaster management, greater capacity of local governments in disaster response will enable faster restoration as local governments are the key performers for formulating policies on disaster management and enforcing them (Lee, 2019). So, local governments proactively work on reducing the risks of disaster as they are the institutions intimate with the people and societies (Amaratunga et al., 2018). Thus, “local governments play a critical role in responding to hazard events and emergencies” (Atkinson, 2022, p. 1). Putra and Matsuyuki (2020) found capacity enhancement of the local governments through adequate budget allocation as the crucial way of strengthening disaster management capabilities. They emphasized coordinated local measures for the substantial performance of the country on disaster management.

2.3.2 Incorporating Human Security into Local Governance

Characterizing human security in the study as the freedom from want that is poverty and unemployment, freedom from fear that is violence and conflict and freedom from indignity that is displacement and human rights abuse, Indriastuti (2019) claims that combating against these threats to human security is key task of governance. Moreover, Paleri (2022) prefers calling it “disaster security governance” putting the responsibility of identifying disaster need and managing deaths, injuries, losses of property and damage to environment caused by disasters on government’s part. As discussed above, local governments are the immediate institutions on the citizens’ yard for responding day to day public matters.

Thus, people’s current living index and strategies for further improvement becomes primary accountability of the local governments. Here, human security represents the same crucial responsibility of local levels connecting people’s fundamental living standard with dignity. Kumar (2008) sees Nepali state being ignorant towards dignity of its citizens due to the misgovernance of its political leaderships. Contrastingly, Adhikari (2013) describes human security as “promoting local governance by putting the ‘human factor’ at the center and improving public policy and budgeting practices for the benefit of all” (p. 150) and presents example of improved health services of local government in Nepal. Likewise, progress can be observed in the policy formulation as in *National Security Policy* (2016) that signifies human security and good governance.

Portraying core of human security as the concern from local to global level, Thomas (2000) connects it with the sufficient basic materials and dignified social life of the community. Similarly, Hampson et al. (2002) defines human security as the absence of threat to fundamental human values like protection of physical integrity, economic welfare and liberties. They further outlined the origins of human security in sustainable development, security of the people, human rights and public good, which makes governments answerable to all related matters. Agreeingly, Leaning and Arie (2000) describe human security as a prerequisite for human development, where government assures the survival of individuals by capacity building of individual and group to meet basic standards of living and its continue maintenance.

Linking local government's activities to human security, Alkire (2003) significantly focused on operational programs for protection due to disasters like flooding. Furthermore, Shaw (2006) perceives government-people association of greatest value for enhancing human security as it need to be more attentive on people's lives and livelihoods, demanding more specific attention when affected by disasters. For this, policy integration through local governance is utmost important. Porio (2014) suggests that key factors of human security should be addressed in instant, medium-term and long-term disaster response interventions of local governments through evacuation, restoration of basic services and rebuilding of infrastructural support. "Cities may and do greatly contribute to human security" (Szpak, 2015, p. 119) with policy adaptation and interventions.

Today, local governments are increasingly becoming influential for supporting its citizen (Szpak, 2015) and human security is acknowledged as a policy framework (Muguruza, 2017) for structuring good practices at community level. In a study related to Port Harcourt City, Rivers State, Nigeria, Ogele (2020) found local government's crucial role to deal with unemployment which is one of the key threats to human security. Recently, Paleri (2022) opines that governance is just for human wellbeing and all actions of the government are for people's welfare. From this perspective, ultimate expected outcome of the governance is human security. Opposingly, Howe (2013a) warns that there can be lack of accountability mechanism in local levels and considers human insecurity and underdevelopment as the product of ineffective local governance.

Integrating human security into local governance encompasses adopting a people-centered approach to governance, consequently the good and protection of individuals and communities are provided high priority in decision-making and policy execution (UN, 2009b). This can be materialized through identifying the real needs and concerns of the local communities by

carrying out surveys, meetings or social engagements (Dariagan et al., 2021). Likewise, formulating policies that prioritize human security (Hoffman, 2019; Hoffman & Barrios, 2019; Szpak, 2015) such as healthcare access, food security, affordable shelter, and disaster management will help the local governments to ensure public wellbeing. Adequate resource allocation for such primacies is essential for good of the people (Gencer, 2017; Putra & Matsuyuki, 2020). Similarly, partnership and close collaboration with the societies and social organization helps to strengthen community engagement thus nurturing ownership of the plan implementation (Malla et al., 2020a; Melis & Apthorpe, 2020). Equally, fostering a culture of inclusion and participation in decision-making processes helps to incorporate needs and perspectives of the communities (Dzigbede et al., 2020; Lee, 2019). This process confirms the consideration of local worries in policy formulation and implementation. Most importantly, creating mechanisms for accountability by reporting and evaluating those programs and policies can help to ensure that local governments keep prioritizing human security (H. P. Dhungana, 2019; UNDP, 2022).

Discussing on the indicators of good local disaster governance, Gaston et al. (2012) presented three main categories that are inclusion and participation, local capacity and capability, and accountability and transparency. They incorporated other indicators within these broader parameters. Similarly, Colucci (2012) took adaptation, flexibility and innovation as the major parameter for good disaster governance, that is critical to resilient city. Similarly, Bhandari et al. (2020) listed disaster risk reduction plan, participation of the society in the disaster management, early warning system, coordination and so on as the key indicators. Discussing on various types of indicators, Cardona (2008) presented Risk Management Index (RMI) to measure the disaster governance. He further stated that government need to consider the indicators within the index during formulating, enforcing and evaluating policies.

The RMI as a tool measures four public policies, each consisting of six indicators. These four policies are risk identification, risk reduction, disaster management, and governance and financial protection. The first policy, risk identification, measures the way individuals and society perceive and objectively evaluate risks. This involves the indicators: Systematic inventory of disasters and losses; hazard monitoring and forecasting; hazard evaluation and mapping; vulnerability and risk assessment; public information and community participation; and risk management training and education. The second policy, risk reduction, focuses on prevention and mitigation measures, and includes the indicators: the extent to which risk is taken into account in land use and urban planning; management of river basins and environmental protection; implementation of control and protection techniques prior to hazard

events; relocation of persons living in disaster prone areas and improvements to housing in those areas; updating and enforcement of safety standards and construction codes; and reinforcement and retrofitting of public and private assets.

Similarly, the third policy, disaster management, intends to measure capacity for disaster management. This incorporates the indicators: organization and coordination of emergency operations; emergency response planning and implementation of warning systems; supply of equipment, tools and infrastructure; simulation, updating and testing of inter-institutional response capability; community preparedness and training; and rehabilitation and reconstruction planning. The fourth and last policy, governance and financial protection, measures how well risks are institutionalized and transferred. This comprises the indicators: decentralized organizational units, inter-institutional and multisector coordination; availability of resources for institutional firming; budget allocation and mobilization; existence of social safety nets and funds; insurance coverage and loss transfer strategies for public assets; and housing and private sector insurance and reinsurance coverage (Cardona, 2008, pp. 17–18).

In conclusion, good local disaster governance refers to the capability of the local governments and other actors involved to effectively manage and respond to disasters at the local level. Reviews concludes that good local disaster governance possesses the features of human security within its policies formulation and implementation process. Thus, these parameters can serve as the indicators of good local disaster governance:

- (a) Local disaster risk reduction and management plans: periodic formulation and renewal of disaster risk reduction and management plans at the local level, including hazards mapping, disaster risks assessment, plans for disaster response and recovery, and measures to strengthen community resilience.
- (b) Resourcing: status of allocation of funding, personnel, equipment, and technology in a timely and effective manner during all phases of disaster management.
- (c) Early warning systems: availability and effectiveness of early warning systems for the timely dissemination of disaster warnings and evacuation plans.
- (d) Participation and inclusion: involvement of the individuals and local communities in planning, decision-making, response and recovery efforts of disaster management.
- (e) Coordination, communication and collaboration: mechanism and its effectiveness for coordination, communication and collaboration between and amongst state and non-state actors engaged in disaster management.

- (f) Capacity building: level of capacity building of the actors expected to be involved in the disaster management through trainings, exercises and education.
- (g) Emergency response capacity: readiness of emergency response machinery including responders, infrastructures, supplies and equipment.
- (h) Accountability and transparency: systems of local governments and other stakeholders to make their disaster management activities accountable and transparent.
- (i) Learning, flexibility and adaptability: ability of actors to learn from past plans and events, and adjust and adapt into disaster risk reduction and response plans according to the changing circumstances.
- (j) Monitoring and Evaluation: mechanism of monitoring and evaluation of the effectiveness of disaster management activities and recognize areas for improvement.

2.3.3 History, Impact and Governance of the Past Earthquake in Nepal

Nepal, nestled in the seismically active Himalayan region, has a long and turbulent history of earthquakes. Nepal ranks as the 4th country on vulnerability to climate change and 11th with a high frequency of earthquakes, making it one of the most earthquake-prone nations globally (MoHA, 2017; UN, 2009a). Nepal is located in a seismically active region where the Indian and Eurasian tectonic plates collide (Goda et al., 2015). The country has witnessed a series of significant seismic events that have shaped its landscape and impacted its population (Adhikari & D'Ayala, 2020). Those noteworthy earthquakes are shortly described below commencing from the first recorded history of the tremor.

(a) The 1255 earthquake: On June 7, 1255, Nepal experienced its earliest recorded earthquake, resulting in significant devastation (NEMRC, 2021; NPC, 2015a; Sapkota et al., 2013). The quake, having epicenter of the earthquake was located around Kathmandu, caused extensive damage to temples and houses, leading to the tragic loss of approximately 2,200 lives. Among the victims were King Abhaya Malla, who ruled at the time, and approximately one-third to one-fourth of the population residing in the Kathmandu Valley (Chitrakar & Panday, 1986). The earthquake, estimated to have a magnitude of around 7.8 on the Richter scale, was followed by recurring tremors for a duration of 15 days (Rana, 2013). The tremor caused severe damage to infrastructure and settlements, and extensive destruction of buildings, and impact on communities.

(b) The 1260 earthquake: During the reign of King Jayadev Malla, Nepal experienced a significant earthquake in 1260 (Campbell, 2018; Rana, 2013). The quake resulted in numerous

casualties and triggered widespread epidemics and famines. Residential buildings, as well as significant architectural and monumental structures, suffered extensive damage. The earthquake's epicenter was in Sagarmatha, and the estimated death toll was around 100. This event marked the next major earthquake recorded after the 1255 earthquake. Many temples and buildings collapsed, while others sustained severe destruction.

(c) The 1344 earthquake: In the year 1344, Nepal experienced a powerful earthquake with an estimated magnitude of around 7.9 (Dhakal, 2019; The Everest List, 2022). The epicenter of the quake was located around Mechi, affecting various regions of the country. The earthquake caused significant destruction to buildings and infrastructure, leading to the loss of numerous lives, approximately 100. In addition to the loss of life, the earthquake resulted in many injuries and had a profound impact on the affected settlements, disrupting daily life for the people living in those areas. The widespread damages and the ensuing disruption highlighted the devastating effects of the earthquake in Nepal.

(d) The 1408 earthquake: In the year 1408, Nepal was struck by a devastating earthquake during the reign of King Shyam Singh (Campbell, 2018; Rana, 2013). This powerful earthquake, estimated to have a magnitude of around 8.2, had its epicenter near the Nepal-Tibet Border in the Bagmati zone. The month of August witnessed this catastrophic event, leading to an approximate death toll of 2500 individuals, while many others suffered injuries. The destruction caused by the quake was extensive, with the collapse of the Machhendranath temple and numerous other temples and houses. Additionally, cracks in the earth emerged in various places, further exacerbating significant damage and loss of lives and property. The earthquake's impact extended across the Kathmandu Valley and its surrounding areas, leaving a trail of devastation and loss in its wake.

(e) The 1505 earthquake: On June 6, 1505, Nepal experienced a massive earthquake known as the Lo Mustang earthquake or the 1505 earthquake (Dhakal, 2019; The Everest List, 2022). With a magnitude ranging between 8.2 to 8.8, it stands as one of the most significant earthquakes in Nepali history. The epicenter was located in central Nepal near Saldang, in the Karnali zone. This seismic event had far-reaching consequences, impacting not only Nepal but also neighbouring China and India. The earthquake resulted in a devastating loss of life, estimated to be around 6000. Temples were destroyed, lives were lost, and the socio-economic fabric of the affected areas suffered immensely. The repercussions of this earthquake reverberated throughout the region, leaving a profound and lasting impact on the affected communities.

(f) The 1681 earthquake: In January 1681, during the rule of King Sri Niwas Malla, Nepal and the Kathmandu Valley were struck by a powerful earthquake (Campbell, 2018; Rana, 2013). With an estimated magnitude of around 8.0, the earthquake caused extensive devastation. The epicenter was located in the Northern Kosi zone. Tragically, the earthquake resulted in a significant loss of life, with an estimated death toll of 4,500 people. Numerous buildings, including temples, were severely damaged or completely destroyed as a consequence of the earthquake. The widespread destruction highlights the intensity and impact of this seismic event.

(g) The 1767 earthquake: In July 1767, Nepal experienced another significant earthquake that had a lasting impact. This earthquake was characterized by a series of aftershocks, with a total of twenty-one recorded within twenty-four hours (NSET, 2012; The Everest List, 2022). The earthquake's epicenter was located in the Northern Bagmati zone. With an estimated magnitude of around 7.9, it caused widespread destruction and loss of life. The death toll from this seismic event is estimated to be around 4,000 individuals. The occurrence of multiple aftershocks further compounded the devastation and prolonged the recovery process. The 1767 earthquake stands as a reminder of the seismic activity and its consequences in Nepal's history.

(h) The 1810 earthquake: In the month of May or June, 1810, Nepal experienced a series of earthquake shocks during the reign of King Girban Yudha Bikram Shah (Campbell, 2018; Rana, 2013). There was a total of twenty recorded shocks during this period. While the loss of lives and livestock was relatively limited, the earthquake caused significant damage to houses, buildings, and some temples. Many structures were either destroyed or suffered varying degrees of damage.

(i) The 1823 earthquake: In 1823, the Kathmandu valley region experienced a series of seventeen earthquakes, though they were likely smaller in scale compared to previous seismic events. Fortunately, there were no reported casualties or loss of life and livestock resulting from these tremors (Campbell, 2018; Rana, 2013).

(j) The 1833 earthquake: On August 26, 1833, two major earthquakes struck the Kathmandu valley and Bihar, India, during the reign of King Rajendra Bikram Shah. With a magnitude estimated around 8.0, these seismic events resulted in significant loss of life. The death toll in Nepal reached approximately 6,500. The first earthquake occurred around 6:00 pm, followed by a second one around 11:00 pm. The destruction caused by the quakes was immense, leading to the collapse of houses, temples, and public shelters. The iconic Dharahara tower suffered severe damage, and the cities of Thimi and Bhaktapur were particularly hard-

hit (NSET, 2012; Rana, 2013). The disaster resulted in extensive damage to housing facilities, the road network, and numerous temples.

(k) The 1869 earthquake: On July 7, 1869, a significant earthquake struck Nepal, specifically in the location of Kathmandu (Dhakal, 2019). With an estimated magnitude of around 6.5, the earthquake resulted in the loss of approximately 750 lives. The destruction caused by the quake was widespread, impacting houses, temples, and livestock. The tremors caused significant damage to buildings and infrastructure with a lasting impact.

(l) The 1916 earthquake: On August 28, 1916, a powerful earthquake struck both Nepal and Tibet (Dhakal, 2019; The Everest List, 2022). The earthquake, estimated to have a magnitude of around 7.7, resulted in the tragic loss of approximately 3,500 lives. Impact of the quake was significant, causing extensive damage to houses and claiming many lives.

(m) The 1934 earthquake: The earthquake of 1990 B.S., which occurred on January 15, 1934 at 2:24:22 pm NST, is remembered as one of the most devastating earthquakes in Nepal's history (Chamlagain et al., 2011; NSET, 2012; Rana, 2013). The epicenter was located approximately 9.5 km (5.9 mi) south of Mount Everest in eastern Nepal. This devastating event, also known as the great Nepal-Bihar earthquake, was of 8.4 Richter scale.

The earthquake had a profound impact, causing significant loss of life and extensive damage to property. Thousands of people were trapped and tragically lost their lives, including two of the king's young daughters. Iconic landmarks like the Dharahara Tower and the clock tower were reduced to rubble, while cracks emerged in fields and roads, leading to water rise and even the emergence of hot water and sand in some areas. The ground subsided in certain locations, with roads across the valley bearing numerous cracks. The earthquake disrupted vital lifelines such as electricity, transportation, and the Birgunj-Raxaul railway (Chaulagain et al., 2018; Rana, 2013). The loss of life was significant, with over 9,000 people losing their lives in Nepal alone. A staggering 126,355 houses suffered severe damage, and approximately 80,893 buildings were completely destroyed (Chaulagain et al., 2018; Rana, 2013). The king established an earthquake aid fund to provide assistance, including loans, to those affected by the disaster. Additionally, volunteer groups were formed to contribute to relief efforts. The earthquake relief fund allocated 20,650 NR for the Kathmandu valley alone (Rana, 2013). Despite the immense destruction and loss, efforts were made to support and rebuild affected communities, emphasizing the resilience and determination of the Nepali people in the face of such a catastrophic event.

(n) The 1966 earthquake: On June 27, 1966, an earthquake struck Doti, Nepal, with a magnitude of 6.3. The earthquake caused the loss of 80 lives in the region (Dhakal, 2019). While the details about the extent of damage and destruction are limited, the impact of the earthquake was significant.

(o) The 1980 earthquake: An earthquake struck the western part of Nepal including Baitadi, Bajhang, and Darchula, and the surrounding area of Pithoragarh, India on July 29, 1980. With a magnitude of 6.5, the earthquake resulted in significant loss of life, tragically claiming around 200 lives, and leaving more than 5,500 individuals injured. The destruction was significant, with 13,414 buildings suffering severe damage, while another 11,604 structures were completely destroyed (NSET, 2012).

(p) The 1988 earthquake: On August 21, 1988, at 4:54 a.m. NST, the earthquake of 1988, also known as the Udaypur earthquake, struck predominantly in the eastern region of Nepal, affecting 22 districts in the east and parts of the central region (Chamlagain et al., 2011; NSET, 2012). With a magnitude of 6.9, the earthquake resulted in the tragic loss of 721 lives and caused 6,553 serious injuries. The impact on infrastructure was substantial, with 64,174 private buildings, 468 public houses, and 790 government buildings damaged (Chamlagain et al., 2011; Sijapati, 2021). The direct loss from the earthquake was estimated to be around 5 billion rupees. This seismic event caused significant damage to buildings and infrastructure, loss of lives, displacement of people, and destruction of property (Whelpton, 2021), highlighting the devastating consequences of such natural disasters.

(q) The 2011 earthquake: On September 18, 2011, at 6:25 p.m. NST, a strong earthquake with a magnitude of 6.9 occurred near the Nepal-India border, specifically in the vicinity of Sikkim (Chaulagain et al., 2018; NSET, 2012). In Nepal, the impact was relatively milder, resulting in six fatalities and 30 injuries. However, in the Eastern mountainous regions, building collapses and severe damage were more prevalent. Approximately 12,301 individuals from 4,851 families were displaced as a result of this earthquake. The overall toll in Nepal included 6,435 collapsed buildings, 11,520 structures with moderate damage, and 3,024 buildings sustaining minor damage (Dutta et al., 2015; Rai et al., 2012).

Prior to the catastrophic event of 1934 in Nepal, information regarding the government's approaches to managing devastating earthquakes was limited. However, this gap was addressed by Rana (2013) with a comprehensive account of the catastrophic earthquake of 1934 that struck Nepal. As a firsthand witness, the author offered detailed observations, personal experiences, and empirical data, creating a compelling narrative that captures the

event's devastating impact. From a disaster management perspective, immediate rescue, relief, public security, and the distribution of relief items were the military's responsibility (Rana, 2013). Hospitals and municipalities were tasked with cleaning the city. At the time of the earthquake, killing thieves was not considered a crime to ensure public safety (Rana, 2013). Earthquake relief organization, fund and volunteer groups were established. The government provided the construction materials at minimal prices and interest-free loans were offered for housing recovery. Significantly, international assistance was refuted, however the government and people worked together to provide relief to the survivors (Bhandari, 2014; Rana, 2013). Geological inspections of the affected areas were conducted, leading to recommendations on suitable land for construction and earthquake-proof buildings (Rana, 2013).

The response to the 1988 earthquake highlighted some advancements in immediate relief efforts, yet long-term recovery and rehabilitation were sluggish and inefficient, illustrating a gap between emergency response and sustainable reconstruction (Chamlagain et al., 2011). After the event, NGOs were established advocating for better earthquake preparedness and risk reduction. However, their initiatives were often limited by insufficient government resources, hindering large-scale implementation (NSET, 2012). The high casualty rates and widespread destruction indicated the absence of a systemic approach to disaster risk reduction (Dixit et al., 2012). The 1988 earthquake revealed significant gaps in disaster preparedness and governance, as the Natural Calamity (Relief) Act of 1982 focused primarily on post-disaster response rather than preparedness. Buildings, especially in rural areas, were not designed to withstand seismic activities, reflecting poor construction practices and a lack of implementation of earthquake-resistant designs (Adhikari & D'Ayala, 2020; Malla & Kayastha, 2015).

The earthquake prompted immediate rescue operations by the government, security forces, and local communities. Emergency relief efforts included the distribution of food, water, medical supplies, and temporary shelter to the affected populations. International assistance played a crucial role, with countries and organizations providing financial aid and technical expertise (Dixit et al., 2015). Reconstruction efforts focused on rebuilding homes, schools, and infrastructure, incorporating more earthquake-resistant designs to mitigate future risks. The earthquake also spurred improvements in Nepal's disaster preparedness and response strategies, highlighting the need for better coordination and more robust infrastructure to withstand natural calamities (Bothara et al., 2018; Dixit et al., 2015). Historically, significant earthquakes, like the 1934 earthquake, underscored Nepal's vulnerabilities but did not result in substantial improvements in disaster management (Dixit et al., 2012). Moreover, it took forty-eight years to enact the disaster relief act as the foundational legal framework after the

1934 earthquake. Over the decades, minimal investment was made in earthquake-resistant infrastructure and public awareness campaigns. Government agencies lacked coordination, and disaster response plans were poorly executed (Malla & Kayastha, 2015). Likewise, the response and recovery efforts following the 1988 earthquake in Nepal were marked by a combination of local resilience and international aid (Bothara et al., 2018; Dixit et al., 2015). Despite Nepal's location in a highly seismic region, preparedness and management strategies were inadequate. The lack of enforcement of building codes, especially in rural areas, left many structures vulnerable to collapse. Public awareness campaigns and emergency response training were insufficient, leaving many communities ill-equipped to respond effectively (Lam & Kuipers, 2018; Vij, 2023).

Post-1988, Nepal began shifting towards proactive disaster governance, influenced by global initiatives like the SFDRR. The development of the Building Code in 1994 remained crucial. At the same time, disaster management framework lacked a comprehensive approach that integrated community participation and modern technology (NSET, 2012). Rarely available seismic data was not effectively utilized to enhance preparedness measures, exacerbating the loss of life and property when earthquakes occurred (Malla & Kayastha, 2015; Manandhar et al., 2017). Urban planning was largely unregulated, resulting in haphazard construction that hardly comply with safety standards. Efforts by international agencies and NGOs to promote earthquake resilience were sporadic and often misaligned with local needs and conditions, leaving Nepal highly vulnerable to seismic activities (Canon & Schipper, 2015).

The country's focus on post-disaster recovery and reconstruction remained reactive rather than proactive, with insufficient attention to developing robust contingency plans, stockpiling essential supplies, and establishing evacuation routes and shelter locations (Amatya et al., 2017; Takeda, 2017). This lack of foresight hindered the ability to mobilize resources swiftly and provide relief in the immediate aftermath of earthquakes. In summary, Nepal's disaster management and governance were characterized by reactive rather than proactive strategies, insufficient coordination among agencies, and inadequate infrastructure and public awareness. The systemic vulnerabilities exposed by the 2015 earthquake underscored the need for comprehensive reforms in disaster governance practices (Cook et al., 2016; Dixit et al., 2012).

2.3.4 Reviewing Devastating Earthquakes Around the Globe

Here are the reviews on some devastating earthquakes of 21st century including Afghanistan earthquake 2022 which were studied on the basis of high death toll and recent occurrence.

2.3.3.1 Kashmir Earthquake 2005

In the morning of 8 October 2005, a devastating earthquake of 7.6 Richter Scale hit Kashmir impacting both India and Pakistan controlled territory resulting more than 80,000 deaths and injuries nearly double (Mumtaz et al., 2008; Nabi, 2014; Shafique et al., 2016). The earthquake devastated more than 600,000 houses, 6,298 education institutions and 782 health facilities making 3.5 million people homeless (Mumtaz et al., 2008). Bendick et al. (2007) found the earthquake most fatal hitting the region due to the destruction and fatalities.

The Kashmir earthquake 2005 created unprecedented disruption engaging national and international communities for relief, recovery and reconstruction. In spite of extensive international attention, remaking process remained less effective due to the absence of sound pre-coordination system in Pakistan (Nabi, 2014). Similarly, Mulvey et al. (2008) concluded their study on Kashmir earthquake finding overwhelmed local facilities in such complex situations. They recommended clear plans with coordinated efforts to manage devastating disasters of similar scale. Additionally, Ariyabandu and Fonseka (2009) observed women with feelings of insecurity and deficient survival skills in the harsh disaster situations.

Likewise, Kamp et al. (2008) pointed out the necessity of policy address to contend with the future vulnerabilities of earthquake like landslides. The earthquake was destructive bringing massive challenges for the reconstruction. Mumtaz et al. (2008), in their study, found more challenges as “lack of knowledge on earthquake-resistant construction, manpower shortages, socio-cultural issues, a building production mechanism which is very informal and incremental in nature, a lack of accessibility to (and acceptability of) the formal sector, a lack of preparedness...” (p. 68). They concluded that owner-driven approach for the reconstruction at the local community level remained operative and sustainable because of the presence of an informal construction regime (Mumtaz et al., 2008).

2.3.3.2 Haiti Earthquake 2010

An earthquake measuring magnitude of 7.0 Richter Scale shattered Haitian Republic on 12 January 2010 at 4:53 PM followed by number of aftershocks. The earthquake killed more than 300,000 people and injured similar number (DesRoches et al., 2011; Kijewski-Correa et al., 2012). Around 93 percent of the houses were either destroyed or damaged making 1.3 million people homeless (Kijewski-Correa et al., 2012). The cost of the damage caused by the earthquake was between 8 to 14 billion US dollars (Margesson & Taft-Morales, 2010). Nearly

one third of the population were affected that makes it one of the most destructive earthquakes in the world (Kijewski-Correa et al., 2012; Margesson & Taft-Morales, 2010).

The experiences in Haiti earthquake provided the world huge lesson specially on urban disaster. The challenges of reconstruction as the representations of disaster are wide-ranging and housing problem remained focused one (Bornstein et al., 2013). By studying the partnerships between local and international agencies working during the response of Haiti earthquake, Coles et al. (2012) found that their relationships were less stable than partnerships between international agencies. Thus, they further recommended that enhanced collaboration among all partners enables the managers for superior and beneficial activities in disaster relief operations (Coles et al., 2012).

Moreover, Kijewski-Correa et al. (2012) found that empowering local capacity, resiliency, viability and sustainability speeds up the reconstruction efforts since this provides the understanding of considerable constraints. Significantly, they suggested from their post-quake Haiti experiences that priorities and solutions need to be dragged out by listening to the affected communities. Continuous feedback from the beneficiaries and reevaluation of those urgencies becomes the crucial message to the world while dealing with similar disasters (Kijewski-Correa et al., 2012). The role of local governments turn to be preferential particularly in such situations as they are closer and aware of the desires, needs and dynamics of the society (Bornstein et al., 2013). In spite of recommendations of strengthening positions of local government or alliances of local residents by international literature on disasters and recovery, very less Haitian plans could address it (Bornstein et al., 2013).

After the earthquake, Haiti received extensive assistance from international communities including UN, US, other countries, and different INGOs (Kijewski-Correa et al., 2012; Margesson & Taft-Morales, 2010). Despite the foreign support, the affected population suffered for basics for a longer period. Those stricken families were missing sustainable and reasonable enduring solutions, particularly regarding housing (Kijewski-Correa et al., 2012). Similarly, the affected people were facing issues related to their health security. The children and adolescence having moderate and severe symptoms of post traumatic disorder after Haiti earthquake is above than 85 percent and there is ample chances of effect on their cognitive and emotional behavior (Cénat & Derivois, 2015).

Likewise, personal insecurity converted into a matter of serious concern. Children were at high risk of sexual and physical assault, more than half of the population of capital city were facing moderate to severe food and shelter insecurity (Kolbe et al., 2010). Presenting the post-

earthquake happenings in Haiti, DesRoches et al. (2011) opined that lacks of effective government and institutions, and lack of earthquake awareness and preparedness remained detrimental to the reconstruction. At the same time, they were hopeful by the progress on coordination among the Haitian government, NGOs, and religious organizations. The further suggested that “Haiti’s long-term recovery depends on providing food security, sanitation, clean water, jobs, education, property and land rights, health care, and other basic services that require a functioning government public sector” (DesRoches et al., 2011, p. 18).

2.3.3.3 Tohoku Earthquake and Tsunami 2011

An earthquake of 9.0 magnitude hit the Pacific Ocean off the coast of Japan’s Tohoku region on 11 March 2011 at 14:46 followed by devastating tsunami that broke more than 650 kilometers of coastline. As the result of the destruction, there were some 20,000 deaths and more than 270,000 houses were severely damaged (Miyazaki, 2022; Ohsumi et al., 2019; Ranghieri & Ishiwatari, 2014, 2014). Due to the disaster, over 200,000 people were displaced and forced to live in difficult condition after evacuation (Ohsumi et al., 2019; Shibahara, 2011). The damage and losses were unprecedented. Immediately after the disaster, 270 railway lines, 15 expressways, 69 national highways and 638 other local roads were shut down. Above 24,000 hectares of farming areas were swept away by the flood (Ohsumi et al., 2019; Ranghieri & Ishiwatari, 2014).

The economic loss by the disaster remains the worst ever. Gross domestic product was affected and there was decline of seven percent on industrial production and eight percent on exports (Ranghieri & Ishiwatari, 2014). The earthquake and tsunami made it the most devastating disaster ever recorded with the damage of more than 300 billion in dollars (Kagan & Jackson, 2013). Likewise, even from the years of learning experiences, disaster of such of intricacy was not anticipated by Japan. “Japan’s advanced DRM system, built up during nearly 2,000 years of coping with natural risks and hazards, proved its worth. The loss of life and property could have been far greater if the country’s policies and practices had been less effective” (Ranghieri & Ishiwatari, 2014, p. 3). Energy supply was also severely impacted by the event posing serious threat to public health and environment. Similarly, it brought changes and impacts on the social capital in the affected areas after the earthquake and tsunami (Veszteg et al., 2015). After the event, modifications on the behavior of the people were observed (Nishio et al., 2014).

In an extensive study on Tohoku earthquake, Ranghieri and Ishiwatari (2014) found that binding consultation between governments and communities for recovery backed the planning and implementation. The other local governments supported the affected municipalities. Good

coordination, communication and early warning system might strengthen disaster management process (Suppasri et al., 2013). Furthermore, Takemoto et al. (2021) offered three key strategies through synthesizing their researches and experiences that planning for disaster in advance is crucial, disaster risk management is a shared concern of many state and non-state actors, and institutionalization of the culture of constant enrichment of the resilience (Takemoto et al., 2021). Moreover, Koshimura (2011) summarized the study presenting some practical valuable lessons as science and technology has limitations in disaster predictions; over rely on infrastructures alone can sometimes be detrimental; discuss the disaster management plan beforehand; survival techniques in emergencies need to be well informed to the teachers, parents and children; and utilization of formal and informal sources of information in disaster situation.

2.3.3.4 Sulawesi Earthquake and Tsunami 2018

Indonesia is one of the disaster-prone countries causing fatalities each year. Since last three decades, annually around 8000 people lose their lives due to 289 various types of disasters in average each year in Indonesia (Trias & Cook, 2021). The damaging earthquake and tsunami of Friday 28 September 2018 was one of those disasters. An earthquake of 7.5 magnitude occurred near Palu City, Central Sulawesi, Indonesia at 18:02 p.m. local time (Paulik et al., 2019). The earthquake followed by tsunami killed more than 4000 people, seriously injured around 5000 and displaced 170000 people due to earthquake, tsunami, landslides, liquefaction or building collapse, or combinations of these hazards (Kashiwagi & Todo, 2022; Paulik et al., 2019; Trias & Cook, 2021).

Describing the findings of their study on Sulawesi earthquake, Trias and Cook (2021) presented the distinctive model of disaster response headed by the provincial government in coordination with national government of Indonesia, where the activities were co-supervised by other state actors (Trias & Cook, 2021). Further, they strongly advised the continuity of the emergency response type of “nationally led, regionally supported and international-as-necessary” for the improvement on the capacities of disaster management (Trias & Cook, 2019). Similarly, Handayani and Puspasari (2020) claimed that the earthquake affected the people’s lives and whole facets of human security.

Moreover, the endeavors of reconstruction and rehabilitation were fairly adequate. Contrastingly, they found the absence of regular disaster trainings and simulation exercises, that curtailed the disaster preparedness of the society against natural disasters of similar kinds (Handayani & Puspasari, 2020). Likewise, Sulawesi earthquake educated that the post-disaster

development needs to be consistent with the premeditated objectives of risk reduction. The practices observed in rebuilding requires extra consideration (Iuchi et al., 2023). In a different research, Kashiwagi and Todo (2022) found that experiences of the natural disasters have reformed the perception of impacted individuals toward other groups. Focusing on the need of local transformation for effective disaster governance, Triyanti et al. (2022) indicated the prerequisite of political will for adopting applicable risk governance in order to encourage systematic risk paradigm.

2.3.3.5 Afghanistan Earthquake 2022

At 1:24 am local time on 22 June 2022, an earthquake of 6.2 magnitude hit Khost province of Afghanistan (Essar et al., 2022; Kufner et al., 2022). The tremor was felt in Paktika and Khost provinces of Afghanistan and Khyber Pakhtunkhwa of Pakistan with major impacts in Khost. Over 1500 people died, above 5000 were injured and more than 10000 houses were either collapsed or severely damaged making it the deadliest earthquake in the year 2022 (Kufner et al., 2022; Rao et al., 2022).

In spite of being a moderate magnitude earthquake, it had a massive impact on lives and properties (Kufner et al., 2022). There was terrible devastation of infrastructures. In a study, Rao et al. (2022) found that the contributors of the destruction were weak buildings and unplanned outlines of the town. Thus, they recommended on coercive implementation of the building codal provisions that can be beneficial for minimizing damages (Rao et al., 2022). Furthermore, Oshiro et al. (2022) offered precautionary measures beforehand like pragmatic disaster risk analysis, hazard mapping, early warning system, building codes, preparedness and so on. They focused on the corrective measures after the disaster as the lesson learnt to deal with future disasters. On the other side, the healthcare system was dysfunctional due to the lack of health personnel, insufficiency of the financing on disaster mitigation and minimal international assistance (Tao et al., 2023). Revealing the critical data on the problem of mental disorder of about half of the Afghan population, Hussaini et al. (2022) claimed that the earthquake additionally intensified the mental health challenges among the survivors and their families. Likewise, the quake has deepened poverty, food insecurity and health issues (Essar et al., 2022).

2.3.5 Empirical Gap

The empirical reviews agreeingly indicate that local governments obvious better understanding on the local needs and expectations. Thus, various writers' emphasis on localized and

decentralized local governance sounds genuine. Consequently, locally coordinated and led disaster management can provide greater results. In this regard, the Constitution of Nepal, 2015 provides the exclusive power of disaster management to local levels in the Schedule 8 and enlisted it within the list of concurrent powers of all three tiers of governments in the Schedule 9. Likewise, NAPA, LAPA and SFDRR aim to strengthen local governments for sound disaster governance. Contrastingly, reviews suggest that elected representatives and authorities working in the local levels essentially require the knowledge of their roles and responsibilities, and crucial capacities for disaster management.

Reviewing international practices of disaster governance, different approaches of disaster management are existing making central, provincial or local levels responsible for planning and responding disasters, and collaboration, coordination and communication for disaster management. In few cases, there is proactive roles on disaster governance by local levels in some countries with fine disaster management mechanisms. They request higher levels for assistance only when they are overwhelmed. Studying of five devastating earthquakes occurred around the globe, deaths, injuries, displacements, and human insecurities are the apparent concurrent products of such disasters.

Furthermore, the earthquakes were destructive in nature or ignited more harmful disasters like tsunamis, landslides, floodings or other life-threatening hazards. Respective governments obviously came forward to respond to those disasters and most of those responses could hardly meet the expected objectives. Some were nationally led and few were provincially or locally. Few responses show that locally coordinated and led disaster governance has been relatively effective to reach to the expectations of the affected populations. However, empirical review of these literatures indicates that there is gap on studying on the ways disaster governance efforts matter the institutionalization of human security particularly at the local government level after the 2015 earthquake in Nepal.

Likewise, the literature relating to the incorporation of human security into local governance present that crucial responsibilities of the local levels are to endeavor for minimizing the threats and challenges of the people's day to day life. People's lives and livelihoods are the fundamental business of the local governments thus making human security of primary concern. As authors are together that ultimate aim of the governance is human wellbeing and welfare consequently considering human security the expected outcome of the governance. In the disaster situations like the 2015 earthquake in Nepal, the consequences of the governance require to be additionally prominent. Here, these previous studies disregard examining and

explaining the different approaches of the local governance in addressing human security concerns after the 2015 earthquake in Nepal. Similarly, disaster-induced displacement and related problems have got satisfactory academic attention in the past two decades. The research papers display that the issues are discussed in isolation neglecting the human security perspective. The effects of the 2015 earthquake are well described in a number of papers, however the ways local government initiatives after the 2015 earthquake in Nepal contribute to the remaking of society is unassessed.

2.4 Review of the Methods Used in Disaster Governance Related Studies

This portion of the methodological reviews helps to comprehend various methods used in studying disaster governance and consequently suggests a practical methodological plan for this study. Researchers has used different methods and followed various methodological perspectives while studying forced displacement. One cannot detect particular method for studying disaster-induced displacement in all circumstances. Rather, a method can be used in various studies or a study can be conducted with various methods or vice versa. The point is that academic research is essential for identifying issues including their options for solutions and the researcher needs to be judicious while selecting a method for such studies. Agreeingly, Cohen (2004b) advocates the significance of the academic studies on internal displacement for its healthier resolutions. Let us see some of the methods widely used in the studies of disaster displacement and disaster governance.

2.4.1 Methods Commonly Used

(a) Document analysis: Document analysis is a valuable research method that can be effectively applied in social science researches (Crano et al., 2023) to investigate the variables including matters relating to governance. This method involves a systematic examination and interpretation of various types of documents, including policy documents, government reports, legal frameworks, official correspondence, and other written materials (Kutsyuruba, 2023; Sharma et al., 2023). Document analysis is particularly well-suited for studying the evolution of policies, strategies, and decision-making processes. One of the key strengths of document analysis is its capacity to provide a comprehensive view of the formal aspects of disaster governance. By scrutinizing policy documents and official reports, researchers can gain insights into the strategies, goals, and priorities set by authorities and governmental bodies (Crano et al., 2023; Kutsyuruba, 2023). This can help in understanding how governance structures were activated, how resources were allocated, and how policies were designed to address human security concerns and foster the remaking of society. Document analysis allows

researchers to trace the development of disaster management plans, allocation of funds, and implementation of specific initiatives for rebuilding communities and enhancing resilience.

Additionally, document analysis can reveal the formal legal and institutional frameworks that govern disaster response and recovery efforts at the local level. This method can uncover how existing laws and regulations were adapted or amended. By examining legal documents and official communications, researchers can assess the extent to which human security considerations, such as access to basic services, protection of vulnerable populations, and safeguarding of livelihoods, were integrated into disaster governance structures. Thus, document analysis is a strong research method for investigating the relationships offering a structured approach to examining policy documents, legal frameworks, and official discourse, enabling researchers to unravel the formal mechanisms and narratives that shape disaster response and recovery efforts at the local level.

(b) Questionnaire: Another commonly used tool is questionnaire. Studying human security and the natural disaster induced displacement in Cameroon, Buchenrieder et al. (2017) claimed that unique primary data were collected using questionnaire method covering all livelihood areas of those displaced populations (p. 35). They found questionnaire a very useful tool for research. Karki (2019) also employed questionnaire during the study of impact of displacement on civil and political rights of the internally displaced persons in Nepal after the 2015 Nepal earthquake. In the dissertation, Khatiwada (2010) has utilized the questionnaire as an important tool for data collection from IDPs.

(c) Meta-analysis: Many studies in social sciences find ‘armchair’ method convenient for its possibility of accessing a number of information within limited time (Koricheva & Gurevitch, 2013). For similar method, Koricheva and Gurevitch (2013) named ‘meta-analysis’ frequently used method in the social science studies. During meta-analysis, systematic assessment of carefully selected literature is carried out. While studying impact of internal displacement on human security in Northern Nigeria, Ejiofor et al. (2017) utilized both primary and secondary data from those carefully chosen literatures. Likewise, Hunt and Clarinval (2014a) nicely used a case of an IDP camp and crafted the issues regarding ‘disaster, displacement and justice’ by analyzing works by various authors. During their study, Adhikari et al. (2016) analyzed the status of community participatory approach to deal with the effects of disaster-induced displacement with the help of selected literatures. Likewise, Ulak (2016) also applied armchair method of research during the study of the impact of the 2015 Nepal earthquake on various sectors. Thus, meta-analysis has been a common method for social science researches, including studies in disaster governance.

(d) Group discussion: Various authors have commonly used ‘group discussion’ as the effective qualitative data collection method. During the study of the conflict-induced displacement in Nepal, Khatiwada (2010) used focused group discussion to collect information regarding the issues arose from the displacement. Kolmannskog (2013) also utilized ‘discussion’ as a significant tool of data collection regarding the impact of displacement due to natural hazards.

(e) Case study: Among all, case study method is more extensively administered predominantly in the studies associated with populations like research on displacements and displacement-like situations. Exploring the reasons for staying internally displaced persons in the camps in Sri Lanka, Johansson (2004) employed case study method in those IDP camps. From the study, he found that majority of the IDPs staying in the camps were low-educated, unskilled and landless seeking for the durable solution for livelihood. Likewise, Kolmannskog (2013) studied some cases of African internal displacement in the work. During the study on internal displacement, Laker (2013) carried out case studies in the internally areas of northern Uganda. A number of cases of forced displacement were carefully chosen to make the paper comprehensive enough (World Bank, 2017).

Similarly, Yu et al. (2010) selected some disaster displacement cases to study and came forward with some constructive lessons learnt from natural disasters on how future developments would ameliorate the impacts of natural disasters and suffering that could be caused. Exemplarily, Salgado-Gálvez (2018) applied the methodology in Nepal by choosing the Gorkha earthquake 2015 as the case to study the internal population displacement and found that two key areas ‘housing and infrastructure’ and ‘economic production’ can be severely affected. Advocating the merits, VanWynsberghe and Khan (2007) suggested that case study method in research is transdisciplinary; that is, it can be used in social science, science, applied science, business, fine arts, and humanities research (p. 81). Similarly, Yin (2009) gave emphasis on the use of case study as the credible research method.

(f) Interview: Among the research methods, interview as the tool for primary data collection is broadly instrumented. Various authors prefer interview – unstructured, semi structured, or structured; formal or informal; direct or indirect/telephone – for its advantages prominently including incorporating comprehensive variety of information. Studying disaster-induced migration in Bangladesh, Mallick and Siddiqui (2015) collected the data through in-depth interview with the victims of cyclone. Kolmannskog (2013) also relied on the semi-structured and unstructured that is open-ended interviews during the study on the subject ‘securing effective rights for persons displaced in the context of climate change and natural hazard-

related disasters' with key informants and subject matter experts working with various agencies for displacement in many countries. To study the population displacement and its impact on food security and socioeconomic status, data were collected from the selected respondents with the help of interview schedule (Shetu et al., 2017).

(g) Survey: Survey is one of the commonly used research methods in disaster governance. Gaston et al. (2012) used survey during their study of local disaster governance in Cameroon. They selected twenty local levels for their extensive and face-to-face survey. Similarly, Randell (2016) widely used field survey to study the impacts of development-induced displacement in the Brazilian Amazon. In the study of social disorganization and sexual violence among internally displaced women of hurricane Katrina, Fagen et al. (2011) has used the data collected through field survey. Likewise, Abusaada (2016) carried out an extensive field survey to study internal displacement and he termed the problem as a 'silent crisis'. Field survey has been effective method to study ongoing processes.

(h) Observation: Observation can be a valuable research method for studying the dynamics of local disaster governance and the remaking of society in the aftermath of the 2015 earthquake. This method involves firsthand, systematic data collection by various writers who actively participate or passively observe events, processes, and interactions within the affected communities (Chiba et al., 2016; González & Martínez, 2023). Through direct observation, researcher can gain a deeper understanding of the lived experiences of individuals and communities as they navigate the challenges and opportunities presented by post-disaster recovery (González & Martínez, 2023; Zainol et al., 2023).

Furthermore, conducting observation in the affected areas can provide unique insights into various aspects of disaster governance and human security. For instance, by immersing yourself in the local context, you can observe how disaster response and recovery efforts unfold on the ground, how resources are allocated, and how decision-making processes take place within local governance structures. You can also witness the day-to-day experiences of community members, including their access to essential services, their safety concerns, and their interaction (González & Martínez, 2023; Zainol et al., 2023). This firsthand knowledge can be invaluable in assessing the effectiveness of disaster governance mechanisms in addressing human security needs and facilitating the remaking of society. Moreover, observation can help capture the social dynamics that influence disaster recovery. By being a presence in the area, researchers can gain trust and build rapport with local residents (Chiba et al., 2016; Zainol et al., 2023). This can facilitate access to narratives and perspectives that might not be easily accessible through other research methods. Likewise, observation allows

for the identification of unexpected or emergent phenomena that may not have been initially considered in the research design, enabling a more holistic understanding of how local communities adapt and transform in the aftermath of a disaster.

(i) Mixed method: In fact, mixing various methods in a study has been effective way of finding answer to the research question (Yin, 2009). It offers the options to compare and contrast the collected data, consequently enriching the data quality. Studying role of local government in disaster risk reduction, Gaston et al. (2012) utilized questionnaire and survey to collect data from twenty local levels. Likewise, Ratnayake and Disanayake (2018) found ‘mixed method’ the best by using ‘questionnaire field survey, ranking scale and meta-analysis’ during their study of the resettlement of the displaced people in Sri Lanka. Similarly, Bae et al. (2016) administered meta-analysis and case study methods to study the disaster governance in South Korea. In the same way, Goyal (2019) has used meta-analysis, semi-structured interview and case study during her study on disaster in Kerala. In a study of challenges of disaster governance, Artiningsih et al. (2016) administered questionnaire, meta-analysis and interview as their methods of research. Recently, Dariagan et al. (2021) has used survey and meta-analysis in their study of disaster preparedness of local governments in Philippines.

2.4.2 Methodological Plan

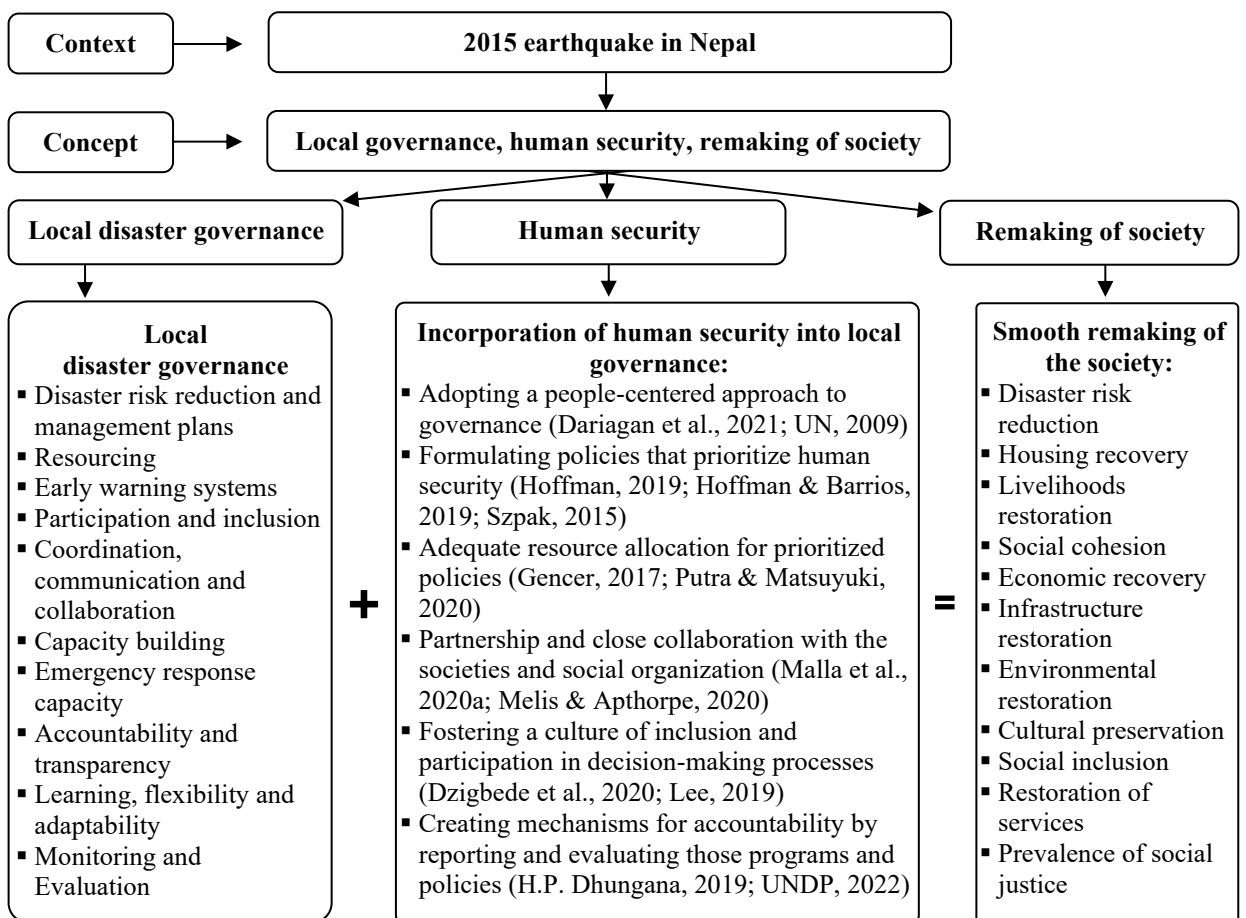
The reviews of the research methods do not clearly indicate the best method for a specific discipline. It depends on the art of the user how skillfully the method is crafted. Rather, validity remains the primary concern while designing the research method whether the designated tool is valid for the study, meaning whether the research tool becomes appropriate to feed the information that it supposed to. Going through the review process, the researcher recommends mixed-method as the best option to study the disaster-induced displacement and its management, that is disaster governance. Giving emphasis on the mixed-method, Yin (2009) claims that multiple data sources and types enhances data credibility. Afterall, it is planned to go by combining case study, observation, document analysis and interview for this study. Document analysis aids in uncovering facts and forming rational arguments. Qualitative analysis of selected documents benefits the discussion. Seven years after the 2015 Nepal Earthquake and the declared end of reconstruction, the displacement cannot be observed as it was. Therefore, this study uses a case study method for data collection. Uncontrolled non-participatory observation is employed to compare qualitative data from other methods. Key informants are interviewed directly or by phone. An open-ended interview schedule is the primary data collection tool, aiming to gather perceived and experienced information.

2.5 Conceptual Framework

In this study, disaster displacement, particularly displacement due to 2015 earthquake, is the situation. The independent variable is the local disaster governance. Similarly, the dependent variable is ‘remaking of society’ that is dislocated by the earthquake. In the process, ‘human security’ serves as the mediating variable. Ultimate intention of the study is to present the pragmatic findings on how the threats to human security can be lessened through good local disaster governance so that the process of remaking of society becomes as anticipated. Here, the indicators of incorporation of human security into local governance and the smooth remaking of society are extracted from overall literature reviews. The flow and intention of the study as shown in the figure 2.1 assumes that the result of the process ensures human security which will contribute on smooth remaking of the disrupted societies.

Figure 2.1

Conceptual Framework



Note. Adopted from the literature review and modified by the researcher.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter comprises of the description of the variables, pilot study, research approach and design, data collection process, sampling techniques and research methods. Further, it explains content validity index, and data presentation, analysis and interpretation. Lastly, it enlightens the ethical consideration that is the significant aspect of research methodology.

3.1 Local Disaster Governance as the Independent Variable

As indicated in the reviews in the previous chapter, local governance refers to the broader concept of governing the local levels through collaboration of state and non-state actors. The objectives of the wider joint effort are focused on the social wellbeing and public service delivery. It involves the system, arrangements and process of planning, decision-making and managing whole affairs within the local levels. Thus, local disaster governance encompasses the mechanism, system and process regarding disaster risk reduction, preparedness, response and recovery.

Local disaster governance, as an independent variable, can make substantial influence on other dependent variables such as the damages and losses caused by the disaster, the effectiveness of disaster response, momentum of recovery process, and the remaking of society disrupted by the disaster. Through the effective disaster risk reduction and management plans, local disaster governance can be instrumental for minimizing effects. It has vital role in instigating policies and practices of effective disaster management through practices of environmental sustainability, workable emergency plans, allocation of adequate resources, and coordination and collaboration with the intention of saving lives and minimizing lives.

Likewise, good local disaster governance can accelerate the remaking process by prompt restoration of essential utilities, facilitating the reconstruction process, and supporting affected individuals and communities through participation and inclusion. Thus, effective local disaster governance can contribute in making more resilient societies. Conversely, abortive local disaster governance can cause delayed responses, shortage of resources, and a slow recovery process, that can lead to greater damage to buildings and infrastructure, loss of lives, and protracted suffering for those affected by the disaster.

Considering the critical role of local disaster governance as the independent variable, the operational indicators of the good local disaster governance in this study are local disaster risk reduction and management plans; resourcing; early warning systems; participation and inclusion; coordination, communication and collaboration; capacity building; emergency response capacity; accountability and transparency; learning, flexibility and adaptability; and monitoring and evaluation.

3.2 Human Security as the Mediating Variable

The 2015 earthquake in Nepal had a profound impact on the country's social, economic, and political landscape. Local disaster governance played a crucial role in managing the aftermath of the disaster and in the subsequent remaking of society. One important variable that can mediate the relationship between disaster governance and the remaking of society is human security. Human security denotes safeguarding and empowerment of individuals and communities to live a satisfying life devoid of worries about violence, illness, or poverty. In the context of disaster governance, human security is about confirming that persons and societies have access to the resources and amenities required to recover from the disaster and remake their lives.

In the aftermath of the 2015 earthquake in Nepal, human security remained a critical factor in disaster governance. The earthquake triggered extensive damage and displacement, leaving many people and communities susceptible to further harm. Effective disaster governance was essential to deliver assistance and support to the disaster affected. Moreover, disaster governance that prioritized human security was crucial in the remaking of society after the earthquake. Thus, disaster governance efforts that prioritize human security could include investment in earthquake-friendly infrastructure, capacity building of emergency responders, and making healthcare and education more accessible, which can help to create a further resilient and sustainable society that is improved to handle upcoming disasters and encourage human security. Therefore, human security is a crucial mediating variable in the study of local disaster governance and remaking of society after the 2015 earthquake.

The parameters resembling the operational indicators of incorporation of human security into local governance, summarized through the literature review, are adopting a people-centered approach to governance (Dariagan et al., 2021; UN, 2009b); formulating policies that prioritize human security (Hoffman, 2019; Hoffman & Barrios, 2019; Szpak, 2015); adequate resource allocation for prioritized policies (Gencer, 2017; Putra & Matsuyuki,

2020); partnership and close collaboration with the societies and social organization (Malla et al., 2020a; Melis & Apthorpe, 2020); fostering a culture of inclusion and participation in decision-making processes (Dzigbede et al., 2020; Lee, 2019); and creating mechanisms for accountability by reporting and evaluating those programs and policies (H. P. Dhungana, 2019; UNDP, 2022).

3.3 Remaking of Society as the Dependent Variable

The remaking of society following the 2015 earthquake in Nepal can be studied as a complex variable that is influenced by multiple factors. The earthquake had a substantial effect on the social, economic, and political structures, consequently necessitating urgency for society to be remade. Local disaster governance and human security were two significant aspects that played a vital role in the remaking of society after the earthquake. By prioritizing human security within the disaster governance efforts, remaking of society can be done in a way that promotes better resilience and sustainability. This comprises efforts to rebuild resilient infrastructure, improved access to healthcare and education, economic recovery and so on. As such, the remaking of society is considered the dependent variable in this study of local disaster governance and human security after the 2015 earthquake in Nepal.

Remaking of society has been appraised as the dependent variable for this study, where examination of relationship of local disaster governance and human security, and its influence on the remaking of society has been conducted. For this, the operational indicators for the remaking of society are disaster risk reduction, recovery of housing, livelihoods restoration, social cohesion, economic recovery, restoration of infrastructure, environmental restoration, cultural preservation, social inclusion, restoration of services, and prevalence of social justice.

3.4 Elite Analysis and New Institutionalism as the Working Theories

This dissertation employs two theoretical frameworks: elite analysis and new institutionalism. Elite analysis emphasizes the role of influential individuals and groups in determining policies and decision-making processes related to disaster governance. It highlights the importance of examining the interests, power dynamics, and relationships among various players in local governance systems. On the other hand, new institutionalism emphasizes the role of institutions, rules, and norms in shaping governance procedures and results. This theoretical viewpoint studies how formal and informal institutions, such as laws,

regulations, and social norms, influence the behavior of actors involved in disaster governance. By means of these two theoretical frameworks, this study intends to explore the issues regarding effective disaster governance at the local level in Nepal, particularly in the aftermath of the 2015 earthquake. Thus, it seeks to recognize the ways power dynamics and institutional factors influence disaster governance policies and practices, and how these policies and practices affect the human security and wellbeing of affected societies.

3.5 Pilot Study

As a significant portion of a good study design, pilot studies can notify the feasible research process and possible results of the study (Teijlingen & Hundley, 2002). Piloting research can enrich the research design and may increase the success rate of the study. After the pilot study, Malmqvist et al. (2019) found it crucial as it modified their research design and made them adjust their instrument. During proposal writing process of this dissertation, study and personal communication indicated the need of piloting the research. Accordingly, rapid rural appraisal in some parts of area of study was conducted as the pilot study on 12, 13 and 14 April 2021. The study included field observation, focused group discussion and interaction with concerned personnel: locals, ward chairpersons and chief administrative officer of the rural municipality.

On the first day, personal communication with a social worker cum entrepreneur from the district provided an insight of the district. Other five local personnel of Armed Police Force Nepal (APF), including a staff of District Emergency Operation Center (DEOC), were also communicated repeatedly requesting for information about disaster displacement in Kavrepalanchowk district. As per their suggestion, Roshi rural municipality could be chosen as the area of study. The same day, contact details of the people's representatives and Chief Administrative Officer (CAO) of Roshi were found on the website of the rural municipality. Most of the mobile phones were unreachable (later revealed that it was due to remoteness of the locations). Four ward chairpersons and the CAO were communicated on the same day, and realized that piloting this study through physical visit of the area is crucial.

The field visit was planned for 13 April 2021. Luckily, two of those APF personnel were from Roshi who guided the field visit. The observation and focused discussion were started from ward 2 of Roshi with two displaced households. After completion of the observation and interaction, the study was started in Shikhar Ambote village of ward 3 of Roshi. Single day was too little for such field studies because of time-taking distance and process. The

study continued on 14 April as well in villages named Shikhar Ambote Tallo Gaon, Maku Tar and Gharti Danda, Siyale. Total eight households were covered in the study including six in ward number 3. By the end of the pilot study, it was realized that studying in a ward would limit the qualitative information for whole research. Thus, plan for conducting the study in a local level was modified to four different local levels which was realized beneficial. Plan for administering the questionnaire with the affected people was changed to case study, key informant interview and observation due to the extension of the study area.

Additionally, significant advantage for this study has been the researcher's real-time experiences of working in the Multi National Military Coordination Center (MNMCC) in Kathmandu during Humanitarian Assistance and Disaster Relief (HADR) operations after the 2015 earthquake. Consequently, the information acquired through the case study was examined and made more accurate with the help of the understandings. The MNMCC was established with the aim of coordinating humanitarian actors arrived in Nepal from various countries of the world (Manandhar et al., 2017).

3.6 Research Approach

The study included a research philosophy aligning with constructivist ontological positions, valuing the notion that reality is shaped by social, cultural and historical contexts (Lincoln & Guba, 1985). The experiences and perceptions of individuals involved in disaster response and recovery, as well as those of the affected people, are crucial to understanding the phenomena (Berger & Luckmann, 1990). Consequently, the dissertation is epistemologically interpretivist, asserting that knowledge is gained through understanding the meanings and interpretations of individuals. The researcher's role involves interpreting the social world from the perspectives of the participants, with the context and experiences of individuals being central to generating knowledge (Schwandt, 1994). To effectively address this philosophical stance, the study employed an inductive methodology. This involved collecting specific observations and data from the context of the 2015 earthquake and its aftermath, and then analyzing them to develop broader generalizations (Thomas, 2006). By using this approach, the research aimed to derive conclusions and insights that are grounded in the specific context of the earthquake and contribute to a deeper understanding of the remaking of society and local disaster governance in its aftermath.

Furthermore, the dissertation adopted a qualitative approach to gather the necessary data and explore the research problem. This approach was particularly suitable for understanding the

meanings, experiences, and perspectives of individuals or groups involved in a specific phenomenon (Creswell, 2007), such as the process of remaking society after a disaster. Case studies, document analysis, interviews, and observations were the methods employed. Case studies provided in-depth examinations of specific instances or events (Yin, 2009) related to the 2015 earthquake and its impact on local disaster governance and human security. These case studies offered detailed descriptions and analyses of the communities, allowing for a comprehensive understanding of the complexities and dynamics involved in the remaking of society.

Likewise, interviews were conducted with individuals who have first-hand experiences or expertise relevant to the research problem. These interviews provided an opportunity to gather rich qualitative data, allowing the researcher to explore the perspectives, emotions, and insights of the interviewees (Kvale, 2007) regarding local disaster governance and the process of remaking society. Through interviews, the study captured the experiences and interpretations of the individuals involved, shedding light on the social and psychological dimensions of the post-disaster context. Additionally, observations played a crucial role in understanding the behavior, interactions, and practices within the context being studied. By directly observing the activities, decision-making processes, and interactions of individuals and groups involved in local disaster governance and the remaking of society, valuable insights into the actual dynamics of the prevailing situation was gained (Angrosino, 2007).

In conjunction with these qualitative methods, the study also incorporated document analysis, examining relevant documents such as policy papers, official reports, and other written materials that provide insights into the context, policies, and strategies (Bowen, 2009) related to local disaster governance and human security. By adopting a qualitative approach and utilizing case studies, interviews, observations, and document analysis, the study aimed to capture the complex and multi-dimensional aspects of the post-2015 earthquake context. It recognized that qualitative methods are well-suited for exploring the dimensions of local disaster governance, human security, and the remaking of society, allowing for a comprehensive understanding of how communities rebuild and reshape themselves in the aftermath of a major disaster.

3.7 Research Design

This dissertation on local disaster governance, human security and the remaking of society in Nepal was exploratory and analytical in research design due to its multifaceted approach

to a complex and relatively under-researched topic. It is exploratory as it aimed to uncover new insights into how local governance structures responded to the disaster, the human security concerns, and the societal remaking processes, using broad research questions and qualitative methods. This allowed for a deep understanding of the lived experiences of the affected populations. Simultaneously, it was analytical as it systematically examines the collected data to identify patterns and relationships, applies and potentially contributes to theoretical frameworks, conducts comparative analyses across different local levels, evaluates the effectiveness of governance mechanisms, and provides recommendations to enhance future disaster governance and human security.

The research design in this dissertation incorporated both primary and secondary sources of data. The study adopted a qualitative approach, utilizing various research methods including case study, interview, document analysis and observation. By combining these qualitative research methods and data sources, the research design aimed to gather the complex and multi-dimensional aspects of the post-2015 earthquake context. Primary data sources were utilized to gather firsthand information relevant to the research problem. The researcher employed various qualitative research methods to collect primary data. These methods included case studies, interviews and observations, which were utilized to insights from the specific events related to the 2015 earthquake with the first-hand experiences, perspectives, complexities, challenges and successes relevant to the research problem.

Secondary data sources were also incorporated into the research design to complement the primary data and provide a broader context. The researcher analyzed existing studies, policy papers, official reports, and other relevant written materials through a systematic review. This enabled the researcher to understand the existing knowledge, policies, strategies, and frameworks related to local disaster governance and human security in the aftermath of the 2015 earthquake. The analytical nature of the research design involved synthesizing and analyzing both primary and secondary data. The researcher employed qualitative data analysis techniques to identify patterns, themes, and relationships within the data. This analysis enabled the researcher to draw meaningful conclusions, develop insights, and generate recommendations regarding the remaking of society and local disaster governance in the aftermath of the earthquake.

By incorporating both primary and secondary data sources and utilizing an exploratory and analytical approach, the research design of this study aimed to provide a comprehensive

understanding of the dynamics, challenges, and opportunities associated with the remaking of society and local disaster governance after the 2015 earthquake. The design enabled the exploration of experiences, social constructions of reality, and practical strategies employed in the post-disaster context, contributing to the broader understanding of how communities can effectively recover and ensure human security in such situations.

3.8 Source and Collection of Data

As the primary source of data, case studies had been very fruitful for receiving firsthand qualitative data. Eight case studies, two from each local level, were conducted. Focused group discussions, personal communications and document analysis were the methods used for the case studies. Likewise, open-ended key informant interview was administered for gathering data from the concerned personalities. Uncontrolled non-participatory observation in the study area had been helpful to receive crucial information which also verified the data received from different sources. At the same time, the secondary sources of data were the subject matter related data publicly available and obtained from the local levels, policies, programs, legal documents, articles and various literatures.

3.9 Area and Population of Study

Among various causes of displacement, disaster displacement was chosen for the study. Particularly, earthquake-induced (geophysical) displacements caused by the 2015 Nepal earthquake and its governance has been the matter for the study. The tremor caused noticeable destruction in thirty-one districts in Nepal, with fourteen districts, including Bhaktapur, Dhading, Dolakha, Gorkha, Kathmandu, Kavrepalanchowk, Lalitpur, Makawanpur, Nuwakot, Okhaldunga, Ramechhap, Rasuwa, Sindhuli, and Sindhupalchowk, being particularly hard-hit (NRA, 2018). In broad, Nepal was the area of this study, however in particular, Kavrepalanchowk district out of the most affected fourteen districts was purposefully chosen for the study. Similarly, Dhulikhel and Namobuddha Municipalities, and Bhumlu and Roshi Rural Municipalities were the local levels for the study based on the highest and lowest private houses reconstruction progress. The authorities involved in disaster management after the 2015 earthquake, the elected people's representatives in the local level, and the severely affected local levels were the population for the study.

The data of private houses construction completion as of March 2021 in Kavrepalanchowk district was reference for the sampling. As per the data, 3776 houses were completed among

6550 enrolled beneficiaries in Banepa. Likewise, 3713 houses were completed out of 5371 in Dhulikhel. In Mandandepur, 5843 houses were completed out of 8989, and 3862 were finished in Namobuddha among 7067 enrolled beneficiaries. In Panchkhal and Panauti, respectively 5772 and 5640 were finalized out of 9457 and 8795 receivers. Similarly, 3032, 5099, 4875, 2355, 2499, 4187, and 3539 private houses were completed out of 4113, 5981, 6090, 2816, 2936, 6121, and 4541 enrolled recipients respectively in Bethanchowk, Bhumlu, Chaurideurali, Khanikhola, Mahabharat, Roshi, and Temal (NRA, 2021). This progress report of NRA provided an idea about the area and population for the study, which shows that Dhulikhel had the highest and Namobuddha had the lowest private houses reconstruction progress among municipalities. Similarly, Bhumlu had the highest and Roshi had the lowest reconstruction progress among rural municipalities.

3.10 Sampling Technique

For this study, Kavrepalanchowk district among the severely hit fourteen was purposefully chosen on the basis of distance from the Valley so that the area of study could be accessed repeatedly, consequently aiming to make more effective study. Four local levels, namely Dhulikhel and Namobuddha municipalities, and Bhumlu and Roshi rural municipalities, were chosen through criteria-based purposive sampling for the study. The eight villages (Appendix 'G') for the case study were sampled through snowball sampling based on the field visits, personal communications, interviews and observations. Among the villages for the case study, one is resettled in other location because it was disqualified for the residence, since there were multiple geographic ruptures due to the effect of the earthquake. The nine areas (Appendix 'E') for the observation were also chosen through snowball sampling during the field visits, interactions and interviews.

Dissimilarly, among the respondents for the interview, Chief District Officer (CDO) and the commanders of Nepali Army (NA), Nepal Police, APF, and National investigation Department (NID) within then District Security Committee (DSC) were selected through cluster sampling. The period for this sample is same as in sampling local levels. Likewise, the former heads and deputies from all four local levels were chosen via cluster sampling for the study. Similarly, the incumbent heads of those local levels and present deputies who were previously elected people's representatives were also selected through cluster sampling, that is aimed for the comprehensive understanding of the prevailing scenario of the study. One CAO from each local level was chosen via criteria-based purposive sampling on the basis of

longest tenure they served in the respective local levels. Other respondents of the interview were then presidents of Nepal red cross society (NRCS) Kavre and Federation of Nepali Chambers of Commerce and Industry (FNCCI) Kavre, then Local Development Officer, an engineer from NRA's District Level Project Implementation Unit (DLPIU- Building) Kavre, a social worker, and a journalist, who were sampled through snowball on the basis of other interviews, field visits and personal communications. They were sampled on the basis of their active participation in the response and recovery activities. Altogether, forty-four respondents (Appendix 'C') were interviewed.

3.11 Research Methods and Tools

The disaster-induced displacement due to the 2015 earthquake in Nepal has been for more than seven years and the government has ended the tenure of NRA. Because of the prolonged duration of the displacement event, case study has been the most appropriate and effective method for examining the matters regarding local disaster governance, human security and remaking of society. For the case study, a checklist (Appendix 'F') was used as the tool. Interactions with the ward chairpersons and members, study of the documents of the ward office and focused group discussions with the affected people of the designated study areas were the methods used for the case studies.

Likewise, document analysis in this research has also been helpful to find the information and facts through the study of the policies, plans and documents produced by the local levels. The data and documents related to disaster governance available in the public sources and offices of local levels were also used for the study. Uncontrolled non-participatory observation (Appendix 'D') was also carried out in and around the affected and displacement sites. An open-ended key informant interview schedule (Appendix 'A' and 'B') was used as the primary data collection tool for this study.

Content Validity Index (CVI) can be used to validate the research tool such as questionnaire and interview questions (Ayre & Scally, 2014; Gilbert & Prion, 2016). For validating the questions of the interview schedule, Lawshe's CVI was used in this study. Five practitioners with knowledge in the disaster related subject matter including an advocate were chosen for consultation. Particularly, a work by Yusoff (2019) was followed in this validation process. The questions of the open-ended interview schedule were prepared in the content validity data collection tool with four-scale relevancy that is 1 for not relevant, 2 for somewhat relevant, 3 for quite relevant and 4 for highly relevant. While calculating CVI, 1 was assigned

for practitioner in agreement and 0 for non-agreement. In the same way, 1 was assigned for the proportion of content practitioners giving item a relevance rating of 3 or 4 while calculating I-CVI (item-level content validity index). Likewise, 1 was assigned for 100 percent UA (universal agreement). While calculating S-CVI/Ave (scale-level content validity index based on the average method), the formula “ $S-CVI/Ave = (\text{sum of I-CVI scores}) / (\text{number of item})$ ” was used. Likewise, the formula “ $S-CVI/UA = (\text{sum of UA scores}) / (\text{number of item})$ ” was used to calculate S-CVI/UA (scale-level content validity index based on the universal agreement method). Finally, CVI value for both the S-CVI/Ave and S-CVI/UA received was 1 that is acceptable for two to five practitioners involving CVI (Yusoff, 2019), thus making the interview schedule acceptable for this study.

3.12 Data Presentation, Analysis and Interpretation

In this dissertation, American Psychological Association (APA) 7th edition is followed for in-text citation and referencing. The data obtained from various sources are presented in descriptive form. The qualitative data were analyzed and interpreted to reach to the findings of the study. In this study, the data collected through the chosen methods of case study, interviews, observation, and document analysis were presented, analyzed and interpreted to gain a deeper understanding of the local disaster governance, human security, and the remaking of society after the 2015 earthquake. The qualitative method of research was employed to explore the complex and multifaceted nature of the phenomenon under investigation. The data collected from multiple sources provided a comprehensive and rich dataset that allowed for a nuanced examination of the research problem.

The data analysis process began with organizing and categorizing the collected information to identify common themes, patterns, and relationships. The case study approach provided an in-depth examination of specific instances of local disaster governance and societal changes, while interviews offered valuable insights and perspectives from key stakeholders involved in the post-earthquake recovery efforts. The document analysis enabled a systematic review and synthesis of existing documents related to the local disaster governance, further enhancing the understanding of the broader context and frameworks. Additionally, observations conducted in relevant settings supplemented and crosschecked the gathered data by providing real-time observations of the dynamics and interactions between various actors and institutions. Interpreting the data involved critically analyzing the findings within the theoretical framework of human security and disaster governance.

By examining the data in light of existing literature and theoretical perspectives, this study aimed to generate new knowledge and contribute to the existing body of research. The interpretation of the data strived to capture the complexities, variations, and nuances of the local disaster governance processes and their implications for human security and societal reconstruction. Through this rigorous analytical process, this research has sought to provide meaningful insights into the challenges, successes, and transformative potential of disaster governance in remaking societies affected by major disasters such as the 2015 earthquake.

3.13 Ethical Consideration

Throughout the course of this research, ethical considerations were paramount in ensuring the protection and wellbeing of all respondents and participants involved. Ethical guidelines and principles were followed to uphold the rights, privacy, and confidentiality of individuals, communities, and organizations participating in the study. Prior to data collection, informed consent was obtained from all participants, clearly explaining the purpose of the research, the voluntary nature of participation, and the measures taken to safeguard their identities and personal information. To maintain anonymity and confidentiality, all personal identifiers were removed or pseudonyms were assigned to respondents and participants in the reporting and analysis of the data. The data collected through interviews and observations were stored securely and accessible only to the researcher. Information shared by respondents and participants was treated with utmost respect and used solely for the purposes of this study. Any potential conflicts of interest were acknowledged and managed to ensure the objectivity and integrity of the research process.

Moreover, the research design and methods employed aimed to minimize any potential harm or discomfort to respondents and participants. Prior to conducting case studies, interviews and observations, the researcher took steps to establish rapport and trust with respondents and participants, creating a safe and supportive environment for open and honest dialogue. Participants and respondents were assured of their right to withdraw from the study at any time without negative consequences. The researcher also considered the potential impact of the research on the communities involved, aiming to ensure that the findings and recommendations would be beneficial, respectful, and sensitive to local contexts and needs. By adhering to established guidelines and ethical principles, this research aims to contribute to the existing knowledge base while respecting the dignity and rights of all individuals and communities involved.

CHAPTER 4

THE 2015 EARTHQUAKE AND APPROACHES OF LOCAL GOVERNANCE IN ADDRESSING HUMAN SECURITY CONCERNS

Chapter four begins with an account of the 2015 earthquake in Nepal, detailing its immediate effects and subsequent recovery efforts. It then analyzes the roles of different actors involved in the recovery process, offering measures to enhance their effectiveness. The chapter explores approaches for integrating human security into local governance, followed by an analysis and comparison of the laws, programs, and plans at various local levels under study. Insights from case studies on the incorporation of human security are presented, highlighting the roles of elites and institutions thereafter. The chapter concludes with a comprehensive discussion.

4.1 The 2015 Earthquake in Nepal

The 7.6 Richter scale devastating earthquake that struck Nepal on 25 April 2015, had far-reaching impacts and caused extensive destruction (NRA, 2018). Some of the authors prefer to name it Gorkha earthquake as the epicenter of the quake was in Barpak of Gorkha district. The affected areas witnessed the collapse of buildings including multistorey buildings in Kathmandu, while the mountains experienced landslides and avalanches. Tragically, the death toll was tragically high, with a total of 8962 lives lost. Among them, 3934 were males, 5026 were females, and the gender of two deceased individuals remains unknown. The earthquake also resulted in the disappearance of 195 people, adding to the immense grief and uncertainty experienced by their families, making it the most severe earthquake in the region in the past 81 years (NPC, 2015a; NRA, 2018).

The number of injured individuals was equally alarming, with 22302 people requiring medical attention and care. The physical toll of the earthquake extended beyond human lives, as infrastructure suffered significant damage. A total of 6463 government houses were damaged, with 2687 of them being completely destroyed and 3776 partially damaged as shown in the table 4.1. This rendered many government facilities and services inaccessible, posing challenges to the immediate response and recovery efforts (NPC, 2015a; NRA, 2018). The aftermath of the earthquake was marked by numerous aftershocks, including a major earthquake of 7.3 Richter scale just 17 days later (NRA, 2018). Approximately one-third of Nepal's population, around 8 million people, were affected across 39 districts, with the

impact particularly severe in remote rural areas. Among those, fourteen were the severely affected districts. This posed significant challenges for response and relief efforts, with hundreds of thousands of individuals losing their homes and facing extreme poverty. The impact on private houses was staggering, with 1072093 homes damaged. Among them, 773095 houses were fully destroyed, leaving a vast number of families without a place to seek shelter. An additional 298998 houses were partially damaged, adding to the magnitude of the housing crisis in Nepal (MoHA, 2018b; NPC, 2015b; NRA, 2018).

Table 4.1

Summary of Damages and Losses by the 2015 Earthquake in Nepal

Category	Number
Total death	8962
Death male	3934
Death female	5026
Death unknown	2
Missing people	195
Injured	22302
Total Govt. houses damaged	6463
Govt. houses fully damaged	2687
Govt. houses partially damaged	3776
Total private house damaged	1072093
Private house fully damaged	773095
Private house partially damaged	298998

Note. The data is derived from *Incident Record* (2018), <http://drrportal.gov.np/home>.

The 2015 earthquake in Nepal left a devastating trail of damages and losses causing widespread destruction. As shown in the table 4.2, worth NPR 408625 million was damaged from social sectors that included housing and human settlements, health, education and cultural heritage. In the losses and damages from the social sectors, shares of private and public sectors are NPR 363248 and 45377 million respectively. Likewise, the losses and damages of productive sectors was worth NPR 178121 million which incorporates the losses of agriculture, irrigation, commerce, industry, tourism, and finance. Looking in to the total loss, its \$7065 million, that includes \$5404 million of private and \$1661 million of public sector. These damages and losses highlight the magnitude of the socioeconomic impacts of the 2015 earthquake in Nepal.

Table 4.2***Summary of the Effects of the 2015 Earthquake in Nepal***

Sectors	Disaster effects (NPR million)			Distribution of disaster effects (NPR million)	
	Damages	Losses	Total	Private	Public
Social sectors	355028	53597	408625	363248	45377
Housing and human settlements	303632	46908	350540	350540	-
Health	6422	1122	7544	1394	6150
Education	28064	3254	31318	2365	28953
Cultural heritage	16910	2313	19223	8948	10274
Productive sectors	58074	120046	178121	158079	20043
Agriculture	16405	11962	28366	25813	2553
Irrigation	383	-	383	-	383
Commerce	9015	7938	16953	16953	-
Industry	8394	10877	19271	19271	-
Tourism	18863	62379	81242	75105	6137
Finance	5015	26890	31905	20937	10969
Infrastructure sectors	52460	14323	66783	17281	49502
Electricity	17807	3435	21242	15569	5673
Communications	3610	5085	8695	1712	6983
Community infrastructure	3349	-	3349	-	3349
Transport	17188	4930	22118	-	22118
Water and sanitation	10506	873	11379	-	11379
Cross-cutting issues	51872	1061	52933	1755	51178
Governance	18757	-	18757	-	18757
Disaster risk reduction	155	-	155	-	155
Environment and forestry	32960	1061	34021	1755	32267
Total	517434	189027	706461	540362	166100
Total (US\$ million)	\$5174	\$1890	\$7065	\$5404	\$1661

Note. The data is derived from the report *Nepal earthquake 2015: Post disaster needs assessment, Vol. A: Key findings* (NPC, 2015a).

The impacts of the earthquake were devastating, with widespread devastation of buildings, including historical monuments and UNESCO World Heritage sites. Infrastructure such as roads, bridges, and power lines suffered severe damage, impeding rescue and relief operations. The earthquake caused mass displacement and disrupted essential services, posing additional challenges for affected communities in accessing basic necessities and hindering coordination efforts. These losses not only disrupted the lives of individuals and families but also had significant socio-economic implications for the affected communities, leaving a devastating trail of damages and losses, highlighting urgency of comprehensive recovery and rebuilding efforts to support the affected population and rebuild their lives. Survivors faced not only physical challenges but also profound psychological trauma as they

coped with grief and the daunting task of rebuilding their lives. Landslides and avalanches triggered by the earthquake added to the complexity of recovery efforts. International aid poured in, reflecting the global solidarity and support extended to Nepal in its recovery and reconstruction journey.

4.2 The 2015 Earthquake in Kavrepalanchowk District

The 2015 earthquake in Kavrepalanchowk, Nepal had a profound and far-reaching impact, causing significant loss of life and widespread destruction. The disaster claimed the lives of 330 people, with 135 males and 195 females among the casualties (MoHA, 2018b). Among those deceased, 59 percent were female including 19 percent female children, and 41 percent were male including 16 percent male children (DDRC Kavrepalanchowk, 2015b). Additionally, 1179 individuals were injured, further highlighting the extent of the disaster's impact. These numbers shown in the table 4.3 represent not only the loss of human lives but also the immense pain and suffering experienced by the affected families and communities.

Table 4.3

Damages and Losses by the 2015 Earthquake in Kavrepalanchowk

Category	Number
Total death	330
Death male	135
Death female	195
Injured	1179
Total Govt. houses damaged	79
Govt. houses fully damaged	48
Govt. houses partially damaged	31
Total private house damaged	107244
Private house fully damaged	83530
Private house partially damaged	23714

Note. The data is derived from *Incident Record* (2018), <http://drrportal.gov.np/home>.

The earthquake had devastating effects on both government and private housing in the district. A total of 79 government houses were damaged, with 48 of them completely destroyed and 31 partially damaged. The destruction of these houses disrupted the functioning of government services and hindered immediate response and relief efforts. The impact on private houses was even more staggering, with a total of 107244 houses damaged.

Among them, 83530 houses were fully destroyed, leaving thousands of families without a place to call home. An additional 23714 houses were partially damaged, further adding to the housing crisis in the region (DDRC Kavrepalanchowk, 2015b).

The earthquake also caused extensive damage to public properties and infrastructure. These damages included 131 community buildings, 79 cooperative buildings, 35 youth club buildings, 13 buildings of farmer groups, 107 Gumbas/Bihar/Stupa, 3 Red Cross buildings, 39 micro hydro plants, 383 temples, 45 irrigation canals, 89 Pati/Sattal, 1 view tower, and 1 martyr's gate. Likewise, a total of 698 school buildings were damaged, with 317 community schools fully destroyed and 158 community school buildings and 223 institutional school buildings partially damaged (DDRC Kavrepalanchowk, 2015b), disrupting the education of thousands of students and posing a significant setback to the educational infrastructure.

Agriculture, a vital source of livelihood for many in Kavrepalanchowk, suffered extensive damages. Agro products and agricultural infrastructure worth above NPR 1.3 million, including food grains, seeds, vegetables, cash crops, bee hives, and local agro product collection centers, were lost. Additionally, the loss of livestock was estimated to be worth NPR 182014000, impacting the livelihoods of many farmers and their families. Access to clean drinking water was significantly affected, with 652 drinking water projects damaged, totaling NPR 187327312 in losses. The damage to over 30000 toilets further exacerbated sanitation and hygiene challenges in the aftermath of the earthquake. Even law enforcement was not spared, as 30 police offices were damaged, further complicating the efforts to maintain order and security in the region during the response and recovery phase (DDRC Kavrepalanchowk, 2015b). The impact of the 2015 earthquake remained overwhelming in Kavrepalanchowk district. The interview data revealed the following impacts of the devastating earthquake:

Loss of human lives and injuries: The 2015 earthquake in the Kavrepalanchowk District in Nepal resulted in a significant loss of human lives. The collapse of buildings and infrastructure caused tragic consequences for individuals and families. Many people perished, and numerous others sustained injuries. The impact of collapsing structures, falling debris, and the overall devastation led to physical harm for a large number of people (Goda et al., 2015; Karki, 2019). The loss of lives extended beyond the district itself. Some individuals originally from the district lost their lives in Kathmandu, the capital city of Nepal, which was severely affected by the earthquake. This added to the grief and impact on

the population of the district. In addition to the physical injuries, the earthquake caused trauma and the loss of family members among the affected population. The emotional and psychological toll on individuals and communities was immense, leading to long-term effects on mental wellbeing.

Damage to private houses, property, and displacement: Private houses in the Kavrepalanchowk District suffered extensive damage due to the force of the earthquake. Many families were left homeless or with severely damaged properties. The destruction of houses and the fear of aftershocks compelled individuals and families to seek temporary shelters or move to safer areas. The earthquake also caused substantial damage to public and commercial properties, including shops, markets, and other establishments. This resulted in significant economic losses for businesses and further added to the challenges faced by the affected population. The destruction of houses and the limited availability of safe and secure temporary shelters posed a significant challenge for the affected population (Cook et al., 2016). Many people faced a lack of adequate shelter, exacerbating the already dire situation.

Loss of crops, agricultural products, animals, and poultry: The earthquake had a severe impact on agriculture in the Kavrepalanchowk District. Agricultural crops and infrastructure were destroyed or damaged, resulting in a loss of livelihoods for many farmers and a decline in the availability of local food supplies. This created food scarcity and further exacerbated the challenges faced by the affected population. Various agricultural products were lost or damaged, leading to a decline in agricultural output (DDC Kavrepalanchowk, 2015). This not only affected food security but also had a negative impact on the local economy. Farmers who rely on agricultural products for their livelihoods faced additional economic hardships. Livestock and poultry also suffered losses and damages during the earthquake. Animals were killed or injured, further adding to the economic burden faced by farmers and impacting their ability to recover.

Food insecurity: The earthquake resulted in food insecurity among the affected population. The damage to infrastructure and disruption of transportation made it challenging to ensure the availability and accessibility of food. With limited resources and disrupted supply chains, people struggled to obtain sufficient food for their daily needs.

Damage to public infrastructure and services: The earthquake caused significant damage to public infrastructure and services in the Kavrepalanchowk District. Roads and

transportation infrastructure were severely impacted, with landslides, cracks, and collapses making them impassable. This hindered rescue and relief efforts, as well as everyday transportation for the affected population. Schools in the district were severely damaged, with classrooms and educational facilities destroyed or rendered unsafe (Kotani et al., 2020). This disruption of education affected thousands of children and youth, depriving them of the opportunity to continue their studies.

Public buildings, including government offices, health centers, and community centers, were also significantly impacted and damaged. This hampered the provision of essential services, including healthcare, and added to the challenges faced by the affected population. Water facilities and infrastructure were damaged, leading to a shortage of clean water for drinking, sanitation, and hygiene. The lack of access to clean water increased the risk of waterborne diseases and further compromised the wellbeing of the affected population.

Bridges in the district suffered damages, making it difficult for people to access essential services, markets, and other areas. The disruption of transportation systems and connectivity compounded the challenges faced by the affected population, limiting their ability to recover and rebuild. The earthquake also disrupted telecommunication networks, including mobile and landline services. Communication networks were damaged, leading to a lack of connectivity and hindering coordination efforts for rescue, relief, and recovery operations (MoHA, 2015). The power supply infrastructure was also affected, with damages to electricity grids, transmission lines, and substations. This resulted in power outages and a lack of access to electricity for an extended period, further impacting the daily lives of the affected population.

Landlessness: In certain areas, people were left without land due to the earthquake. The shifting of land, landslides, and other geological effects rendered some lands unusable or unsafe for habitation. This left people without their homes and livelihoods, exacerbating the challenges faced by the affected population.

Health-related issues: The sudden increase in patients due to injuries and trauma strained health services in the district. Medical facilities, including hospitals and clinics, were overwhelmed, making it difficult to provide timely and sufficient care to those in need. The healthcare system struggled to cope with the influx of patients and the demand for medical services. The earthquake also had a significant impact on the mental health of the affected

population. The trauma, loss of lives, displacement, and overall destruction of communities had long-lasting psychological consequences (Basnyat et al., 2015). The increased levels of stress, anxiety, depression, and post-traumatic stress disorder among survivors required appropriate support and mental health services.

Damage to cultural heritage: The earthquake caused extensive damage to the cultural heritage sites in the Kavrepalanchowk District. Historical buildings, temples, and monuments of cultural significance were destroyed or severely damaged, resulting in the loss of cultural and historical artifacts. This damage not only affected the district's identity and heritage but also had implications for tourism and cultural preservation efforts.

Impact on social structure and change in gender roles: The social structure of the affected communities underwent significant changes following the earthquake. Displacement, loss of livelihoods, and the overall disruption of daily life altered social dynamics, relationships, and community interactions. The sense of community and social cohesion was challenged as people struggled to rebuild their lives and recover from the disaster (Hall et al., 2017). Gender roles also experienced shifts in the aftermath of the earthquake. The breakdown of traditional gender roles and responsibilities occurred as individuals and families faced new challenges and adapted to the post-earthquake circumstances. Women and men took on different roles, responsibilities, and decision-making roles in response to the changed circumstances.

Security challenges: The chaos and vulnerability caused by the earthquake created opportunities for criminal activities. Incidents of burglary, thefts, and looting occurred in the affected areas, further worsening the situation for the already vulnerable population. The lack of security and the disruption of law enforcement created an environment conducive to criminal behavior. Relief items provided for the affected population were also subject to theft or looting in some instances. This unethical behavior hindered the distribution of aid and deprived those in need of essential resources, exacerbating the challenges faced by the affected population.

Disrupted development, economy, and livelihoods: The earthquake disrupted people's livelihoods and sources of income. Many occupations, including farming, trade, and small businesses, were severely impacted, leaving individuals and families struggling to sustain their livelihoods. The loss of income and employment opportunities added to the economic

hardships faced by the affected population. Businesses had to be closed down as a result of the earthquake. The destruction of physical infrastructure, lack of customers, and economic instability forced many businesses to shut down, resulting in job losses and reduced economic opportunities (Ulak, 2016). The halt in economic activities and the decline in income generation contributed to overall economic stagnation in the Kavrepalanchowk District. The earthquake also disrupted developmental activities in the district. Construction projects, infrastructure development, and other initiatives were put on hold as resources were redirected towards relief and recovery efforts. The delay in developmental projects further impeded the district's progress and hindered long-term recovery and reconstruction.

Geological and environmental damages: The earthquake had significant environmental consequences in the Kavrepalanchowk District. Landslides, soil erosion, and disruption of ecosystems had long-term impacts on the natural environment and ecological balance. The altered topography and geological ruptures, including landslides and ground fissures, posed ongoing risks and challenges for rebuilding and development efforts. The changes in the landscape required careful consideration during the reconstruction process to mitigate future geological hazards.

Human trafficking, abuse, and exploitation of vulnerable individuals: The chaotic and vulnerable situation created by the earthquake led to an increase in instances of human trafficking. The displacement, loss of protection networks, and overall instability provided opportunities for traffickers to exploit vulnerable individuals, particularly women and children. The earthquake made them more susceptible to various forms of exploitation, including forced labor, sexual exploitation, and trafficking. Further, studies show that rate of sex trafficking became 15 percent higher and the violences increased after the earthquake (Bradley et al., 2021; Joshi et al., 2020). Vulnerable individuals, including children and women, faced a heightened risk of abuse and exploitation in the aftermath of the earthquake. The breakdown of social support networks, loss of protection, and overall instability increased their vulnerability to various forms of abuse, including physical, sexual, and emotional abuse. It was crucial to provide protection and support services to these vulnerable groups to prevent further harm.

Illegal occupation of public land and misuse of natural resources: In the chaotic aftermath of the earthquake, there were cases of illegal occupation of public land. The absence of proper monitoring and governance, combined with the disarray caused by the

disaster, led to unauthorized settlements and encroachments on public spaces. This further complicated the process of reconstruction and land management, requiring effective governance and land-use planning. The earthquake also led to the misuse or exploitation of natural resources (Karki, 2019). The demand for wood, timber, and other materials for reconstruction purposes resulted in unsustainable practices. This not only contributed to environmental degradation but also compromised the long-term sustainability of natural resources in the region.

Lack of rescuers and equipment: Following the earthquake, the district faced a shortage of rescuers and necessary equipment. The scale of the disaster overwhelmed local resources, including trained personnel and specialized equipment, delaying rescue operations and exacerbating the challenges faced by survivors. The shortage of rescuers and equipment hindered the immediate response efforts and affected the timely provision of assistance to those in need (DDRC Kavrepalanchowk, 2015a).

The case studies in appendix 'H' also collectively illustrate the profound effects of the 2015 earthquake on Nepali villages, emphasizing recurring themes of widespread devastation encompassing loss of life, destruction of homes, and agricultural losses. While physical destruction was evident, the psychological impact was equally substantial, as villagers faced fear, anxiety, and trauma from both the initial quake and subsequent aftershocks, perpetuating a sense of vulnerability. Despite these challenges, the communities showcased remarkable resilience through acts of solidarity, resource sharing, and temporary shelter provision, underscoring the compassionate response of humans during crises.

The case studies also highlight the difficulties in relief efforts and resource access, where slow response mechanisms and challenges in obtaining necessary supplies prolonged the villagers' suffering. Displacement emerged as a significant consequence with families forced to create new settlements due to destroyed ancestral homes. This displacement presented complexities related to resettlement, community identity preservation, and livelihood restoration. Throughout, the stories collectively demonstrate the villages' unwavering determination to recover and rebuild, even in the face of challenging terrain, damaged infrastructure, and ongoing psychological trauma.

4.3 Response and Recovery Efforts After the 2015 Earthquake

4.3.1 Role of Central and Provincial Level Agencies

The roles played by the central and provincial level agencies are described below:

(a) Office of the Prime Minister and Council of Ministers (OPMCM): After the devastating earthquake of April 2015 in Nepal, the OPMCM played a key role in coordinating the country's disaster response and recovery efforts. As the highest executive body, the OPMCM led the government's immediate response to the disaster, mobilizing resources and coordinating with various ministries, agencies, and international partners to provide timely assistance to affected communities. The OPMCM's role in disaster management was vital in ensuring that relief and aid reached the most impacted areas, and that essential services like healthcare, food, and shelter were promptly provided to those in need (Nepal et al., 2018). Additionally, the OPMCM took the lead in formulating the PDRF, providing a structured and prioritized plan for rebuilding the affected regions.

(b) Ministry of Home Affairs (MoHA): After the devastating 2015 earthquake in Nepal, MoHA played leading role for disaster response and management efforts. Collaborating closely with the Central Disaster Management Committee (CDMC) and the NEOC, MoHA took charge of coordinating relief and rescue operations. The NEOC served as the central hub for gathering and disseminating information, facilitating effective communication between various stakeholders and overseeing the coordination of international support pouring into the country (Aryal, 2023; Nepal et al., 2018). Likewise, efforts of NA, NP and APF were also synchronized through the NEOC. To further streamline international assistance, the MNMCC and the OSOCC were established within the premises of the NA Headquarters, both operating under the NEOC's purview (Manandhar et al., 2017). These centers played a crucial role in harmonizing and optimizing international assistance, ensuring efficient utilization of resources for rescue, relief, and recovery through the collective efforts.

(c) NRA: The NRA played a decisive part in the reconstruction phase. However, its direct involvement at the local level was found to be impractical, and there was a lack of technical workforce mobilized by the NRA, which hindered its positive efforts (Acharya et al., 2022). The interview data further revealed that the organization also faced resistance from a significant part of the bureaucracy, resulting in reluctance among personnel to work with the

NRA. This lack of good intentions within the bureaucratic structure impacted the efficacy of the NRA's operations. Besides, the NRA lacked to implement a one-door policy for all activities, leading to coordination challenges and inefficiencies (Platt et al., 2020).

(d) Provincial level agencies: At the time of the earthquake, the provincial government was not yet established, and its role in the recovery process was not significant. However, interview data suggested that the province be given an active role in the response and recovery efforts to ensure better coordination and decision-making at the local level. This can enhance collaboration and information sharing between the central and provincial levels.

As per the interview data, the central level agencies played a directive role in the response and recovery efforts after the earthquake. They took an active role in formulating laws, policies, and guidelines to guide the post-earthquake actions (MoHA, 2015). Their focus on providing housing grants and gathering international assistance was commendable. However, there were challenges in the organization of immediate relief and rescue activities, with delays in delivering relief items to the affected districts. The facilitating role of the central government and its broader responsibilities as a guardian in the recovery process were not effectively observed. Despite the challenges, there were positive developments in infrastructure restoration, particularly in the education, health, and drinking water sectors. The infrastructures related to these areas were well-built, showcasing progress in these critical sectors. Monitoring efforts remained satisfactory throughout all phases of disaster.

4.3.2 Strengthening the Role of Central and Provincial Agencies

To improve the effectiveness of the response and recovery efforts, several measures can be considered as per the interview data. First, there is a need for a dedicated and active institution or ministry to oversee disaster affairs and ensure effective response and recovery measures. This would help streamline the decision-making process and enhance coordination among various stakeholders. Second, a legal and effective coordination mechanism between the district and local levels should be established to facilitate collaboration, information sharing, and joint planning. This can improve the overall efficiency and effectiveness of the response and recovery efforts.

Additionally, political leadership at various levels should prioritize effective and unbiased recovery measures, rather than using the process for political gain. The central government should facilitate the recovery process as required, ensuring that public expectations are met

through proper planning and implementation. The NRA should strengthen its efforts in skill training for house construction and mobilize technical workforces to enhance the reconstruction process (Sharma et al., 2018). The missed opportunity for restructuring existing settlements and constructing planned settlements should be addressed to improve long-term resilience. Overall, a comprehensive and coordinated approach, involving both public and private sectors, is crucial for effective disaster response and recovery in the future.

4.3.3 District Level Bodies in Earthquake Response and Recovery

The interview data indicated that the district level bodies played a significant role in the response and recovery efforts following the earthquake. The spontaneous and voluntary engagement of DSC members demonstrated their dedication to serving their communities during the crisis. The DAO played an active role in coordinating the response, with a particular focus on administrative affairs. The CDO provided valuable facilitation, ensuring effective coordination among different stakeholders. The security forces' crucial efforts in search and rescue operations and relief activities were instrumental in saving lives and providing assistance to affected individuals (Karki, 2017). However, the district level bodies faced challenges due to the lack of trained human resources and sufficient search and rescue equipment, hindering their effectiveness in delivering timely and efficient aid.

The DDC played an active role in coordinating the flow of relief items, demonstrating their commitment to addressing the immediate needs of the affected population. On the other hand, the DCC had a more ceremonial role, which highlights the need for clarity and delineation of responsibilities among district-level bodies. It is commendable that district level bodies placed a special focus on response efforts, including measures to control abuse, prevent the occupation of public land, and curb the misuse of natural resources. Their efforts in collecting and equitably distributing relief items contributed to meeting the urgent needs of the affected communities. However, challenges were faced in implementing a one-door policy by the DAO, indicating the importance of streamlining coordination mechanisms and promoting effective collaboration among stakeholders.

4.3.4 Improving the Roles of the District Level Bodies

To enhance the effectiveness of district level bodies in future earthquake response and recovery, the interview data suggested some measures. Firstly, there is a need for the DAO to assume a monitoring and evaluation role to ensure the effectiveness of recovery efforts

and facilitate speedy reconstruction. This involves setting clear goals and benchmarks, regularly monitoring progress, and demanding comprehensive progress reports from local levels (Amatya et al., 2017). Additionally, coordination between the DAO and the NRA's district office should be strengthened to foster effective collaboration and information sharing, ensuring a cohesive approach to recovery efforts.

Furthermore, it is crucial to address the challenges faced by the DDMC by organizing more productive and inclusive meetings with active discussions. Provision of meeting agendas in advance can enable participants to come prepared, promoting meaningful engagement and decision-making. The CDO should be empowered and supported to resist influence and pressure, ensuring impartial decision-making aligned with the best interests of the affected population. Moreover, there is a need to prioritize the effective prioritization of injured individuals by the DDMC and hospitals to minimize further losses. Efforts should be made to ensure that available resources are allocated based on need and vulnerability, aiming to provide timely and appropriate medical treatment.

Lastly, building upon the public appreciation for the coordination efforts of DSC members, it is essential to encourage and sustain their active involvement. This can be achieved by providing them with adequate training and resources to enhance their capacity in handling various aspects of response and recovery (Gencer, 2017). These recommendations can improve district level bodies' effectiveness in responding to future earthquakes, ensuring more efficient and coherent efforts to alleviate the impact of disasters on affected societies.

4.3.5 Role Played by the Then Local Bodies

Prior to the 2017 local elections, local bodies faced several limitations in disaster response and recovery, as revealed by interview data. Without local political leadership, effective decision-making was hindered, and representation of local interests was weak. Public access to administrators was limited compared to elected representatives, resulting in poor communication. This issue extended to executive officers, making it difficult for locals to address their concerns promptly. Procedural difficulties with technicians further affected response efficiency. While some executive officers were active, many local bodies showed little engagement and local ownership, hampered by limited constitutional and legal powers.

The effectiveness of local bodies in earthquake response varied. Some were actively involved in relief collection, distribution, and rapid assessment, providing crucial

information on damage and needs. However, many were passive, struggling to recognize local needs, leading to a disconnect between response efforts and community requirements. Executive officers were often criticized for failing to understand local sentiments, sometimes facing physical assaults. This underscores the need for improved communication between local bodies and communities.

Community-based responses for immediate rescue and relief were strong but lacked technical knowledge, posing potential risks. It is vital to supplement these efforts with technical expertise for efficient response. All-party mechanisms in local bodies were intended to ensure impartiality in relief efforts but often failed, undermining effectiveness. A significant challenge was that single personnel served multiple VDCs, limiting their active involvement. Information sharing, data collection, and public mobilization were problematic in bureaucracy-led local bodies, hindering decision-making and timely assistance. Improving communication channels, data collection, and public engagement is crucial. Lastly, administrative leaders based in district centers had limited direct engagement with local communities, impeding effective communication and understanding of local needs. Ensuring administrative personnel are accessible and present within communities is essential for effective disaster response and recovery.

4.3.6 Local Levels in Earthquake Response and Recovery

The data indicates that local levels became relatively more effective after the 2017 local election. This can be attributed to the democratic processes and empowered local governance structures that emerged from the election. The challenges faced and role played by the local levels in the disaster response and recovery are explained in the following paragraphs:

(a) The challenge and opportunity for learning: The earthquake event served as both the biggest challenge and an opportunity for learning at the local level. It presented unprecedented difficulties that required local levels to adapt and develop effective strategies for response and recovery. Documenting and disseminating the lessons learned from this event can enhance preparedness for future disasters (Tafti & Tomlinson, 2015). Conducting post-disaster evaluations, assessments, and simulations can help local levels integrate these learnings into their disaster management plans, resulting in more effective response and recovery efforts.

(b) Role of local levels and overlooking livelihoods: The role of local levels in earthquake response and recovery is critical since all plans and programs are ultimately implemented at the local level. However, the data highlights that local levels failed to prioritize livelihood-related activities. To enhance their effectiveness, local levels should place a greater emphasis on supporting and restoring local economic activities (Liu et al., 2022). This can be achieved by allocating resources for financial support, technical assistance, and access to markets. By focusing on livelihoods, communities can regain self-sufficiency, build resilience, and contribute to long-term recovery.

(c) Mental health and COVID-19 impact: The data indicates that mental health issues received less focus during the earthquake response and recovery. Addressing trauma, depression, and psychological problems is crucial in post-disaster contexts. Allocating resources for mental health services, establishing counseling centers, and conducting awareness campaigns are essential measures to support the psychological wellbeing of affected individuals and communities (Labra et al., 2019). Additionally, the data highlights that further sufferings were occurred due to the COVID-19 pandemic (Karki, 2021). Future disaster response and recovery efforts should consider the intersecting impact of pandemics and natural disasters to ensure comprehensive support and resilience-building.

(d) Politicization and lack of preparedness: Politicization of local levels during the implementation of activities poses challenges to effective response and recovery. It is essential to mitigate political influences and ensure impartiality, transparency, and needs-based relief and recovery operations (N. Dhungana, 2019). The data also points out a lack of preparedness and sensitization at the local levels and among the general public. Investing in initiatives that enhance disaster preparedness, such as training programs and awareness campaigns, can improve local-level response capacity and community resilience.

(e) Providing information and shelter: The data highlights the constructive role played by local levels in providing information and arranging shelters for rescuers and affected people. Strengthening information-sharing mechanisms and data collection processes can enhance decision-making and the timely delivery of assistance (Sharma et al., 2021). Local levels should continue to play an active role in coordinating and providing shelters to ensure the safety and wellbeing of affected communities during disasters.

(f) Challenges of personnel transfers and capacity building: Frequent transfers of personnel in and out of local levels pose challenges to their performance. Establishing guidelines and policies to minimize such transfers can foster continuity, allowing personnel to develop deeper understanding and relationships with the communities they serve. The data also shows that some local levels effectively engaged in capacity building through skill training programs. Expanding and diversifying these initiatives can enhance local capacity in various relevant areas, contributing to more effective response and recovery efforts.

(g) Missed opportunity for societal remaking and bottom-up approach: The data reveals a missed opportunity for overall societal remaking due to a failure to follow a bottom-up approach to planning and implementation. Local levels should actively involve communities in decision-making processes and incorporate their perspectives and knowledge (Uddin et al., 2020). Strengthening community-based organizations, fostering partnerships between local levels and community groups, and promoting participation can ensure that response and recovery efforts are more effective and contextually appropriate.

(h) Security and local authorities in reconstruction: NRA personnel faced threats from beneficiaries, highlighting the need for security in reconstruction efforts. Local security forces provided protection upon request, creating a safe environment for reconstruction activities (Karki, 2017). Some local levels actively engaged in the reconstruction phase, emphasizing the importance of clear mandates, coordination mechanisms, and resource allocation. Following the 2017 local elections, elected representatives became more involved in response and recovery, enhancing community representation and decision-making. Their increased accountability, driven by electoral motivations, led to greater public expectations and pressures, resulting in more efficient response and recovery efforts.

Despite this increased activity, many local levels lacked a comprehensive understanding of their primary responsibilities in disaster management. Despite granted authorities, it was observed that local levels have been less capable of fully utilizing them. This underutilization of authorities may pose challenges and hinder the effectiveness of response and recovery efforts. Nevertheless, local authorities conducted frequent field visits to monitor reconstruction progress, ensuring timely recovery. A potential concern was the political bias of elected leaders, which could impact response and recovery efforts (N. Dhungana, 2019). It is crucial to mitigate such biases to ensure fair outcomes. The reconstruction process accelerated post-elections, benefiting affected individuals by providing a platform for

complaints and grievances. However, the underutilization of granted authorities by local levels posed challenges. Addressing this issue and supporting local levels to maximize their potential is essential for effective response and recovery.

4.3.7 Enhancing the Role of the Local Levels

To enhance the effectiveness of local levels in response and recovery, measures as indicated by interview respondents, should be considered. First, strengthening local capacity is essential. This involves investing in capacity-building initiatives for local communities, equipping them with the necessary skills and knowledge to actively participate in response and recovery efforts. Training programs in areas such as first aid, search and rescue, and disaster management can significantly enhance community resilience and preparedness.

Second, prioritizing local livelihoods is crucial for sustainable recovery. Local levels should focus on restoring and supporting local economic activities, enabling communities to rebuild their lives and enhance their resilience (UN, 2010b). This can include initiatives to revive small businesses, agriculture, and other local enterprises that form the economic backbone of affected communities. Addressing mental health needs is another critical area. Post-disaster contexts often lead to trauma, depression, and other psychological issues. Allocating resources and implementing programs to provide mental health support is vital. Counseling services, support groups, and awareness campaigns can help individuals cope with the psychological impacts of disasters, promoting overall wellbeing and recovery.

Enhancing disaster preparedness and sensitization at the local level is also important. This can be achieved through awareness campaigns, training programs, and simulation exercises. Such initiatives ensure that communities are well-prepared for future disasters, reducing vulnerability and enhancing response efficiency. Empowering local governance is essential for effective planning and implementation (Sikandar, 2020). A bottom-up approach should be promoted, devolving more authority, resources, and responsibilities to local levels. Ensuring their active participation in decision-making processes will lead to more contextually appropriate and effective policies.

Coordinated support from national agencies is crucial. The NRA should provide local levels with direct, legal, and active roles in response and recovery efforts. Establishing coordination mechanisms can facilitate effective collaboration, ensuring a harmonized and streamlined approach between local and national levels (Trias & Cook, 2019). Ensuring continuity and

stability by minimizing frequent personnel transfers is also important. Stable personnel can develop a deeper understanding of local needs and build stronger relationships with communities, enhancing trust and effectiveness. Lastly, strengthening information management at the local level is vital. Improving information sharing, data collection, and public mobilization mechanisms can be achieved through technology, such as centralized information systems, facilitating efficient communication channels.

4.3.8 Other Institutions in Earthquake Response and Recovery

The roles played by the other institutions are as follows:

(a) All-party mechanism and political parties: The data highlights that the all-party mechanism played a constructive role in some locations during the earthquake response and recovery. However, bias was experienced in many locations, indicating the need for greater impartiality and coordination. The involvement of political parties in a race for credit and attempts to influence formal institutions created challenges and disruptions. Instances of physical assault against government officials by political party members further undermined effective response and recovery efforts. To enhance the effectiveness of political parties and the all-party mechanism, it is crucial to prioritize the interests of affected communities over political gains. Encouraging collaboration, accountability and transparency among political parties can help create a focused approach to response and recovery (Sulila, 2022).

(b) Role of other countries, NGOs, and INGOs: The involvement of various countries, NGOs, and INGOs in the response and recovery efforts was extensive (Manandhar et al., 2022). However, the numerous agencies directly approaching affected people created a sense of disorganization and fragmented efforts. To enhance effectiveness, coordination mechanisms should be established to facilitate collaboration and communication among these institutions. Implementing a one-door policy, where agencies work through a centralized coordination structure, can help streamline efforts, minimize duplication, and ensure the efficient delivery of assistance. Relief distribution should focus on addressing genuine needs, avoiding the distribution of unnecessary, unhealthy, and expired items. Transparent monitoring and evaluation systems can ensure the accountability and quality of assistance provided.

(c) Challenges of self-involvement and partiality: The data reveals instances of self-involvement by other institutions, where their interests in housing reconstruction led to social

division and negative public sentiment against the state. This perception of partiality created challenges and disrupted social cohesion. It is essential to address these concerns by promoting inclusive decision-making processes and ensuring that interventions are guided by local needs and priorities. The implementation of policies should prioritize the wellbeing of affected communities over institutional interests (Bali, 2022). Measures such as community consultations, feedback mechanisms, and regular monitoring can help identify and address potential bias, ensuring a more equitable and effective response process.

(d) Role of journalists and supporting agencies: Journalists played a crucial role in maintaining a good flow of information during the earthquake response and recovery. Their efforts in reporting accurate and timely information helped facilitate transparency and accountability. Collaborative platforms, information sharing mechanisms, and resource coordination can enable better engagement and coordination between formal institutions and supporting agencies. Recognizing the value of the media and ensuring their access to reliable sources of information can further enhance the effectiveness of efforts (Kapoor, 2015).

Enhancing the roles of various institutions in earthquake response and recovery requires several strategic measures, as indicated by interview data. First, strengthening coordination among all involved institutions is essential. Establishing effective coordination mechanisms will ensure regular communication, information sharing, and collaboration. This approach helps avoid duplication of efforts, streamline resources, and improve overall effectiveness in response and recovery initiatives. Promoting accountability and transparency is another critical measure. Implementing robust monitoring and evaluation systems can ensure accountability and quality in relief distribution and recovery programs. Transparent reporting and feedback mechanisms are necessary to address concerns of partiality and biases, fostering public trust and confidence in the institutions involved. Implementing a one-door policy can significantly enhance coordination and efficiency. By establishing a centralized coordination structure, a unified and streamlined approach to relief and recovery efforts is facilitated (Chuang & Ho, 2021). This minimizes fragmentation and ensures that resources and assistance reach affected communities in a coordinated manner.

Prioritizing local needs and participation is also crucial. Engaging local communities in decision-making processes and ensuring their active participation and representation is essential. Conducting community consultations, listening to their voices, and incorporating their perspectives ensures that interventions are tailored to their specific needs and priorities.

Enhancing capacity building for supporting agencies, NGOs, and INGOs is vital for improving their effectiveness in disaster response and recovery. This includes training programs, knowledge sharing, and skills development, enabling these organizations to address local needs more effectively and contribute significantly to recovery efforts.

Fostering social cohesion and inclusivity is another important measure. Promoting inclusive practices that bring together diverse communities through collaboration, dialogue, and joint initiatives can reduce divisions and foster a sense of unity, essential for collective recovery (Rawal et al., 2021). Lastly, facilitating information flow is crucial. Establishing mechanisms to ensure timely and accurate information flow among institutions, supporting agencies, and the public is necessary. Improved communication channels, regular updates, and collaboration with journalists can maintain transparent and reliable information dissemination.

4.3.9 Formal Institutions in Response and Recovery Efforts

The interview data highlighted the significant role played by the formal institutions in earthquake response and recovery activities, particularly in policy making and operational management. These institutions were responsible for coordinating rescue efforts, collecting and distributing relief items, and managing the overall response process (Shrestha & Pathranarakul, 2018). The effectiveness of formal institutions varied depending on the knowledge, interest, and dedication of the individuals involved. Their expertise and commitment played a crucial role in ensuring the smooth functioning of relief operations. Moreover, formal institutions like the DDRC and DDMC played a critical role in policy formulation for resource mobilization. These institutions played a vital role in coordinating efforts at the district level and ensuring a systematic approach to response and recovery.

However, there were challenges that hindered the effectiveness of formal institutions. One issue was the unequal distribution of resources due to modalities and procedures that favored sometimes certain groups or individuals. This could be attributed to a lack of knowledge, unwanted influences, or unethical interests within the institutions. Furthermore, delayed decision-making processes and the implementation of impractical policies had an adverse impact on the overall recovery process. These factors created obstacles in the timely and efficient delivery of relief and hindered the progress of reconstruction and recovery efforts.

4.3.10 Measures for Effective Formal Response and Recovery Efforts

To enhance formal institutions' effectiveness in earthquake response and recovery, several recommendations from interview data should be considered. First, enhancing knowledge and capacity-building initiatives for institutional personnel is essential (Lee, 2019). This can be achieved through targeted training programs, workshops, and knowledge-sharing platforms focusing on disaster management, relief operations, and policy formulation. Establishing transparent and accountable systems within these institutions is also crucial to ensure equitable resource distribution and prevent unethical practices. Streamlining decision-making processes and making policies more practical and adaptable to local contexts is another key measure. Timely decision-making is vital in disaster response, and realistic policies contribute to overall effectiveness (Carrasco et al., 2016). Incorporating feedback from local communities, experts, and stakeholders during policy formulation ensures policies align with the specific needs and challenges faced after an earthquake.

Fostering collaboration and coordination among different formal institutions is also essential. Strengthening communication channels, establishing clear roles and responsibilities, and promoting information sharing can facilitate a more unified response. This can be achieved through coordination mechanisms, regular meetings, and collaborative platforms bringing together representatives from various institutions. Lastly, promoting community engagement and participation in decision-making processes is crucial. Active involvement of local communities, community-based organizations, and civil society groups leads to more contextually appropriate and sustainable solutions (Bali, 2022). Creating spaces for dialogue, consultation, and feedback ensures the perspectives and needs of affected communities are considered when formulating and implementing policies.

4.3.11 Informal Institutions in Response and Recovery Efforts

As indicated by the interview data, informal institutions played a crucial role in earthquake response and recovery, significantly enhancing the effectiveness of these efforts. Shaped by social culture and norms, these institutions provided essential social support and fostered cooperation among community members. They promoted humanitarian sentiment, group spirit, and a helping attitude, facilitating relief efforts. This cultural orientation proved particularly constructive in immediate rescue and relief operations, such as constructing temporary shelters, sharing food and water, and providing psychosocial support. The mutual

support within affected communities were evident in these activities (NRC & NAP US, 2011). Additionally, institutions like Guthiyar and Gumba were instrumental in reconstructing cultural heritage and disseminating information, and sensitizing the public in specific locations.

However, challenges such as the social acceptance of corruption and unethical behavior within some informal institutions hindered response and recovery efforts. Issues like hiding factual data, influencing surveyors, and unequal gains undermined the process. To make informal institutions more effective, it is crucial to promote ethical behavior and ensure planning and execution are conducted with understanding and good faith. Enhancing their effectiveness also requires the mobilization of political parties for sensitization and public mobilization efforts. Political parties can raise awareness, mobilize resources, and foster collaboration between formal and informal institutions. By aligning their efforts and working together, both types of institutions can create a more cohesive and efficient response and recovery system (Bali, 2022).

4.3.12 Ways for More Effective Informal Response and Recovery Efforts

For more effective informal response and recovery efforts, fostering ethical behavior and transparency within informal institutions. This can be achieved through awareness campaigns, capacity-building initiatives, and community dialogues that promote integrity and discourage corrupt practices. Encouraging the participation of community members in decision-making processes can also enhance the effectiveness of informal institutions. By involving the affected communities in the planning and execution of response and recovery efforts, the interventions will be more contextually appropriate and better aligned with the specific needs and priorities of the communities. Additionally, establishing mechanisms for information sharing and collaboration between formal and informal institutions can improve coordination and enhance the overall effectiveness of the response and recovery efforts.

4.3.13 Various Actors, Social Groups and Stakeholders in Response and Recovery

The role played by various actors, social groups, and stakeholders in earthquake response and recovery activities was significant, but there were both positive contributions and areas for improvement. The interview data revealed that the earthquake temporarily erased social stratification and classification, bringing people together in solidarity. Social workers like Dhurmus Suntali Foundation gained popularity for their support, although the impact of their

efforts on the overall recovery was nominal. Many actors took to social media to publicize their relief distribution efforts, which helped raise awareness and mobilize support (Fauzi, 2023). However, there was a limited availability of health, rehabilitation, and psychosocial support services in some locations. In addressing various societal issues, actors, social groups, and stakeholders played an active role. They engaged in constructive efforts to address issues such as human trafficking, domestic violence, and the abuse of vulnerable groups. Sensitization initiatives were undertaken in certain areas to create awareness and promote positive change. In addition, the involvement of children clubs, volunteers, and women/mother groups in activities related to environmental protection, hygiene and sanitation, and understanding the effects of the earthquake showcased their commitment to community wellbeing (Sadaka et al., 2023).

However, a lack of focus on livelihood programs was observed among most actors. While immediate relief efforts are crucial, supporting affected communities in rebuilding their lives and restoring their economic activities is equally important. Actors, social groups, and stakeholders should collaborate to develop sustainable livelihood programs that provide long-term support and promote self-reliance. This can be achieved through initiatives such as skills training, access to credit and markets, and support for entrepreneurial activities.

According to interview data, enhancing the effectiveness of earthquake response and recovery efforts by actors, social groups, and stakeholders requires several strategic actions. First, promoting coordination and collaboration is essential to avoid duplication and ensure a comprehensive response. This can be facilitated through coordination mechanisms, regular information sharing, and joint planning. Second, prioritizing and expanding essential services, such as healthcare, rehabilitation, and psychosocial support, in affected areas is crucial. Achieving this requires partnerships between relevant agencies, capacity-building initiatives, and adequate resource allocation. Addressing the physical, mental, and emotional needs of affected individuals and communities is vital for a holistic recovery process.

Third, a stronger focus on livelihood programs is necessary. While immediate relief is critical, supporting affected communities in rebuilding their lives and economic activities is equally important. Collaborative efforts to develop sustainable livelihood programs, such as vocational training, access to microfinance, and assistance in rebuilding businesses and agriculture, can promote long-term support and self-reliance, helping communities regain economic stability and resilience (Liu et al., 2022). Lastly, addressing self-interest and

resource misuse by some actors is imperative. Promoting transparency, accountability, and ethical practices ensures effective resource use and proper allocation. Establishing monitoring and evaluation mechanisms can identify and address misuse. Additionally, hidden proselytization interests by some religious groups should be managed to ensure assistance remains humanitarian and secular. Collaboration with religious organizations should focus on genuine humanitarian aims, maintaining the secular nature of relief efforts.

4.3.14 Influential People in Earthquake Response and Recovery

The role played by influential people in earthquake response and recovery activities had mixed outcomes as indicated by the interview data. On one hand, their direct access to central institutions facilitated the acquisition of resources from various sources, enabling them to play a significant role in mobilizing support. Some influential individuals took proactive measures to coordinate both state and non-state actors, which helped in the effective coordination of response and recovery efforts. Their ability to leverage their networks and influence played a crucial role in addressing immediate needs and providing support to affected communities (Boin et al., 2016). However, there were instances where influential individuals misused their power and influence for personal and political gain. Some of them manipulated policies and activities within formal institutions, diverting resources based on their political and personal interests. This led to an inequitable distribution of relief and grants, with some indigent populations being excluded while others received excessive benefits. Such practices undermined the principles of fairness, transparency, and accountability that should guide response and recovery efforts.

Moreover, marginalized communities often did not receive priority in service delivery, indicating a lack of inclusivity and sensitivity to the needs of the most vulnerable. Political parties also played a disruptive role, frequently obstructing the delivery of relief items to divert them to their desired locations instead of reaching those in need. The central access of influential individuals led to undue pressure at the district level, potentially compromising the effectiveness and impartiality of the response efforts. In some instances, influential individuals attempted to influence and mislead surveyors and monitors, undermining the accuracy and integrity of data collection and assessment processes.

The unconstructive practice of relief announcements by political leaders for popularity further exacerbated the challenges. Rather than focusing on the needs of the affected

communities, some influential individuals sought to claim credit for the efforts of formal institutions, perpetuating a culture of self-promotion and diminishing the importance of collective action and collaboration. There were also instances where relief trucks were stopped and distributed in areas influenced by political leaders, highlighting favoritism and a lack of transparency in the distribution process. Furthermore, competition among political parties to showcase their presence resulted in needless helicopter flights for relief, diverting resources that could have been better utilized for the benefit of affected communities.

4.3.15 Constructive Engagement of the Influential People

Constructive engagement of the influential people in disaster governance can result in prolific values for the efforts. As per the interview data, some measures can be considered in order to improve the effectiveness and integrity of influential individuals in earthquake response and recovery activities. Firstly, there is a need for stronger oversight mechanisms to ensure transparency, accountability, and equitable distribution of resources (Panday et al., 2021). This can be achieved through robust monitoring, independent audits, and increased public scrutiny of relief operations. Additionally, it is crucial to strengthen the capacity of formal institutions to withstand external influence and manipulation. This can be achieved through enhanced training, professional development, and the establishment of clear guidelines and protocols that safeguard the integrity of decision-making processes.

Moreover, promoting a culture of ethical behavior, humility, and genuine commitment to the wellbeing of affected communities is essential. Influential individuals should be encouraged to prioritize the needs of marginalized groups and ensure inclusivity in service delivery. Collaborative platforms should be established to foster dialogue, cooperation, and joint decision-making between influential individuals, formal institutions, and civil society organizations. This can help in aligning efforts, sharing expertise, and ensuring a more comprehensive and equitable response and recovery process. Lastly, raising public awareness about the importance of collective action, transparency, and accountability is crucial. Encouraging citizens to actively engage in monitoring and reporting any misuse of resources can help foster a sense of collective responsibility and deter unethical practices (Kita, 2017). By promoting a culture of transparency, inclusivity, and collaboration, the role of influential individuals can be transformed to better serve the interests of the affected communities and contribute to a more effective and equitable response and recovery process.

4.4 Approaches for Integrating Human Security into Local Governance

4.4.1 Disaster Risk Reduction and Response Plans at the District Level

The data reveals that district-level disaster risk reduction and response plans have shown improvement since the 2015 earthquake. However, it is noted that many elements of these plans are primarily for formalities rather than practical implementation. One of the significant challenges faced at the district level is the lack of trained human resources and sufficient disaster management resources. This hampers the effectiveness of response efforts. Additionally, stakeholders and actors in disaster management demonstrate less active involvement, which further impacts the efficiency of the plans. Another observation is that there is a prevailing perception that disaster management primarily focuses on post-disaster activities rather than proactive risk reduction measures. This highlights the need to shift the focus towards emphasizing preventive measures and mitigation strategies (Uddin et al., 2020). It is essential to involve actors and the public in sensitizing the value of proactive disaster risk reduction, which has direct effect on the local disaster governance as well.

4.4.2 Disaster Risk Reduction and Response Plans at the Local Levels

At the local levels, comprehensive documented plans exist, including committees up to the ward level. However, these plans often remain on paper and lack effective implementation. Many of these plans are primarily prepared to fulfill governance indicators rather than addressing the practical and real risks faced at the local level. This indicates the necessity of bridging the gap between plans and practical implementation on the ground.

Moreover, the lack of public awareness on disaster risk reduction at the local levels leads to persisting issues such as the use of risky, cracked houses and harmful practices like lighting fires in the jungle for new grass for animals. Sensitization efforts and education on disaster risk reduction are crucial to address these issues effectively.

4.4.3 Making Disaster Risk Reduction and Response Plans Effective

To enhance the effectiveness of disaster risk reduction and response plans, several measures can be taken. Firstly, it is crucial to focus on disaster risk reduction, environmental protection, and climate change in planning and preparedness efforts at all levels. This would involve integrating strategies to mitigate and adapt to climate change and prioritize environmental sustainability within disaster management plans (Prabhakar, 2021).

Furthermore, measures such as creating large water ponds for storage and recharge systems and arranging plantations to address the food needs of wild animals can be considered at the local levels. These measures emphasize the importance of holistic approaches that consider both human and environmental factors in disaster risk reduction.

Additionally, it is necessary to address the challenges related to the preparation and updating of plans at the district and local levels. While NGOs often handle these tasks, there is a need for greater practicality and broader focus beyond specific disaster types. Moreover, the establishment of monitoring and evaluation agencies can help assess and guide the effectiveness of district and local-level disaster risk reduction plans, including disaster preparedness and response plans (DPRP). The lack of trained human resources, insufficient disaster management resources, and less active engagement from stakeholders are significant obstacles that need to be addressed (Quang & Thanh, 2023). Efforts should be made to invest in capacity building, establish monitoring and evaluation mechanisms, and foster proactive involvement from all relevant actors.

The data also emphasizes the importance of public awareness and sensitization on disaster risk reduction at both the district and local levels. This includes educating the public on safer building practices, sustainable resource management, and behavioral changes that minimize risks. Moreover, the limited storage of relief items by lead agencies, such as the Red Cross in Kavre district, reveals the need for improved logistics and stockpiling strategies to ensure adequate response during major disasters. Lastly, recent efforts in disaster preparedness activities among security forces, particularly the APF and the NA, indicate positive progress at the district level (Karki, 2017). However, there is necessary of a comprehensive and proactive approach to disaster risk reduction and response planning. By addressing the identified challenges and implementing the recommended measures, district and local-level plans can become more effective, practical, and aligned with the goal of reducing disaster risks and enhancing overall resilience.

4.4.4 Disaster Early Warning System at District and Local Levels

The interview data reveals a significant gap in the preparedness and response infrastructure within Kavrepalanchowk district, as there are currently no disaster early warning systems at the district and local levels. Early warning systems are essential for mitigating disaster impacts and providing timely information to communities, enabling them to protect lives

and minimize damage. The absence of these systems makes local levels more vulnerable to various hazards. Although some local initiatives use FM radio stations to issue notices about potential flooding, fire outbreaks, and disease outbreaks, this approach may have limitations in terms of reach and effectiveness, especially in remote areas.

Kavrepalanchowk district, home to major rivers such as Sunkoshi, Indrawati, Bhotekoshi, and Roshi, faces significant risks during monsoon seasons when flooding and related disasters are likely. Establishing early warning systems is crucial for providing real-time information on water levels, potential landslides, and other hazards, allowing communities to take timely precautionary measures (Sun et al., 2023). Prioritizing and investing in robust early warning systems that leverage various technologies and communication channels will enhance the district's disaster preparedness and response capabilities, ultimately reducing potential losses and damages.

4.4.5 Emergency Response Capacity at Local Levels

The interview data reveals that in the past, only a few municipalities had fire brigades as a form of emergency response capacity. However, the majority of local bodies, including municipalities, currently lack adequate emergency response capacity. This indicates a significant gap in preparedness and the ability to effectively respond to disasters at the local level (Malla et al., 2020a). It is encouraging to note that municipalities have now established fire brigade services, which is a positive step towards enhancing emergency response capacity. Additionally, some local levels have introduced ambulance services as well.

4.4.6 Local Emergency Response Capacity Building

To strengthen emergency response capacity at the local levels, several measures can be implemented. Firstly, it is crucial to ensure that all local levels have the necessary infrastructure and resources, such as fire brigades and ambulances, to handle emergencies effectively. This requires investment in acquiring the required equipment and vehicles to enhance response capabilities. Additionally, local levels should focus on capacity building initiatives. This includes conducting comprehensive and regular disaster management training programs for focal persons and locals. However, it is essential to address the lack of interest and follow-up observed in the current training programs. By enhancing the relevance and practicality of the training, local levels can increase engagement and ensure that the knowledge gained is effectively applied during disaster situations (Quang & Thanh, 2023).

Furthermore, local levels need to establish LEOC to centralize emergency response coordination and communication, that serves as hubs for information dissemination, decision-making, and resource allocation during emergencies. Establishing these centers at the local levels would improve coordination among various stakeholders and enhance the overall effectiveness of emergency response efforts. It is also crucial to improve the knowledge and awareness of disaster focal persons at the local levels regarding the available materials in their stores. Regular inventory checks, training, and updating of focal persons can ensure that they are well-informed about the resources at their disposal.

Lastly, measures such as obtaining the necessary response materials, conducting joint trainings and exercises, and ensuring the storage of an adequate amount of relief materials are essential for effective emergency response capacity building. These measures ensure that local levels have the necessary resources, skills, and preparedness to respond promptly and efficiently to disasters. In conclusion, enhancing emergency response capacity at local levels requires a multi-faceted approach. It involves investing in infrastructure and resources, conducting relevant and practical training programs, establishing local emergency operation centers, improving knowledge among disaster focal persons, and ensuring the availability of necessary response materials (Lee, 2019). By implementing these measures, local levels can significantly enhance their emergency response capabilities, leading to more effective and efficient disaster management at the grassroots level.

4.4.7 Status of Resourcing for Disaster Response in Local Levels

The interview data reveals the current state of resourcing for disaster response at local levels, highlighting significant developments and challenges. Historically, local bodies in Nepal did not allocate specific budgets for disaster response, equipment, or specialist roles. However, since the 2017 elections, there has been a noticeable increase in awareness among local levels regarding disaster management. This shift indicates a growing recognition of the importance of addressing disasters at the grassroots level, with some local bodies expressing intentions to enhance their disaster management capabilities. Despite this positive inclination, there remains a substantial gap in knowledge and expertise, hindering effective implementation of preparedness measures.

Several local levels have taken steps towards proactive disaster management, such as hiring consultants for hazard mapping. While this demonstrates a forward-thinking approach to

identify risks, the integration of these findings into local-level planning has been lacking. This underscores the need for effective utilization of consultant recommendations to bolster local preparedness initiatives. Budget allocation for disaster management has improved across all local levels, albeit modestly. However, the challenge lies in the capacity constraints and knowledge gaps that limit the efficient use of these resources (Gencer, 2017).

The predominant focus of local efforts remains on response and relief activities rather than on risk reduction and preparedness. Shifting this focus requires a comprehensive approach to disaster management that emphasizes proactive measures to mitigate risks and enhance community resilience. Although each local level maintains a disaster relief fund, their awareness of its potential applications beyond immediate relief materials is limited. There is a pressing need to broaden their understanding of the fund's utilization for long-term risk reduction, capacity building programs, and sustainable recovery initiatives.

4.4.8 Improving Resourcing in Local Levels

To improve resourcing for disaster response at the local levels, interview data suggested some measures. Firstly, it is essential to prioritize capacity building programs that enhance the knowledge and expertise of local level authorities and stakeholders (Gencer, 2017). By providing comprehensive training and knowledge-sharing platforms, they can effectively utilize available resources and make informed decisions in disaster response efforts. Additionally, efforts should be made to bridge the gap between consultant recommendations and implementation. This involves ensuring that hazard mapping findings are integrated into local-level planning and preparedness initiatives, translating them into practical actions.

Moreover, there is a need to shift the focus towards risk reduction and preparedness, rather than solely prioritizing response and relief activities. This requires a change in mindset and the adoption of a comprehensive approach to disaster management. Investing in long-term risk reduction measures, such as early warning systems, infrastructure improvements, and community resilience building, can significantly enhance local-level resourcing. Furthermore, expanding the understanding of the disaster relief fund's potential applications is essential. Local levels should be encouraged to invest these funds in sustainable recovery initiatives, capacity building programs, and projects that prioritize risk reduction and preparedness (Dariagan et al., 2021). This holistic approach to resourcing will contribute to more effective disaster response and management at the local level.

4.4.9 Capacity Building Programs in Disaster Risk Reduction at Local Levels

The interview data sheds light on the status of capacity building programs in DRR at local levels. It is evident that prior to and after the earthquake, there were no specific programs or activities focused on DRR capacity building. However, local levels have gradually initiated such activities following the 2017 local level election. Despite this progress, the level of interest, enthusiasm, and dedication for capacity building among local authorities and community members remains limited. This indicates the need for increased awareness and engagement to effectively address DRR at the local level.

Some disaster management trainings have been conducted by security forces, benefiting around 300 individuals in the district. However, the trained human resources are not effectively utilized by the local levels, highlighting the existing gap in coordination and utilization of trained personnel. Moreover, the focus on capacity building of the members of disaster management committees at the ward and local levels has been lacking (Malla et al., 2020b). This indicates the need for efforts to enhance the knowledge and skills of the members, who play a crucial role in local-level disaster preparedness and response.

4.4.10 Advancing Capacity Building Programs in Disaster Risk Reduction

To enhance the effectiveness of capacity building programs in disaster risk reduction at local levels, some measures that can be implemented are suggested by the interview data. Firstly, there is a need for more practical and tailored training programs that address the specific needs of each location. The training should focus on building the necessary skills and knowledge required for effective disaster preparedness, response, and risk reduction (Gencer, 2017). Moreover, efforts should be made to increase community engagement and participation in capacity building activities, that can be achieved by sensitization programs in schools, where students can learn about disaster risk reduction from an early age.

Another important measure is the establishment of community responders at each ward level. These individuals should receive regular training updates and incentives to maintain their motivation and preparedness. Additionally, coordination between the trained community responders and local authorities needs to be strengthened to ensure effective utilization of their skills and expertise during emergencies. Furthermore, it is crucial to address the underlying factors that contribute to heightened disaster risks, such as unplanned developmental activities and the misuse of natural resources by political leaders at the local

levels. This requires promoting sustainable practices, encouraging responsible resource management and holding accountable those involved (Uddin et al., 2020).

Lastly, the community-based disaster risk management (CBDRM) approach should be prioritized to achieve effective DRR at local levels. This approach emphasizes the active involvement of communities in identifying and addressing their own risks, empowering them to take ownership of their disaster preparedness and response (Pamungkas et al., 2023). The inclusive community-based disaster risk reduction (ICBDRR) initiative by the Red Cross in a few locations serves as a positive example that can be expanded to other areas.

4.4.11 District-Local Levels Coordination, Communication and Cooperation

The interview data highlights the existing challenges in coordination, communication, and cooperation between the district and local levels in disaster management. Prior to the earthquake, these interactions were largely formalities, lacking substantive collaboration. Although there was an initial improvement in the arrangement after the earthquake, it deteriorated following the 2017 local level election. Reluctance of local level heads to attend DDMC meetings, influenced by government protocols and order of precedence, has hindered effective coordination. Furthermore, meetings often focus on mandatory agenda items, such as compensations and performance indicators of the DAO, rather than comprehensive disaster management planning. Frequent transfers of the CDO have also contributed to the decreased activity of the DDMC.

4.4.12 Operative Coordination, Communication and Cooperation

Enhancing coordination, communication, and cooperation in disaster management requires several key measures. Firstly, clear guidelines and mechanisms must be established to address concerns of bias and ensure impartial decision-making. Transparent and accountable practices, including merit-based appointments and stakeholder participation, are crucial to prioritize the best interests of affected communities and mitigate political interference (Sulila, 2022). Federal legislation should delineate roles and responsibilities of government DCC, DAO and security forces tailored to the scale of disasters. This framework would clarify expectations and facilitate coordinated responses.

Empowering local levels is imperative by strengthening their decision-making authority and resource allocation. The restructuring of states has inadvertently weakened DAO roles

without providing viable alternatives, necessitating a reassessment of institutional setups. The newly formed NDRRMA must demonstrate effectiveness to instill confidence at district and local levels. Regarding the DCC, its role should be reevaluated to determine whether legal empowerment or revision is necessary to enhance coordination mechanisms. A majority of respondents suggest granting the DCC chairperson legal authority over the DDMC for a minimum tenure of five years, albeit with caution against potential political biases. Transparent decision-making within the DDMC is essential to prevent undue influence in disaster management efforts.

Establishing clear guidelines and mechanisms to ensure impartiality and transparency in decision-making processes is critical (Sulila, 2022). Clarity on the relationship between the DDMC and DCC, both practically and legally, is essential to avoid confusion and enhance collaboration effectively. Recognizing local levels as distinct governing entities, not just units under the DAO, is pivotal for decentralized disaster management and empowering local authorities. These initiatives collectively aim to foster improved collaboration and effectiveness in disaster management through transparent processes, defined roles, empowered local levels, and acknowledgment of their autonomy.

4.4.13 Participation and Inclusion in Decision-Making Processes

The interview data reveals several shortcomings in ensuring local participation and inclusion in decision-making and implementation processes at the local levels. Firstly, very few local levels have formed Tole Lane Organization (TLO), which disregards the significance of inclusive representation. The provision of TLOs with an inclusive nature is mandatory in all local levels, but it is not being effectively implemented. Additionally, community-level discussions for decision-making are rarely practiced, further limiting the involvement of local communities in shaping decisions. Women and minority groups also face limited effective participation in most local levels, indicating a lack of inclusivity in the decision-making processes (Rawal et al., 2021). In fact, women face practical difficulties in following proper procedures, such as traveling to the district center for banking process requiring overnight stays, which can be unacceptable from the family members.

Moreover, decision-making at the local level primarily involves discussions among ward members and a few select individuals, often chosen based on personal favoritism. This approach undermines the broader representation of diverse perspectives and can lead to

exclusionary decision-making. Political alliances further exacerbate the issue, resulting in less inclusive assemblies and executive bodies at the local level. These findings highlight a gap between the intended participatory and inclusive governance and the actual decision-making processes at the local levels.

4.4.14 Effective Participation and Inclusiveness in Local Levels

To address the existing gaps and promote effective participation and inclusiveness at the local levels, several measures can be considered. Firstly, it is crucial to ensure the formation of TLOs in all local levels as mandated. These organizations should be inclusive and representative of the local community, providing a platform for diverse voices to be heard in decision-making processes. Additionally, community-level discussions should be encouraged, allowing for broader participation from local residents (Rawal et al., 2021).

To enhance the participation of women and minority groups, specific measures need to be implemented. This can include targeted initiatives such as appointing at least one female representative from each ward in the executive. Furthermore, the formation of councils dedicated to women, senior citizens, ethnic groups, youth, Dalits, and disabled individuals can help promote inclusivity and ensure their active involvement in decision-making and implementation processes. To strengthen the overall governance structure, active and capable subject committees should be established in all local levels. These committees can provide expertise and guidance in policy formulation and implementation, ensuring informed decision-making (Carrasco et al., 2016). Following the seven steps of policy formulation from the ward level can contribute to a systematic and inclusive approach.

Additionally, CAOs play a crucial role in driving inclusive decision-making processes. They should take a proactive approach in convincing political leadership about the importance of inclusiveness and ensure that diverse perspectives are considered. Lastly, raising awareness and promoting local interest in areas beyond physical infrastructure development, such as disaster management, can help broaden the focus of local governance and encourage community involvement in critical decision-making processes. By implementing these measures, local levels can enhance participation, promote inclusiveness, and create a more transparent and representative decision-making and implementation framework that truly reflects the needs and aspirations of the local communities.

4.4.15 Policy Prioritization of the Local Levels

The interview data reveals that the policy prioritization of local levels is skewed towards physical infrastructure rather than livelihood programs. Public demand emphasizes the development of roads, electricity, and drinking water, reflecting the immediate needs and concerns of the communities. However, there is a notable lack of emphasis on sectors such as agriculture, animal husbandry, irrigation, poultry, and skill development for income generation. This imbalance indicates a potential neglect of long-term sustainable programs that can contribute to the overall improvement of people's lives (Malla et al., 2020b).

Education and health are also given some priority, but the progress in these areas remains limited. It suggests that while there is recognition of the importance of these sectors, there is a need for more significant efforts and investments to achieve substantial improvements. Additionally, the data highlights the absence of a focus on mental health and the oversight of aspects such as vocational knowledge, entrepreneurship, and cash crops, which can play a substantial role in helping economic development and utilizing local resources effectively.

4.4.16 Measures to Improve Policy Prioritization

Enhancing policy prioritization at the local levels requires a multifaceted approach based on insights from interview data. Firstly, it is crucial to adopt a comprehensive and inclusive policy formulation process that integrates diverse local needs and aspirations. This can be achieved through robust consultation and community engagement strategies, ensuring active participation of local communities in decision-making. Emphasizing participatory governance empowers both local authorities and the populace to contribute effectively, fostering policies aligned with community priorities. Additionally, promoting economic development ideas and providing capacity-building programs can enhance local resilience and holistic policy prioritization (Lee, 2019).

Collaboration and coordination among various levels of government are essential, particularly in disaster risk reduction and socioeconomic reconstruction. Allocating adequate resources to these areas ensures policies address human security concerns and support vulnerable groups, such as children orphaned by the 2015 earthquake. Offering subsidies for essential resources like equipment, technical support, seeds, and fertilizer aids in overcoming economic challenges, promoting inclusive policy outcomes (Dzigbede et al., 2020). To bolster policy effectiveness, raising awareness of human security among elected officials

and administrative staff through training initiatives is crucial. This approach ensures policies are sensitive to human security issues and contribute to social wellbeing. In conclusion, a balanced approach encompassing livelihood programs, economic development, human security, and social welfare is pivotal for effective policy prioritization at local levels. Implementing these measures will strengthen policy formulation processes, bridge existing gaps, and better meet the diverse needs of local communities.

4.5 Integrating Human Security into Local Disaster Governance

The study focuses on analyzing and comparing the legislative frameworks, programs, and plans of four distinct local levels: Dhulikhel and Namobuddha Municipalities, alongside Bhumlu and Roshi Rural Municipalities. The primary objective is to evaluate how these local entities have integrated human security considerations into their disaster governance structures. Spanning from fiscal years 2074/075 to 2078/079 BS (2017-2021), the assessment meticulously examines legal statutes, policies, procedural frameworks, directives, and guidelines to illuminate the approaches adopted by these local governments.

Appendix 'I' compiles a comprehensive inventory of documents – laws, programs and plans – enacted and formulated by these local levels, reflecting their efforts to incorporate human security principles into disaster governance. Dhulikhel, Namobuddha, Bhumlu, and Roshi have respectively endorsed 32, 35, 37, and 27 legal documents, underscoring their commitment to this endeavor. Notably, all local levels consistently passed annual policies, programs, and budgets during the specified five-year period. Dhulikhel and Bhumlu have three distinct plans each, while Namobuddha and Roshi have one and two plans, respectively.

The list of legal documents reveals diverse priorities across local levels influenced by local needs, the capacity of local authorities, and specific interests. This variability underscores the localized nature of governance, necessitating tailored strategies to address specific circumstances. Importantly, a select few legal documents related to procedural and administrative guidelines - such as 'plan formulation and implementation procedure, municipal executive (division of work) regulations, municipal executive (performance) regulations, and procedure on operation of municipal assembly' - have been unanimously passed by all local governments. This indicates a shared understanding of the importance of standardized procedures across different jurisdictions. Among the endorsed legal

documents, a notable pattern emerges where 75 percent of local levels have enacted legislation addressing crucial areas like water resources utilization, FM radio operation, disaster management, environmental protection, and more. This alignment reflects a collective recognition of the significance of these issues, underscoring a shared commitment to addressing multifaceted challenges.

However, discrepancies arise when considering other legal matters; only half of the local levels have prioritized laws concerning gender equality, social inclusion, health, sanitation, education, budget planning, and financial assistance. This variance suggests varying degrees of emphasis on matters crucial to equitable representation, welfare, and education. Moreover, it is concerning that certain critical issues such as initial environmental examinations and the activities of judicial committees have only been addressed by half of the local levels, with several other laws on the list passed by just 25 percent of them. This gap highlights the complexities of prioritization within decentralized governance structures, reflecting potential gaps in addressing key human security concerns.

Furthermore, essential human security matters like child protection, youth empowerment, support for marginalized groups, governance policies, waste management, and COVID-19 response have received relatively little attention from local authorities. These issues are paramount for local governance and community wellbeing. Despite these disparities, commendable efforts are evident in initiatives such as promoting local cash crops and infrastructure development through legal frameworks, demonstrating the potential for impactful policies to drive positive change within communities.

Appendix 'J' illustrates how human security is integrated into local governance through various laws, programs, and plans, categorized into six parameters based on a conceptual framework as the mediating variable. The comparative analysis within these documents is anchored in key domains that facilitate the integration of human security principles into local governance strategies, guiding effective governance strategies to ensure community safety and wellbeing.

The first domain emphasizes a people-centered approach to governance, with 58 percent of matters within this domain receiving attention across local government documents. Notably, all local governments have shown dedication to participatory decision-making by involving local communities in policy formulation through consultations and feedback mechanisms.

This approach empowers communities to actively shape their local governance, reflecting a commitment to transparency and community engagement. Documents also underscore the importance of addressing unique local challenges through contextual solutions, ensuring policies resonate with local needs. Responsive service delivery, sustainable development, and conflict resolution mechanisms are prioritized by 75 percent of local governments, demonstrating forward-thinking approaches aimed at long-term community wellbeing.

However, certain areas within this domain receive limited attention. Only a quarter of local governments prioritize governance approaches that integrate local cultural values, while empowerment of marginalized groups and women is focused on by only 25 percent of local levels. This indicates the need for greater commitment to inclusivity and diversity within governance frameworks. In terms of specific local performance, Dhulikhel stands out with a 66 percent focus on matters within the first domain, demonstrating robust commitment to integrating human security principles. In contrast, Namobuddha, Bhumlu, and Roshi share a focus level of 55.5 percent, slightly lower but still significant. While Dhulikhel leads in percentage, the differences are not stark, emphasizing the need for sustained efforts across all localities.

The second domain centers on policy formulation prioritizing human security, with 60 percent of relevant matters addressed across local documents. Notably, all local governments focus on policies safeguarding vulnerable populations and promoting equitable education. They also prioritize disaster risk mitigation, environmental protection, and strategies for public safety and security. Areas needing more attention include healthcare access, sanitation, disease prevention, and social welfare support, addressed by only 50 percent of local levels. None of the local governments have focused on identifying local human security challenges or fostering sustainable economic opportunities, underscoring areas needing additional focus for holistic community protection and wellbeing. In policy prioritization, Bhumlu and Roshi stand out with a 70 percent focus, followed by Namobuddha with 60 percent and Dhulikhel with 40 percent. These percentages reflect varying degrees of commitment and emphasis among local governments regarding human security principles in policy formulation, highlighting both progress and areas needing further attention.

The third domain explores resource allocation for prioritized policies, with only 33 percent of relevant matters receiving attention from local levels. While all local levels recognize the importance of exploring funding sources and maximizing resource utilization, only a quarter

invest in training for effective resource management. None allocate sufficient funds for implementing human security-focused policies or for robust monitoring and evaluation of policy outcomes. Overall, Dhulikhel, Namobuddha, Bhumlu, and Roshi share an equal 33 percent focus on resource allocation matters, indicating balanced but low commitment across these areas. This underscores the need for comprehensive resource allocation strategies aligned with community safety and resilience objectives.

The fourth domain examines partnership and collaboration with societal organizations, with only 37.5 percent of relevant matters receiving attention. All local levels prioritize partnering with NGOs for expertise and community reach, and half emphasize community engagement. However, local levels need to enhance engagement with cultural groups and civil society for advocacy and inclusive governance. Dhulikhel leads with a 50 percent focus on partnership and collaboration, followed by Roshi with 40 percent, and Namobuddha and Bhumlu with 30 percent. These variations highlight the importance of promoting collaboration in underrepresented areas to enhance local governance effectiveness.

The fifth domain assesses inclusive decision-making, with 32.5 percent of relevant matters addressed by local levels. All prioritize diverse community representation and engagement, conducting open forums and policy consultations. However, only a quarter provide platforms for marginalized groups, indicating the need for greater inclusivity in decision-making processes. In this domain, Dhulikhel, Namobuddha, and Roshi focus 30 percent, while Bhumlu exhibits a slightly higher focus at 40 percent. Continued efforts are needed to foster inclusive governance, integrating diverse perspectives and ensuring transparency and accountability.

The sixth domain evaluates accountability mechanisms, with only 25 percent of relevant matters receiving attention. All local levels focus on structured reporting and accountability frameworks, but only half establish consequences for unmet targets or mismanagement. Only a quarter gather relevant data for evidence-based reporting, highlighting gaps in utilizing data-driven insights. Roshi leads with 60 percent focus on accountability mechanisms, followed by Bhumlu with 20 percent, and Dhulikhel and Namobuddha with 10 percent. Enhanced accountability mechanisms are crucial for maintaining constituent trust and ensuring effective policy outcomes.

As we can see in the table 4.4 that there are six domains extracted from the rigorous literature review and incorporated in the conceptual framework which have fifty-eight matters as enlisted in the appendix ‘J’. The table indicates that Roshi exhibits the highest level of commitment among local levels, while Dhulikhel stands out among municipalities. When we compare these findings with the private house reconstruction progress as of the end of 2022, presented in table 6.3, it becomes evident that proactive and dedicated institutions and elected officials can significantly influence outcomes. For instance, Bhumlu, with over 41 percent commitment, achieved an impressive 93.7 percent reconstruction rate.

Table 4.4

Summary of Laws, Programs and Plans Committed to Human Security

Domains	Matters within the Domain	Dhulikhel	Namobuddha	Bhumlu	Roshi
Adopting a people-centered approach to governance	9	66.66%	55.55%	55.55%	55.55%
Formulating policies that prioritize human security	10	40%	60%	70%	70%
Adequate resource allocation for prioritized policies	9	33.33%	33.33%	33.33%	33.33%
Partnership and close collaboration with the societies and social organization	10	50%	30%	30%	40%
Fostering a culture of inclusion and participation in decision-making processes	10	30%	30%	40%	30%
Creating mechanisms for accountability by reporting and evaluating those programs and policies	10	10%	10%	20%	60%
Total	58	37.93%	36.2%	41.37%	48.27%

Note. The table presents the summary of the appendix ‘J’ representing the commitment of the four local levels on the integration of human security into local governance through the laws, programs and plans.

On the other hand, Roshi, despite having a higher commitment level of 48.27 percent, only reached an 84.4 percent reconstruction rate. Similarly, Dhulikhel managed to achieve a 79.5 percent progress rate with a 37.93 percent commitment level, and Namobuddha attained a

75.9 percent progress rate. These findings suggest that higher recovery rates are attainable through committed political and institutional leadership, complemented by strong policy and legal frameworks as in Dhulikhel and Bhumlu.

In summary, integrating human security into local governance requires a comprehensive approach across legislative frameworks, programs, and plans. The analysis underscores varying levels of commitment among Dhulikhel, Namobuddha, Bhumlu, and Roshi in incorporating human security principles into governance strategies. While progress is evident in some areas like participatory decision-making and policy formulation, gaps remain in prioritizing healthcare, inclusivity, resource allocation, partnership, inclusive decision-making, and accountability. Continued efforts to address these gaps will enhance the effectiveness of local governance in ensuring community safety, resilience, and wellbeing. Adopting a holistic approach that considers local needs and promotes inclusivity and transparency will further strengthen human security initiatives within decentralized governance structures, fostering sustainable development and equitable outcomes for all community members.

4.6 Impression of the Case Studies on Incorporation of Human Security

The case studies in appendix 'H' collectively depict the intricate relationship between local government policies and practices and their effectiveness in promoting robust local disaster governance while integrating the principles of human security. These case studies reveal a range of challenges and successes in Nepal's local-level disaster management efforts following the 2015 earthquake.

In many instances, while local disaster risk reduction and management plans existed on paper, their implementation was often hindered by a lack of understanding and awareness among stakeholders. Capacity building within the communities, particularly in terms of disaster management training, remained deficient, leading to inadequate emergency response capabilities. Furthermore, the notion of human security was disregarded during policy formulation, as local priorities tended to lean towards physical infrastructure development rather than holistic wellbeing. Collaboration and coordination with societies and social organizations displayed varying degrees of success, often falling short of achieving meaningful engagement. Inclusion and participation in decision-making processes were found to be challenging, with the representation of diverse groups often lacking.

Learning from past disaster events was limited, restricting the flexibility and adaptability required for effective disaster response and preparedness. Accountability and transparency mechanisms were present, yet they often lacked the practical actions needed to uphold these principles in practice.

Despite these challenges, some case studies highlighted positive aspects, such as community engagement and the establishment of structures like TLOs, which facilitated local communication and participation. However, the overall case studies underscore the need for more comprehensive and integrated approaches to disaster governance at the local level, which align with the principles of human security and effectively address the multidimensional challenges posed by disasters.

4.7 Indication of the Case Studies on The Role of Elites and Institutions

4.7.1 Elites in Incorporating Human Security Concerns

The elite analysis theory offers valuable insights into understanding how powerful individuals and groups influence disaster governance outcomes and the integration of human security principles. In the context of the case studies in appendix 'H', the role of elites in the incorporation of human security concerns into local disaster governance becomes evident. As in the first case study, the presence of influential individuals and groups is identified as a significant factor in disaster governance. These elites possess the authority and resources to access crucial disaster management resources, such as relief items, funding, and training opportunities. While their influence can lead to positive outcomes, such as effective disaster management, it can also result in bias and neglect of marginalized groups due to resource allocation preferences.

Similarly in second case study, the absence of influential individuals is noted as a barrier to accessing entitled services. This showcases how influential elites can play a role in advocating for a community's needs and ensuring the provision of necessary resources. In another case study, the dominance of "brokers" and their influence on policies, programs, and resources demonstrates the power of elites in shaping disaster governance outcomes. This influence can lead to biased resource distribution and favoritism, disadvantaging genuine households. Moreover, as in one of the case studies, the detrimental impact of powerful individuals is highlighted, as they prioritize their affiliations over genuine needs

during relief distribution and enrollment processes. This underlines how elites can manipulate disaster governance for their political interests.

Differently in a case study, the constructive roles of powerful individuals are recognized, particularly in accessing resources for disaster recovery. However, the potential for favoritism and nepotism underscores the dual nature of their influence. In the same way, another study indicated the lack of influential advocates results in a sense of powerlessness for the community, revealing how elites can impact resource access and recovery support. Their absence can hinder long-term sustainability and livelihood programs. In one of the case studies, the mixed perception of powerful individuals emphasizes their role in resource access but also highlights instances of favoritism and bias based on political ideology and personal relationships. Likewise, in another case, the mixed role of influential individuals is reiterated, where they aid resource access but also contribute to resource bias, affecting the distribution of relief items.

As the interviews and case studies revealed, the elites' mixed but crucial role in influencing disaster governance, that need to be interpreted through the theoretical framework of elite analysis. These powerful individuals and groups hold the authority, resources, and decision-making capabilities to shape policies, resource allocation, and overall disaster management outcomes. Pointedly, these influential elites played a dual role in disaster governance. While some prioritized the wellbeing of affected populations and promote effective disaster management, others prioritized their own interests or affiliations, resulting in biased resource distribution and neglect of marginalized groups.

Moreover, political elites played a crucial role in disaster governance. Their affiliations and influence impacted resource allocation, policy formulation, and overall disaster management strategies. In cases where their interests aligned with community needs, they advocated for effective disaster governance. However, if their interests conflicted, disaster governance was compromised. Thus, as per elite analysis theory, the influence of elites is a key determinant in the incorporation of human security concerns into local disaster governance. Their presence, actions, and affiliations significantly impact resource access, decision-making processes, and the overall wellbeing of affected populations.

4.7.2 Institutions in Incorporating Human Security Concerns

The new institutionalism theory provides a framework to understand how formal and informal institutions shape disaster governance outcomes and the integration of human security principles (Hossain, 2022). As described in the case studies, the role of institutions in incorporating human security concerns into local disaster governance becomes evident. In the first case study, the formal institutions like NRA, DAO, security forces, and local government play pivotal roles in disaster governance due to their structured roles, responsibilities, and decision-making capabilities. These institutions establish frameworks, allocate resources, and coordinate disaster management efforts. Informal institutions, such as social networks and community-based organizations, also influence disaster governance by providing relief items, assistance, and advocacy. However, some informally favored specific groups, revealing the influence of norms and practices.

In the second case, the villagers emphasize the critical role of formal institutions, highlighting their importance in disaster governance. This viewpoint underscores the significance of established bureaucratic structures and governance mechanisms in disaster management. Similarly in another case study, the villagers also recognize the role of powerful individuals and groups in shaping disaster governance outcomes while acknowledging the influence of formal institutions. This perspective illustrates how institutions can be influenced by external forces, affecting their decision-making processes. Likewise, residents attribute a decisive role to formal institutions like local government and district administration in disaster governance in one of those case studies. However, challenges arise as certain individuals may not receive entitled support, indicating potential gaps in resource allocation processes.

Similarly in another case study, the villagers perceive a substantial role for formal institutions and a minor role for informal ones in disaster governance. This perspective highlights the institutionalized approach to disaster management. Contrastingly in one case study, the stark disparity between the roles of formal and informal institutions is recognized. Formal institutions hold significant power, but technical and legal obstacles hinder equitable support distribution, indicating the need for systemic reforms and inclusive decision-making. Remarkably in a study, both formal and informal institutions are involved in disaster management, emphasizing the importance of collaboration. The lack of knowledge about the roles of certain formal institutions highlights the need for better communication and

awareness. In the last case, formal institutions' crucial role is acknowledged, particularly in providing support during disasters. The involvement of influential individuals, however, emphasizes the importance of fairness and transparency in resource allocation.

The data received through interviews and case studies suggest that institutions, whether formal or informal, influence in shaping governance outcomes. Formal institutions, defined by their structures, roles, and responsibilities, contributed to disaster governance by establishing frameworks, allocating resources, and coordinating efforts. These institutions adhered to established norms, procedures, and policies, which influenced disaster management approaches. Informal institutions, rooted in social and cultural practices, also impacted disaster governance by shaping community responses and influencing policy implementation. Social networks, community-based organizations, and religious groups contributed to disaster management through their established norms and practices. However, the potential for bias and favoritism within these informal networks also existed, reflecting the influence of embedded norms.

The interaction between formal and informal institutions remained complex. While formal institutions provided a structured approach to disaster management, informal institutions both supplemented and challenged their effectiveness. The influence of powerful individuals and groups potentially altered the outcomes of formal institutions, highlighting the interconnectedness between institutional structures and external influences. To sum up, new institutionalism theory underscores the interplay between formal and informal institutions in shaping disaster governance outcomes. These case studies demonstrate the significance of formal institutions' roles and the ways in which informal practices can both contribute to and potentially hinder effective disaster management and the incorporation of human security concerns.

CHAPTER 5

POST-DISASTER GOVERNANCE AND INSTITUTIONALIZATION OF HUMAN SECURITY GOVERNANCE

This chapter delves into the prevailing post-disaster governance in Nepal, providing a concise overview of the institutional arrangements. It outlines the legal and policy frameworks in place before and after the 2015 earthquake. Additionally, it explores how these governance practices contribute to the institutionalization of human security. This includes an analysis of post-disaster institutional practices such as reviewing disaster incidents, promoting responsibility, accountability, and transparency, as well as conducting monitoring and evaluation activities. Notably, examining the practices of local governance entities, such as subject committees, offers valuable insights into the impact on the institutionalization of human security.

5.1 Institutional Arrangements for Disaster Governance

(a) National Council for Disaster Risk Reduction and Management (NCDRRM): Section 3 of the DRRM Act establishes the NCDRRM, chaired by the Prime Minister and composed of various high-level officials, including all government ministers, opposition leaders, provincial chief ministers, and experts in disaster management (DRRMA, 2017). The NCDRRM, supported by the executive officer of the NDRRMA as member secretary, is tasked with formulating national disaster management policies, providing directives to the executive committee and the authority, guiding provincial and local disaster management efforts, managing financial resources for disaster management, and evaluating disaster management functions for effectiveness (DRRMA, 2017). These tasks aim to enhance disaster preparedness, response, and recovery across Nepal, fostering a more resilient Nepal.

(b) Executive Committee for Disaster Risk Reduction and Management: Section 6 of the DRRMA establishes an executive committee led by the Minister of Home Affairs, including key ministers, secretaries, military and police chiefs, NRB and telecommunications authorities, and various organizational heads, with the NDRRMA chief executive as member secretary (DRRMA, 2017). This diverse committee is empowered to efficiently implement disaster management policies and plans. According to Section 8, the committee's duties include preparing national disaster policies, approving plans, enhancing

institutional capacity, mapping high-risk areas, implementing risk reduction and relief programs, establishing early warning systems, overseeing recovery efforts, and ensuring compliance with international assistance protocols (DRRMA, 2017). The committee coordinates comprehensive disaster risk reduction efforts to protect the communities.

(c) Expert Committee for Disaster Risk Reduction and Management: The Act has provision of providing the ministry authority to create an expert committee comprising a maximum of five members. These members may include geologists, consultant doctors, experts in disaster management, the environment, or infrastructure. The primary purpose of this expert committee is to develop policies, plans, and programs related to disaster management. Additionally, the committee is responsible for offering suggestions for conducting studies and research on various aspects of disasters.

(d) National Disaster Risk Reduction and Management Authority (NDRRMA): As a crucial institutional arrangement for disaster management, the NDRRMA is established under the MoHA. It operates under the direct supervision of the executive committee and functions as the secretariat on behalf of the council and the executive committee. The authority's responsibilities include implementing plans and decisions made by the council and executive committee, serving as the central resource agency for disaster risk reduction and management, providing financial and technical assistance to provincial and local levels for disaster management planning, engaging Red Cross, NGOs, private sector, and local communities in disaster management functions, coordinating search and rescue operations, and maintaining records of international assistance (DRRMA, 2017).

The NDRRMA also collects, analyzes, and disseminates information through a national disaster management information system, offers recommendations on disaster risk reduction, organizes orientation training on disaster management for public enterprises and businesses, maintains high alertness in administrative and security machinery related to disaster management, conducts research on various aspects of disaster risks, operates National Emergency Operation Center (NEOC), mobilizes volunteer bureaus and flying squads for disaster response, and manages emergency warehouses and relief materials. The authority conducts all its activities in close coordination with the council, executive committee, and relevant ministries and government agencies in Nepal (DRRMA, 2017).

(e) Provincial Disaster Management Council and Provincial Disaster Management Committee (PDMC): The DRRM Act establishes a Provincial Disaster Management Council, chaired by the Chief Minister, responsible for formulating disaster management policies, offering policy guidance, and directing the PDMC as needed (DRRMA, 2017). Each provincial government also has a Disaster Management Executive Committee, led by the Ministry of Internal Affairs and comprising up to fifteen members. This committee formulates policies aligned with national guidelines, coordinates disaster preparedness, collaborates with various government levels for search and rescue operations, manages relief materials and temporary shelters, mobilizes volunteers, destroys unsafe buildings, relocates affected individuals, develops disaster information systems, supervises disaster management activities, controls market prices and quality during disasters, handles recovery and rehabilitation, and recommends government action during disaster threats (DRRMA, 2017).

(f) District Disaster Management Committee (DDMC): Each district has a DDMC chaired by the CDO, with members including representatives from the District Coordination Committee (DCC), local levels, health offices, security agencies, infrastructure and social development offices, political parties, NRCS, NGO Federation, journalists, and the District Chamber of Commerce and Industries, with a CDO-appointed officer as member secretary (DRRMA, 2017). The DDMC supports and implements policies from higher authorities like the Council, Executive Committee, and PDMC. It is responsible for formulating and executing disaster response plans, operating the DEOC, conducting search and rescue operations, distributing relief items, controlling movement in affected areas, managing waste and remains, providing essential supplies and shelters, requisitioning resources, demolishing unsafe buildings, relocating people, mobilizing volunteers and experts, coordinating with local agencies and NGOs, reducing minor hazards, recommending disaster declarations, disseminating information and submitting progress reports to NDRRMA (DRRMA, 2017).

(g) Local Disaster Management Committee (LDMC): At every local level, an LDMC has been established, chaired by the village body's chairperson or municipality's mayor, with a maximum of fifteen members. The LDMC's responsibilities include formulating the local disaster management plan in alignment with national policies and plans, as well as integrated and sectoral policies approved by the Executive Committee and PDMC. They are tasked with implementing this plan, ensuring the allocation of budget for disaster management at the local level, coordinating with governmental, non-governmental, and

private organizations, engaging local volunteers and social mobilizers, and providing training to officials, employees, and communities. The LDMC also monitors compliance with building codes, sets up disaster preparedness and response committees at community levels, conducts drill exercises for disaster response, provides rescue and relief operations in affected areas, develops and operates information systems and early-warning mechanisms, establishes and runs operational LEOC, maintains updated records of losses during disasters, issues identity cards for affected households, keeps fire brigades on standby, and performs other functions as directed by higher disaster management committees (DRRMA, 2017).

(h) Disaster Management Fund: At the central level, a disaster management fund has been established, which is credited with amounts from the GoN, donations or gifts from organizations and individuals, assistance or grants from foreign governments, individuals, or international organizations, as well as funds from any other sources. Similarly, each province, district, and local level also has its own disaster management fund for disaster-related purposes. The province's disaster management executive committee operates through the district disaster management committee, providing the necessary funds from the provincial fund to the district fund. These funds are exclusively used to cover expenses related to disaster management activities and relief operations (DRRMA, 2017).

(i) National Reconstruction Authority (NRA): The NRA of Nepal was established in response to the devastating earthquake of 2015 with the aim of leading and coordinating the reconstruction efforts in the affected regions. The organizational structure of the NRA consisted of several key units and entities that work in a coordinated manner to achieve the reconstruction objectives. At the central level, there was the Central Level Project Implementation Unit (CLPIU), which was divided into different divisions responsible for specific sectors such as education, building, and grant management. Each division was headed by a director and consists of experts and professionals. The CLPIU for education was focused on rebuilding schools and educational facilities damaged or destroyed by the earthquake. The building division, on the other hand, was responsible for overseeing the reconstruction of private houses and other buildings. It provided technical assistance, guidelines, and support to ensure the safety and resiliency of the buildings. The grant management division handled the payment and management of funds to eligible receivers.

At the district level, the NRA operated through DLPIUs. Each DLPIU was responsible for specific districts and served as a bridge between the central authority and the affected

communities. Its responsibilities were identifying local priorities, and ensuring community engagement and participation in the decision-making process. Moreover, the DLPIU were to collaborate with local authorities, non-governmental organizations, and community representatives to implement reconstruction projects effectively and address the unique needs and challenges of each district. On December 23, 2021, as the tenure of the NRA was coming to an end on December 24, they transferred all their remaining works, liabilities, properties, accounts, and relevant documents to the NDRRMA. The NDRRMA has now assumed the responsibilities of the remaining reconstruction efforts handed over from the NRA to the respective ministries, departments, and agencies (NRA, 2021c).

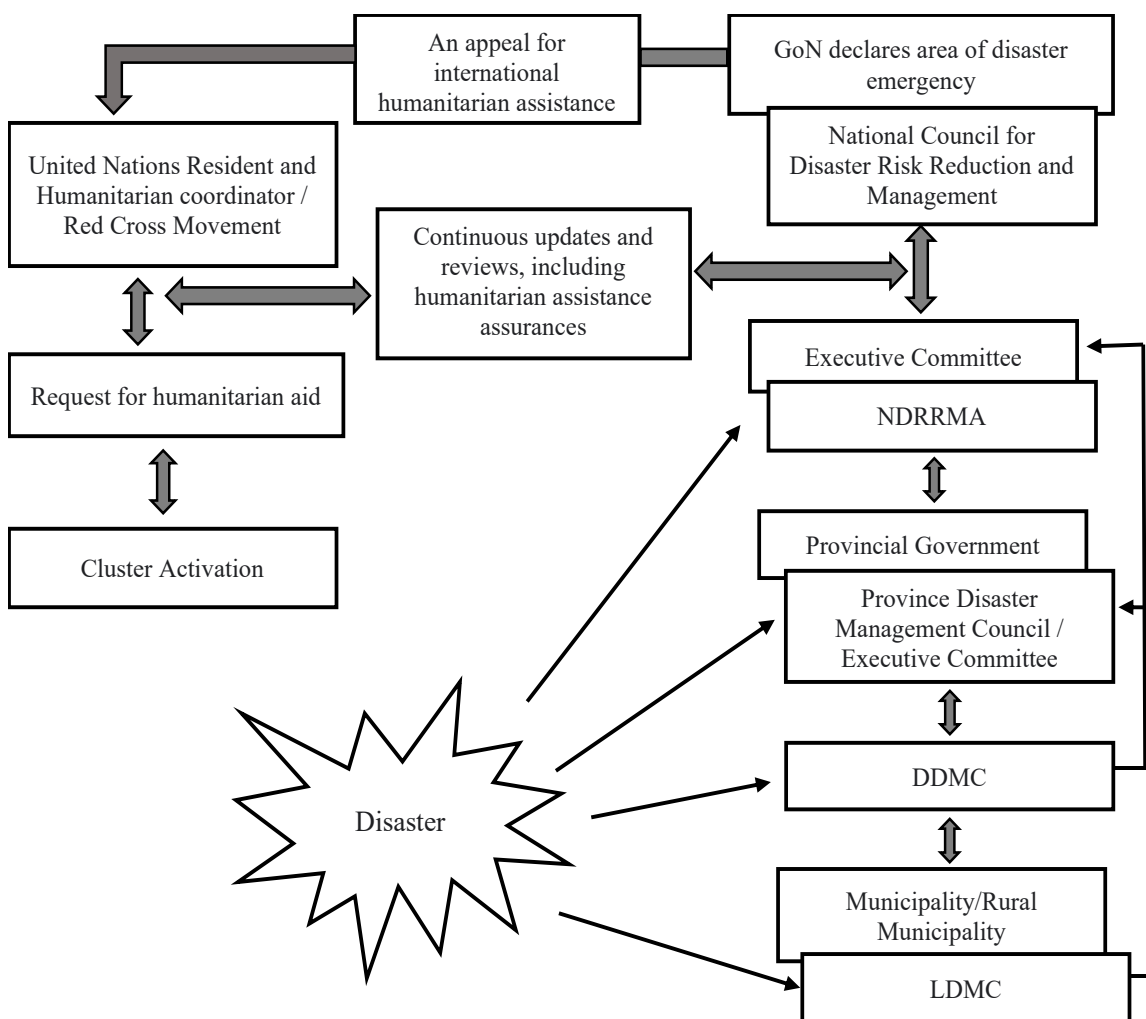
(j) National Disaster Response Framework (NDRF): The NDRF, 2013, amended in 2019, aims to provide effective and coordinated disaster response guidelines, focusing on disaster preparedness, deploying search and rescue teams, saving lives, relocating people, providing relief, managing emergency shelters, and ensuring communication plans. Implemented by the NDRRMA and related agencies, the NDRF requires coordination with federal, state, and local governments, NGOs, and humanitarian organizations (MoHA, 2013). Following the 2015 earthquake, Nepal revised its national and international assistance coordination framework to enhance effectiveness as shown in the figure 5.1. The GoN now plays a central role by quickly declaring disaster emergencies and seeking international aid, with agencies like the UN, Red Cross, and others forming collaborative efforts in response. Specific disaster response clusters, such as health and shelter, are activated, while disaster management committees and emergency operation centers at all administrative levels ensure coordinated and efficient disaster response and aid distribution. This updated framework emphasizes cooperation and organization, demonstrating a commitment to mitigating disaster impacts and protecting affected communities in Nepal.

The NDRF outlines a cluster coordination structure for disaster response in Nepal, led by government agencies and co-led by relevant UN and international agencies to ensure collaborative and efficient disaster management. For instance, the Ministry of Health and Population leads the health cluster with support from WHO, while the Ministry of Water Supply leads the WASH cluster with UNICEF as co-lead. The Ministry of Urban Development leads the emergency shelter cluster, co-led by IFRC and UN HABITAT. Other clusters, including food security, nutrition, CCCM, protection, early recovery, education, logistics, and emergency communication, have designated lead and co-lead agencies,

facilitating a well-organized response and effective assistance delivery to disaster-affected communities (Shrestha & Pathranarakul, 2018). The revised NDRF also establishes an international assistance mobilization framework, coordinating multi-national military efforts through the NA's MNMCC and humanitarian response via the NEOC under the NDRRMA. The NEOC coordinates the Humanitarian Country Team (HCT) and the On-Site Operations Coordination Center (OSOCC), guided by the executive committee and national council. This structure brings together search and rescue teams from the NA, NP, APF, and foreign security forces, and facilitates cooperation among international working groups, UN agencies, response partners, civil societies, private partners, and the Red Cross, ensuring effective mobilization and utilization of international assistance in disaster responses.

Figure 5.1

National and International Assistance Coordination Framework



Note. The figure is derived from NDRF revised in 2019 (MoHA, 2013).

5.2 Laws and Policies Available Before the 2015 Earthquake

Before the 2015 earthquake in Nepal, there were some legal provisions in place to guide disaster response and recovery efforts. Here are some key provisions:

(a) Natural Calamity (Relief) Act, 1982: The act was a crucial legislation that provided a legal framework for managing relief efforts and providing assistance during natural disasters (Natural Calamity (Relief) Act, 1982). The act outlined measures to address the immediate needs of affected individuals, families, and communities in the aftermath of calamities such as earthquakes, floods, landslides, and other natural events. It aimed to streamline relief operations, distribution of aid, and rehabilitation efforts, facilitating a coordinated response from the government and various relief agencies. However, the earthquake that struck Nepal in April 2015 exposed several shortcomings in the implementation of the act. The scale and intensity of the disaster overwhelmed the existing relief mechanisms, leading to delays and inefficiencies in delivering aid to the affected areas. There were challenges in assessing the actual needs of the affected population and ensuring that relief supplies reached the most vulnerable communities promptly. Additionally, coordination issues between government agencies and relief organizations hindered the smooth execution of relief and rehabilitation efforts.

(b) National Action Plan on Disaster Management in Nepal, 1996: The plan was a significant policy document that aimed to enhance the country's disaster preparedness and response capabilities. It provided a framework to address various natural disasters, including earthquakes, floods, landslides, and other calamities. The action plan focused on disaster risk reduction, early warning systems, and building community resilience. It emphasized the importance of coordination among different stakeholders, including government agencies, local communities, and non-governmental organizations, to effectively respond to disasters (MoHA, 1996). While the action plan was an important step towards disaster management in Nepal, subsequent events and lessons learned from disasters, such as the 2015 earthquake, have led to the formulation of more updated and comprehensive policies and strategies in disaster risk reduction and management.

(c) Protection of Environment Act, 1997: This act focused on the protection, conservation, and management of the environment. It included provisions related to environmental impact assessment, pollution control, and ecological preservation, which

were relevant for addressing environmental concerns in disaster response and recovery (Protection of Environment Act, 1997).

(d) Building Act, 1998: The act was an important legislative framework that governs the construction, maintenance, and safety standards of buildings in the country (Building Act, 1998). It aimed to regulate and promote systematic urban development while ensuring the structural integrity and safety of constructed structures. The act set forth guidelines for building permits, zoning regulations, construction materials, and building codes, thereby promoting sustainable and resilient infrastructure. It also outlined provisions for inspection and monitoring of buildings to enforce compliance with safety standards.

(e) Local Self-Governance Act, 1999: The act is a landmark legislation that fundamentally transformed the governance structure at the local level (Local Self-Governance Act, 1999). The act was a significant step towards decentralization, empowering local communities and enhancing their participation in decision-making processes. It established a system of local government, comprising VDCs, Municipalities, and DDCs. The act provided the local bodies specific responsibilities and authority to manage local affairs, including infrastructure development, social services, and resource management. It remained as the initiation for embarking on a journey towards strengthening local governance and fostering community-led development initiatives in Nepal.

(f) National Building Code, 2003: The code was a comprehensive set of guidelines and regulations governing the construction, design, and safety standards of buildings in the country. It was introduced only in 2012 that aimed to promote uniformity and consistency in building practices while ensuring structural integrity and resilience against natural disasters (Timsina et al., 2015). The code covered various aspects, including building materials, structural design, fire safety, accessibility, and environmental considerations.

(g) National Strategy for Disaster Risk Management (NSDRM), 2009: The NSDRM was a policy document that outlined the country's approach to disaster risk reduction and management. It intended to enhance the capacity of government agencies, communities, and stakeholders to effectively address the challenges posed by natural disasters. The NSDRM underlined the integration of disaster risk reduction measures into all development activities and sectors. It endorsed early warning systems, community-based disaster preparedness, and risk-informed decision-making (MoHA, 2009).

(h) National Adaptation Program of Action (NAPA) to Climate Change, 2010: NAPA was formulated to address the country's urgent and immediate adaptation needs in response to the impacts of climate change (MoE, 2010). Nepal is highly vulnerable to climate change due to its mountainous terrain, reliance on agriculture, and exposure to extreme weather events. NAPA is a strategic framework developed under the United Nations Framework Convention on Climate Change (UNFCCC) to help the most vulnerable countries adapt to the adverse effects of climate change. It focuses on identifying and implementing priority adaptation projects and actions at the national and local levels. The key objectives of Nepal's NAPA include assessing vulnerability, prioritizing adaptation actions, building capacity, promoting inclusivity, and leveraging international support. It focuses on various aspects, such as improving water management and irrigation systems, strengthening early warning systems for disasters, promoting climate-resilient agricultural practices, and protecting vulnerable ecosystems (MoE, 2010).

(i) Climate Change Policy, 2011: The policy outlined the country's approach to address the challenges posed by climate change. It provided a comprehensive framework to integrate climate change attentions into national development planning and strategies. The policy aimed to enhance climate resilience, promote low-carbon development, and protect vulnerable communities and ecosystems from the impacts of climate change (GoN, 2011a).

(j) National Framework on Local Adaptation Plans for Action (LAPA), 2011: Nepal is a country highly vulnerable to the impacts of climate change, including glacial melting, extreme weather events, and changing rainfall patterns. In response to these challenges, the GoN has developed the strategies and frameworks to promote local adaptation to climate change. This framework is a concept promoted by the UNFCCC. It aims to enhance the capacity of local societies and governments to assess their vulnerabilities to climate change and develop specific plans to address these challenges (MoE, 2011).

The LAPA process involves identifying local climate risks, vulnerabilities, and opportunities for adaptation. It empowers communities and local authorities to take a bottom-up approach, acknowledging that adaptation measures need to be context-specific and relevant to the local environment, culture, and socio-economic conditions. As climate change disproportionately affects vulnerable and marginalized communities, LAPA seeks to ensure inclusivity and participation, engaging women, indigenous groups, youth, and other stakeholders in the decision-making process (MoE, 2011).

(k) Land Use Policy, 2013: The policy was a framework that guided the sustainable management and utilization of land resources in the country. It provided guidelines for land allocation, land development, and land use planning to ensure efficient and equitable land utilization across different sectors. The policy aimed to promote sustainable agricultural practices, protect natural resources, and address land-related issues such as land fragmentation and land degradation. It emphasized the need for community participation and stakeholder engagement in land use decisions (Nepal et al., 2020).

(l) National Disaster Response Framework (NDRF), 2013: The NDRF serves as a guiding document to ensure a well-coordinated and effective response to disasters impacting Nepal at the national level (MoHA, 2013). The Disaster Risk Reduction and Management Executive Committee oversees the implementation of this framework, with the NDRRMA and relevant agencies taking the lead in executing preparedness and response activities as outlined in the NDRF, along with its first amendment in 2019. Once approved by the National Disaster Risk Reduction and Management Council, the NDRF becomes operational, and the NDRRMA collaborates with governmental agencies, non-governmental organizations, and humanitarian entities at the federal, provincial, and local levels to carry out its provisions and ensure a comprehensive disaster response.

These legal and policy provisions provided a foundation for disaster response and recovery efforts in Nepal before the 2015 earthquake. However, the severity and scale of the earthquake highlighted the need for further strengthening and updating of these provisions to address the specific challenges and lessons learned from the earthquake.

5.3 Laws and Policies Framed After the 2015 Earthquake

After the 2015 earthquake in Nepal, several legal provisions were framed to enhance the country's response to and recovery from disasters. Here are some key provisions:

(a) National Reconstruction Authority Act, 2015: The act regarding reconstruction of structures affected by earthquakes was enacted to establish the NRA as the apex body that provided a legislative framework established to oversee and coordinate the post-earthquake reconstruction and rehabilitation efforts in the country (Act Regarding Reconstruction, 2015). It was formed in response to the 2015 devastating earthquake, causing widespread destruction and affecting millions of people. NRA was established as an independent body with the mandate to plan, implement, and monitor the reconstruction and rehabilitation

activities in the earthquake-affected areas. The NRA Act provided the legal basis for the authority's functions, powers, and responsibilities.

The act aimed to expedite and streamline the reconstruction process, ensuring transparency, efficiency, and accountability in the utilization of funds and resources. It emphasized the participation of local communities in decision-making, prioritizing the needs and preferences of the affected population in the rebuilding efforts. The act played a crucial role in coordinating the efforts of various stakeholders, including government agencies, non-governmental organizations, and international partners, to support the affected communities in their recovery and rebuilding journey after the earthquake.

(b) Land Use Policy, 2015: The policy was formulated as a review and update of the existing policy following the devastating earthquake that struck the country in April 2015. The earthquake highlighted the need to revisit land use planning and management to ensure better resilience and sustainable development in the face of natural disasters. The policy emphasizes the integration of disaster risk reduction and climate change adaptation considerations into land use planning and development. It aims to promote more efficient and equitable use of land resources, safeguarding against potential hazards and mitigating environmental risks. This provides guidelines for land allocation, land development and land use planning across various sectors. It emphasizes the environmental protection, proper zoning for urban development, and sustainable agricultural practices (MoLRM, 2015).

(c) The Constitution of Nepal, 2015: The Constitution is the supreme law of the country, providing the fundamental framework for governance and administration. It was promulgated in 2015, after a series of political changes, including the abolition of the monarchy and the transition to a federal democratic republic. The constitution was promulgated in the aftermath of the devastating 2015 earthquake. It recognized the importance of empowering local levels with the sole authority over disaster management, acknowledging their proximity and understanding of local vulnerabilities and needs (The Constitution of Nepal, 2015).

The Constitution also established a shared responsibility for disaster management between the federal and provincial governments. While local governments were given primary responsibility, the federal and provincial levels were mandated to support, coordinate, and collaborate in disaster response and recovery efforts. This provision aimed to decentralize

disaster management and foster a more efficient and effective approach to addressing disaster risks and challenges. By entrusting local levels with significant authority and promoting cooperation among all tiers of government, the Constitution seeks to build resilience and better protect the people and resources from the impact of future disasters.

(d) Post-Disaster Needs Assessment (PDNA), 2015: The PDNA process following the 2015 earthquake in Nepal helped inform the formulation of recovery plans, resource mobilization, and prioritization of interventions. The National Planning Commission (NPC) of Nepal, in collaboration with international partners and organizations, conducted a comprehensive PDNA. The PDNA aimed to assess the damage caused by the earthquake, identify the needs for recovery and reconstruction, and formulate a strategic plan for rebuilding the affected areas (NPC, 2015a, 2015b). The PDNA process in Nepal involved extensive data collection and assessment across various sectors, including housing, infrastructure, health, education, agriculture, and livelihoods. The assessment considered both economic and non-economic losses to understand the full extent of the disaster's impact on the country. Based on the findings of the PDNA in two volumes, Nepal formulated a detailed recovery and reconstruction plan, outlining the priority areas for intervention and the resources required to support the rebuilding efforts. The plan emphasized the importance of building back better and incorporating disaster risk reduction measures in the reconstruction process to enhance the country's resilience to future disasters.

(e) Post-Disaster Recovery Framework (PDRF), 2016-2020: The PDRF, published by the NRA, served as a roadmap for recovery and reconstruction efforts, following the devastating earthquake of April 2015. The PDRF outlined a comprehensive plan for rebuilding the affected areas, emphasizing the need for a structured and coordinated approach to ensure efficient utilization of resources and timely implementation of projects (NRA, 2016). It set clear priorities for intervention, focusing on critical sectors such as housing, infrastructure, education, health, and livelihoods, with the goal of building back better and enhancing the resilience of communities to future disasters. The PDRF was instrumental in providing a strategic direction for Nepal's recovery and reconstruction process. It aimed to bring together various stakeholders, including government agencies, development partners, and affected communities, to collaborate on rebuilding efforts. By establishing this framework and timeline for recovery initiatives, the PDRF played a crucial role in advancing reconstruction activities.

(f) Disaster Risk Reduction and Management Act, 2017: The act is a significant piece of legislation aimed at strengthening the country's disaster preparedness, response, and risk reduction efforts. The act provides a comprehensive legal framework to address all stages of disaster management, from risk assessment and mitigation to response and recovery (DRRMA, 2017). The act establishes a clearer institutional setup for disaster risk reduction and management at the national, provincial, and local levels. It creates the National Disaster Risk Reduction and Management Council (NDRRMC) as the apex body responsible for overall coordination and policy formulation. The National Council, Executive Committee, NDRRMA and Disaster Management Committees at Province, District and Local levels are new institutional arrangements as per this act.

Likewise, the act mandates the development of national and local-level disaster risk reduction plans. The act outlines the roles and responsibilities of various government agencies and stakeholders during disaster response and relief operations. It also emphasizes the establishment of risk financing and insurance mechanisms to enhance the financial capacity to respond to disasters and support recovery efforts. The act promotes public awareness and education on disaster risk reduction, encouraging a culture of safety and preparedness at the community level. Similarly, the act stresses capacity building of government agencies, local levels and other stakeholders to enhance their capabilities (DRRMA, 2017). Moreover, the act recognizes the importance of international cooperation in disaster risk reduction and management and encourages collaboration with other countries, organizations, and agencies to strengthen disaster resilience.

(g) National Urban Development Strategy (NUDS), 2017: The strategy has been a significant policy framework that aims to guide and shape urban development in the country. With increasing urbanization and challenges posed by rapid urban growth, the NUDS provides a comprehensive approach to address urban issues and promote sustainable urban development. The strategy emphasizes the need for integrated planning, efficient land use, and the provision of basic services and infrastructure in urban areas. It promotes inclusive and equitable urban development, with a focus on improving living conditions for all urban residents, including vulnerable and marginalized populations (MoUD, 2017).

(h) National Disaster Risk Reduction Policy, 2018: Nepal's inaugural policy on disaster risk reduction and management, aligned with the DRRM Act, aims to significantly reduce the impact of natural and non-natural disasters on human lives, properties, health,

livelihoods, infrastructure, culture, and the environment. The policy seeks to enhance awareness and knowledge of disaster risks, ensuring easy access to relevant information at all levels. It focuses on strengthening disaster risk governance, integrating disaster risk reduction with climate change adaptation in development processes, and increasing public and private investments to boost resilience. Additionally, it aims to improve disaster preparedness and response through an efficient information management system and a multi-hazard early warning system, while emphasizing the ‘build back better’ approach for post-disaster recovery and reconstruction (MoHA, 2018c).

(i) Local Government Operation Act, 2018: The act is a comprehensive and transformative legislation that modernized the local governance system. It replaced the previous Local Self Governance Act, 1998 and introduced a three-tier local government structure consisting of rural municipalities, municipalities, and metropolitan cities. The act prioritizes decentralization, empowering local bodies to efficiently manage their own affairs and allocate resources for development projects. Additionally, the act incorporates provisions for disaster management, emphasizing disaster risk reduction and response at the local level. It mandates local governments to establish and operate disaster management committees to enhance preparedness and coordination during emergencies (LGOA, 2017).

(j) Disaster Risk Reduction National Strategic Plan of Action, 2018-2030: The action plan for disaster risk management in Nepal, endorsed by the National Disaster Risk Reduction and Management Council on 18 June 2018, aligns with the DRRM Act, 2017. It builds on past experiences, including the NSDRM 2009, lessons from the 2015 earthquake, and initiatives on Climate Change Adaptation and Sustainable Development Goals. The plan outlines priority actions for the short-term (2018-2020), medium-term (2018-2025), and long-term (2018-2030). Responsibilities are assigned to federal, provincial, and local government entities. The four primary areas are understanding disaster risk, strengthening governance, promoting risk-informed investments, and enhancing preparedness and ‘build back better’ approaches (MoHA, 2018a).

(k) Reconstruction, town development, urban planning, and building-related directives, procedures and guidelines: The guidance provides essential guidelines and standards for town development, urban planning, and building construction. The guidance aims to ensure systematic and sustainable urban growth, enhance infrastructure development, and promote safe and resilient buildings. This document outlines zoning

regulations, land use planning, and building codes to be followed during urban development and construction projects. It emphasizes the incorporation of disaster risk reduction measures and climate change adaptation strategies in urban planning to enhance resilience against natural disasters. These guidelines and directives provided specific instructions and procedures for the implementation of reconstruction and retrofitting projects. They addressed various aspects of the reconstruction process, including land use planning, procurement, financial management, and social inclusion (NRA, 2019).

(l) National Climate Change Policy, 2019: The policy is a significant and updated policy framework that addresses the challenges of climate change and its impact on the country. It aims to enhance climate resilience, promote low-carbon development, and protect vulnerable communities and ecosystems (MoLJPA, 2019). The policy emphasizes the integration of climate change considerations into all sectors of the economy and development planning. It advocates for sustainable resource management, adaptation measures, and climate-friendly practices to combat the adverse effects of climate change. The policy serves as a guiding document to steer Nepal towards a more climate-resilient and environmentally sustainable path.

(m) Disaster Risk Reduction and Management Rules, 2019: The regulation serves as a complementary framework to the existing act. By providing additional clarity on various aspects of disaster risk reduction and management, the regulation enhances the effectiveness and application of the act. It helps stakeholders, including government bodies and agencies, understand their specific roles and responsibilities in disaster management more clearly, leading to improved coordination and response during emergencies (DRRMR, 2019).

(n) Building code and safety standards: After the earthquake, the government revised and strengthened building codes and safety standards to ensure the construction of earthquake-resistant buildings. The National Building Code and related regulations were developed to guide construction practices and improve the safety of structures. Those documents include Seismic Design of Buildings in Nepal, 2020; Guidelines for Earthquake Resistant Building Construction: Earthen Building (EB), 2015; Guidelines on Load Bearing Masonry, 2015; Guidelines for Earthquake Resistant Building Construction: Low Strength Masonry, 2015; and Architectural Design Requirements, 2015. These provisions after the 2015 earthquake aimed to improve Nepal's disaster response and recovery mechanisms, strengthen resilience, and ensure sustainable reconstruction. They focused on effective coordination, institutional

capacity building, community participation, and integration of disaster risk reduction into development planning. These provisions sought to learn from the lessons of the earthquake and promote a more resilient Nepal in the face of future disasters.

5.4 Improving Institutional and Legal Arrangements

The interview data highlights several challenges faced in the legal, policy, and institutional arrangements for response and recovery after the 2015 earthquake in Nepal. One of the major challenges was the unexpected nature of the event, which caught the country off guard and exposed the inadequacy of existing disaster-related laws and provisions (Shrestha & Pathranarakul, 2018). It was observed that the disaster act and other legal provisions were not sufficient to effectively respond to the scale and severity of the earthquake. Another significant challenge was the lack of clear roles and responsibilities for stakeholders involved in the response and recovery efforts. This led to confusion and inefficiency in coordinating and implementing the necessary measures. Additionally, there were issues of inadequate preparedness, shortage of trained human resources and rescuers and sufficient relief items. The frequent changes in guidelines and personnel within the NRA also hampered the effectiveness of the response and recovery process. It can be observed that some institutions, laws and policies were arranged after the 2015 earthquake that indicates positive move towards reviewing such arrangements in place. However, it is apparent that the institutions remain isolated, and legal and policy provisions are fragmented (Acharya, 2018b; Amatya et al., 2017).

The interview data also highlights the lack of recovery and reconstruction policies following the earthquake. The absence of clear policies and arrangements resulted in confusion and harassment for the affected population and within local bodies. There were instances where local leadership were unsure of their roles and responsibilities, further delaying the recovery process. Furthermore, the ongoing process of state restructuring and uncertainty regarding the future of local bodies affected the effectiveness of response and recovery efforts (Malla et al., 2020a). The lack of a clear division of work and coordination among government institutions (Amatya et al., 2017), including the District Disaster Response Committees (DDRC), Local Development Officers (LDO), CDO, and security forces, contributed to the challenges faced.

Furthermore, the interview data suggests that the existing mechanisms were not effective in handling the disaster. The state mechanism was prepared for small-scale disasters and failed to anticipate and adequately prepare for such a devastating event (DDRC Kavrepalanchowk, 2015a). There was a lack of enthusiastic participation from local bodies, and the situation deteriorated further after the 2017 local elections. The data also emphasizes the need for better cooperation among government institutions, as well as the lack of provisions for binding coordination. There was a lack of clear guidelines for the relocation of settlements and inadequate policies for capacity building of security forces and communities.

To address the identified challenges, it is crucial to strengthen the legal and policy framework for disaster response and recovery in Nepal. This includes revising and updating the disaster laws, enhancing coordination mechanisms, and clearly defining the roles and responsibilities of stakeholders at various levels. It is essential to integrate disaster risk reduction into sustainable development goals and prioritize community-based disaster risk management. Additionally, there is a need for effective local leadership and clear guidelines for local levels to ensure their active involvement in the reconstruction process (Gauchan et al., 2017). The NRA should focus on facilitating the transfer of responsibilities and functions to the local levels to expedite the recovery process. Capacity building efforts for both security forces and communities should be prioritized, along with the mainstreaming of disaster risk reduction into development planning.

To enhance coordination and cooperation, provisions should be made for mandatory coordination among government institutions. Clear guidelines for treatment expenses, dead body management, and other aspects of disaster response should be established to facilitate efficient field operations (Amatya et al., 2017). To sum up, the findings suggest that the legal, policy and institutional arrangements for response and recovery after the 2015 earthquake in Nepal faced numerous challenges, including inadequacy, confusion and lack of coordination. Addressing these challenges requires inclusive reforms, capacity building and a multi-sectoral approach to ensure effective disaster response and recovery in the future.

The fragmented policy and legal framework at the federal level has significantly impacted the institutionalization of human security at the local government level in Nepal. This disjointed approach means that there is a lack of cohesive and consistent guidelines for local authorities to follow, leading to variations in how human security is managed across three governments. Without a unified framework, local governments struggle to implement

effective and standardized measures to ensure the safety and wellbeing of their communities. This fragmentation can result in gaps in security provisions, inconsistencies in the enforcement of laws and difficulties in coordinating efforts between federal and local entities. Consequently, the overall effectiveness of human security initiatives is compromised, making it challenging to address issues relating to disaster response at local level.

5.5 Post-Disaster Institutional Practices

5.5.1 Reviewing Disaster Incidents

The interview data highlights the current arrangement for reviewing disaster incidents for learning purposes. It emphasizes the value of drawing lessons from past disasters, particularly citing the 2015 earthquake as an evidential example. However, the process of reviewing these incidents is not well-established or consistently implemented across the various levels of disaster management committees.

At the district level, the DDMC holds regular meetings where past disaster events are discussed. Unfortunately, there is no specific practice of formally reviewing these incidents as an agenda item. Although the DDMC initially engaged in reviewing overall activities after the 2015 earthquake, this practice eventually ceased. Consequently, the opportunity to thoroughly assess the events, identify strengths and weaknesses, and extract valuable lessons was missed.

Similarly, at the local level, the municipal/village executive and disaster management committee meetings touch upon recent disaster events, but without giving them dedicated agenda time. Furthermore, LDMCs rarely convene meetings, occurring only once a year in most cases. This infrequent gathering restricts the ability to comprehensively review disaster incidents and impedes effective learning from them.

5.5.2 Making Reviewing the Disaster Incidents Beneficial

To enhance the expediency of reviewing disaster incidents for learning purposes, several suggestions can be considered. Firstly, it is imperative for the DDMC and LDMC to prioritize the formal review of disaster events and activities. This should be incorporated as a dedicated agenda item during their meetings. By establishing a systematic approach to

reviewing incidents, these committees can delve into the details of each event, assess response strategies, and identify areas for improvement.

Moreover, the subject committee on disaster, forest, and environment should periodically engage in discussions and reviews of disaster management practices. This committee, specifically tasked with overseeing disaster-related matters, can provide valuable insights, guidance, and recommendations for improving response mechanisms. Additionally, there should be an emphasis on regular meetings for both the DDMC and LDMC. Frequent gatherings would enable timely reviews of disaster incidents and facilitate a proactive approach to learning and improvement.

Furthermore, it is crucial to elevate the importance of disaster management in annual activity reviews conducted at various local levels. By allocating dedicated time and attention to disaster management in these reviews, it can be ensured that the process is not overlooked or treated as a low-priority matter. Therefore, the arrangement for reviewing disaster incidents for learning purposes requires significant improvements. By establishing dedicated agenda items, increasing meeting frequency, involving subject experts, and elevating the priority of disaster management in reviews, the process can become more effective. Such enhancements will facilitate thorough assessments, identification of lessons, and ultimately lead to more robust disaster response and mitigation strategies.

5.5.3 Promoting Responsibility, Accountability and Transparency

The interview data reveals that prior to the 2017 local level election, there was a lack of methods to promote responsibility, accountability, and transparency. However, after the election, various local levels implemented different approaches to address these important aspects of governance. One notable method is the maintenance of a website by the DAO, where most activities are uploaded, excluding confidential matters as specified by the laws relating to right to information (Right to Information Act, 2007). This initiative enhances transparency by providing public access to information about the DAO's functioning.

Additionally, many local levels have taken steps to promote accountability and transparency by uploading their annual programs on their websites. Some local levels go further by sharing their decisions and annual progress reports, further increasing transparency in their actions. Flex boards are commonly used by all local levels to display project details. Some local levels actively maintain a Facebook page as an easy platform for information sharing.

These practices enable citizens to be informed about the activities and decisions of their local governments.

However, the data also indicates that certain initiatives have seen limited success. For example, public hearings were initially conducted in all local levels following the 2017 election, but later, most local levels discontinued this practice. Public hearings serve as a vital platform for public participation and feedback, but the discontinuation raises concerns regarding citizen engagement and transparency in decision-making processes. Tender and finance-related activities are influenced by the selfish interests of elected authorities, further decreasing transparency.

The diminishing public interest in transparency is detrimental to overall good governance, partly due to the public's acceptance of the reluctance of people's representatives. Public audit and social audit are mentioned in official documents to fulfill indicators like the Local Government Institutional Self-Assessment (LISA), but their actual implementation is lacking. "LISA system has been introduced as an innovative tool to track the performance of local governments in Nepal" (Kandel, 2021, p. 171). Administrative expenses such as tea, coffee, breakfast, lunch and fuel are high in many local levels, and authorities try to avoid publishing these details. As one of the interviewees stated that the local level spent Rs 30 lakh on tea and coffee alone last year. Many of the respondents opined that the expensive election campaigns have compelled representatives to be less transparent and hide details.

Moreover, Judicial committees in most local levels fail to understand their roles and institutionalize them properly. Both people's representatives and personnel have failed to present local levels as effective local government entities. As an instance, municipal/village assemblies, which serve as the legislative houses of local levels, are not conducted as they should be in many local levels.

5.5.4 Ways to Promote Responsibility, Accountability and Transparency

To make the methods adopted for promoting responsibility, accountability, and transparency more effective, several measures can be considered. Firstly, there is a need to enhance grievance handling mechanisms at all local levels. Establishing institutional mechanisms for grievance redressal, preferably at the ward level, would ensure that citizen concerns are effectively addressed and resolved. This would strengthen transparency and accountability by providing a structured process for citizens to voice their grievances and seek appropriate

actions. Furthermore, efforts should be made to address the reluctance of people's representatives in facing questions from the public. Creating a culture of openness and accountability among elected officials is crucial. Training programs, awareness campaigns, and platforms for dialogue between representatives and the public can encourage elected officials to be more transparent and responsive to citizens' queries and concerns.

Additionally, it is essential to ensure the effective implementation of public audit and social audit processes. These mechanisms should not be treated as mere formalities but should genuinely assess financial management and project implementation. One measure to incentivize transparency is to link project payments to the completion of public audits. This would encourage local authorities to prioritize transparency and accountability in their actions. Moreover, there is a need to strengthen the understanding and awareness of the public regarding the concept and significance of public hearings. Efforts should be made to educate citizens about the purpose and potential impact of these hearings, empowering them to actively participate and contribute constructively. Therefore, the interview data highlights the efforts made to promote responsibility, accountability, and transparency at local levels, while also pointing out areas for improvement. Enhancing grievance handling mechanisms, addressing the reluctance of people's representatives, strengthening audit processes, and promoting public awareness are essential measures to make these methods more effective. By implementing these measures, local levels can foster a culture of transparency, accountability, and good governance, ensuring that the needs and concerns of the public are appropriately addressed.

5.5.5 Monitoring and Evaluation at the Local Levels

The interview data reveals that there is a monitoring and evaluation system in place at all local levels, which is coordinated by the deputies. This implies that there is a structure in place to oversee and assess the progress and performance of projects and activities at the local level. Additionally, it is noted that in most local levels, the monitoring and evaluation of large projects is the responsibility of the heads. This suggests a division of tasks and responsibilities within the local administration. However, the effectiveness of the monitoring and evaluation system is compromised by several factors. One significant issue is the lack of technical knowledge among the team members involved in monitoring and evaluation (Faith et al., 2023). This implies that there is a gap in expertise, which can hinder the accurate

assessment of projects and activities. Furthermore, the presence of individuals with wrong intentions within the team exacerbates the problem. Their motivations may be driven by personal gain or ulterior motives, which can distort the evaluation process and compromise the integrity of the system.

Another noteworthy challenge is the reluctance to enforce legal compliance and punish wrongdoers at the local levels. This reluctance may stem from a desire to avoid alienating voters. The authorities may prioritize maintaining a favorable image among the electorate, even at the cost of allowing non-compliance or misconduct to go unpunished. This lack of strict enforcement undermines accountability and can lead to a culture of impunity.

5.5.6 Moving to More Effective Monitoring and Evaluation

To address the limitations identified in the current monitoring and evaluation system at the local levels, firstly, it is essential to provide local authorities with legal powers and establish effective enforcement mechanisms. This includes enabling them to take action against lawbreakers and ensuring that penalties are imposed for non-compliance. By doing so, accountability can be enhanced, and wrongdoers can be held responsible for their actions. Similarly, to improve the quality of monitoring and evaluation, efforts should be made to enhance the technical knowledge of the team members involved. Training programs and capacity-building initiatives can be applied to equip with the required skills and expertise (Faith et al., 2023). This will enable them to make more informed assessments and decisions.

Moreover, consumer committees with wrong intentions should not be allowed to unduly influence the personnel responsible for monitoring and evaluation. Steps should be taken to ensure that the evaluation process remains objective and independent from external pressures. Transparency and accountability in decision-making should be emphasized (Pandeya, 2015). Additionally, the introduction of structured templates that include relevant indicators can standardize the monitoring and evaluation process. These templates should be designed to capture essential information and measure progress effectively. Such a standardized approach will enhance consistency and facilitate comparisons across different projects and local levels (Hatsu & Ngassam, 2016).

Likewise, monitoring and evaluation should not be limited to specific projects or festivals (Faith et al., 2023). Instead, it should be conducted regularly and comprehensively across all

activities and initiatives at the local level. This will provide a more accurate and holistic assessment of the overall performance and impact. Besides, the presence of hidden conflicts between elected authorities, particularly between the head and deputy, should be addressed. These conflicts can be detrimental to overall performance and hinder effective monitoring and evaluation. Promoting cooperation, communication, and collaboration between the key stakeholders can help mitigate such conflicts and improve the system's effectiveness.

5.6 Case Studies' Impression on Institutionalization of Human Security

This subheading involves a comprehensive analysis of case studies from appendix 'H', which focus on establishing human security governance at the local level, specifically within the context of disaster governance. These cases explore the challenges and efforts related to human security in disaster preparedness, response, and recovery, highlighting insights into strategies, accomplishments, limitations and gaps in local governance. The analysis underscores the intricate interplay between socioeconomic elements, governance mechanisms and community resilience when confronting disasters. These examined cases, addressing the institutionalization of human security governance through local disaster governance, provide valuable insights into challenges, achievements, and areas needing attention for enhancing community wellbeing. These cases illuminate the intricate factors influencing the integration of human security principles within local governance structures. The outcomes and lessons drawn from these instances offer a deeper understanding of advancements and shortcomings in effective human security governance.

Firstly, the studies underscore the significance of access to basic income as a foundational element of human security. While some communities have managed to diversify their income sources and achieve stability, others continue to face financial constraints that impact their overall wellbeing. The extent of economic diversification and access to employment opportunities directly affect the community's capacity to secure basic needs and respond to crises. Furthermore, the challenges in assuring housing for all showcase the complexities of reconstruction efforts post-disaster. Variations in housing access and the inclusion/exclusion of households from grant schemes highlight the need for efficient and transparent mechanisms in addressing housing vulnerabilities.

The presence or absence of SSN emerges as a critical factor in the communities' ability to manage shocks and vulnerabilities. The lack of comprehensive SSN, as evident in multiple

case studies, exposes vulnerable populations to heightened risks during emergencies. The provision of support mechanisms, especially for those facing food shortages or lacking access to healthcare, plays a pivotal role in mitigating the adverse impacts of disasters. Education and healthcare are fundamental to human security, yet disparities exist in terms of access and quality across different communities. The preference for private schools and the inability to afford health insurance demonstrate the challenges in ensuring equitable access to essential services. The need for interconnected disease surveillance systems is evident, as their absence limits the ability to respond proactively to health threats. Additionally, the case studies emphasize the interconnectedness between sustainable practices, environmental protection, and disaster risk reduction. Community practices that align with environmental protection contribute to overall resilience, while unsustainable practices heighten vulnerabilities.

Social issues and discrimination within communities further underline the importance of addressing human security comprehensively. While legal protections exist, perceptions of bias and lack of enforcement raise questions about the effectiveness of these safeguards. The influence of powerful individuals on governance processes, law enforcement, and resource allocation highlights the challenges of ensuring equitable and transparent decision-making. Disaster early warning and response mechanisms emerge as a significant gap in many communities, impacting their preparedness and resilience. The absence of these systems leaves communities vulnerable to future disasters, hampering their ability to recover effectively. Through the lens of these case studies, broader discourse surrounding human security governance can be presented in the following themes:

(a) Access to basic needs: One recurring theme is the issue of access to basic needs such as income, housing, food, and education. While some communities have managed to diversify their economic activities and achieve relative stability, others continue to face challenges in meeting these basic requirements. Lack of sufficient income and SSN disproportionately affects marginalized groups and impoverished households.

(b) Diversified economy: The importance of diversified economic activities becomes evident. Communities that engage in various income-generating activities, such as agriculture, skilled labor, and self-employment, tend to fare better in terms of basic income and overall stability.

(c) Housing and reconstruction: The aftermath of disasters, such as the 2015 earthquake, underscores the significance of swift and effective housing reconstruction efforts. The cases reflect both successes and challenges in this regard, with some communities achieving full reconstruction and others facing delays and exclusion from grants.

(d) Healthcare access: Access to healthcare services, health insurance, and disease surveillance are crucial components of human security. The absence of interconnected surveillance systems for disease outbreaks highlights the need for improved health monitoring mechanisms.

(e) Environmental protection: Environmental considerations are often intertwined with disaster resilience. Sustainable practices and protection of natural resources play a role in enhancing community resilience against future disasters.

(f) Social inequalities: Social disparities based on gender, caste, and ethnicity are persistent issues. Discrimination against women during their periods and caste-based untouchability continue to affect communities' social dynamics.

(g) Governance and institutional arrangements: The effectiveness of local governance structures and institutions is critical for disaster preparedness and response. The case studies highlight varying levels of understanding and implementation of subject committees and governance mechanisms at the local level.

(h) Trust in institutions: Trust in government institutions, law enforcement, and political processes emerges as a recurring concern. The influence of powerful individuals on these institutions and perceived biases affects community members' confidence in receiving fair treatment.

(i) Disaster preparedness and resilience: The level of disaster preparedness and community resilience varies among the studied communities. The absence of early warning systems and disaster response mechanisms poses a challenge for effective disaster management.

(j) Human rights: While many communities are aware of their human rights, doubts persist regarding the enforcement of these rights in practice, particularly in the face of influential individuals.

(k) Community support: Community dynamics and mutual support play a significant role in addressing challenges and building resilience. Some communities have individuals or local officials providing support to those in need, compensating for the absence of formal safety nets.

(l) Education and awareness: Education emerges as a factor that influences various aspects of human security, from economic opportunities to health awareness and disaster preparedness.

In summary, the examined case studies collectively underscore the complexity of establishing human security governance through local disaster governance. They highlight the multifaceted nature of challenges faced by communities, including economic vulnerabilities, social inequalities, governance effectiveness, and disaster resilience. The case studies also reflect the interplay between individual agency, community support, and the role of local institutions. While some communities have made strides in ensuring human security and disaster resilience, others still grapple with various limitations and gaps. The insights gained from these case studies can inform policies and strategies aimed at strengthening human security governance at the local level, fostering more inclusive, resilient, and empowered communities in the face of diverse challenges, including those posed by natural disasters.

5.7 Institutionalization of Human Security Governance

5.7.1 Practices Towards Turning Incorporation into Institutionalization

The process of shifting from mere incorporation to full institutionalization of human security governance involves several critical considerations. Initially, incorporation involves addressing policy aspects tied to the application of the human security concept (Stivachtis, 2023). For the transformation to a comprehensive planning framework, Pachauri et al. (2023) emphasize the need to integrate diverse perspectives and inclusive thinking about human security. Biggeri and Tapia (2023) further stress that this integration of perspectives offers valuable insights for policy recommendations in the face of interlinked threats. In this context, Thapa and Katel (2023) underscore the necessity of both policy incorporation and effective institutionalization to achieve beneficial outcomes, with operationalization, as suggested by Lau (2023), fortifying the implementation of human security principles.

The assurance of personal security is primarily upheld by constitutional, criminal, and administrative laws (Tymoshenko & Makarenko, 2022). This foundation is bolstered by a robust legal framework and effective enforcement mechanisms (Rizzo, 2023; Sprincean et al., 2023), which serve as essential guarantees for ensuring human security. Despite these efforts, Prabhakar (2021) points out that the existing policy and institutional systems are insufficient to fully address the complex human security needs linked to disasters in societies and countries. Churruca Muguruza (2017) advocates a shift from incorporating human security into governance to utilizing it as the overarching policy framework itself, emphasizing its utility as an analytical tool. The challenge now lies in integrating human security, security imperatives, human rights, and development agendas cohesively (Muguruza, 2017).

In the realm of human security governance, the distinction between incorporation and institutionalization holds significant importance. Incorporation entails integrating human security principles, concepts, and approaches into existing policies and practices within established frameworks. This often involves adjustments in policies, operational practices, and increased awareness within relevant sectors. On the other hand, institutionalization takes the process further by establishing dedicated structures and mechanisms solely focused on addressing human security issues (Anthony, 2008). This could involve the creation of new agencies or units with explicit mandates to promote, implement, and monitor human security principles. The decision between these two approaches depends on the desired level of transformation within governance structures and the commitment to human security principles, with both incorporation and institutionalization playing pivotal roles in advancing human security governance.

5.7.2 Key Actors and Practices in Institutionalizing Human Security

The institutionalization of human security at the local level in Nepal involves a diverse array of key actors and stakeholders who play integral roles throughout the process. These stakeholders actively contribute to policy development, implementation, monitoring, and advocacy for initiatives focused on human security. The process of empowering local government through the incorporation of policies and subsequent institutionalization is highlighted as essential for effective disaster governance (Bang, 2013). Looking into the actors in disaster governance in Nepal, the landscape of polycentric governance

configurations is evolving into a complex scenario, with various actors engaging in competition and complementing each other (Vij, 2023).

Addressing the considerable disparity between DRR goals and the practical realities of policy implementation is recognized as crucial for enhancing the country's resilience against disasters (Uddin et al., 2020). This emphasizes the importance of institutionalization as a prerequisite for successful policy implementation. The engagement of multiple state and non-state actors, including key government ministries, NGOs, INGOs, and civil society entities, contribute to the ongoing administrative competition for resources and promotion of diverse disaster governance paradigms (Maeda, 2012). This competitive environment persists, leading to the ongoing struggle for promoting varying approaches to disaster governance (Vij et al., 2020).

Within this context, local governments play a critical role in the institutionalization of human security at the grassroots level. These governments possess the authority to devise legal frameworks, policies, programs, and projects that address the specific human security needs of their respective communities (Vij et al., 2020). In tandem, subject committees within local governance bodies, alongside sections focused on disaster management, health, education, social security, economic development, forest and environment, justice and law, planning and monitoring, and agriculture, play essential roles in the process. Judicial committee also holds a critical position. Moreover, disaster management focal persons significantly contribute to the institutionalization of disaster governance at the local levels, operating within the framework of human security governance. The MoFAGA assumes a responsibility in this regard, providing guidelines, technical support, and capacity-building to local governments, aiding in the integration of human security principles into governance frameworks (GoN, 2008).

NGOs collaborate closely with local communities to identify human security needs and gaps, contributing through the implementation of projects spanning health, education, livelihood, disaster preparedness, and social inclusion (Acharya, 2016; Robinson et al., 2023), all of which are integral components of human security. Additionally, community-based organizations, deeply rooted in local contexts, effectively identify community-specific human security challenges and advocate for tailored solutions. These organizations exhibit

the potential to take on key roles in constructing and managing local governance within the voluntary and public sectors (Maeda, 2012).

International actors also form an integral part of the institutionalization process. International Organizations like UNDP, UNICEF, UNFPA, WFP, WB, and so on provide valuable technical assistance, funding, and expertise (Babamaaji et al., 2023) across various aspects of human security, including health, education, gender equality, and disaster management. Their collaboration with government strengthens initiatives aimed at addressing human security concerns. Furthermore, academic and research institutions contribute by conducting research, studies, and assessments that inform evidence-based policies and interventions (Orimoloye et al., 2021; Sadeka et al., 2023) targeted at improving human security outcomes.

Media organizations play a pivotal role in raising awareness about human security issues, advocating for change, and holding local authorities accountable for their response (Fauzi, 2023). Moreover, media including social media remains instrumental for disaster management (Hui & Tsang, 2016; Kapoor, 2015). The direct beneficiaries of human security initiatives, frequently marginalized communities, women, children, the elderly, and other vulnerable groups, are integral to the planning, implementation, and evaluation of programs, ensuring the effectiveness of institutionalization. In the realm of disaster management, local communities and institutions become the first responders for resilience. Grassroots institutions assume a significant role by providing disaster education and mitigation activities tailored to local contexts. They also function as social mobilizers for disaster-hit local communities, with their integration into local governance facilitating prevention and protection activities (Sikandar, 2020).

Research has indicated the necessity for increased people's participation in local decision-making processes (Bhusal, 2023), while the efforts of local civil society actors in promoting inclusive and accountable disaster governance have been pivotal (N. Dhungana, 2019). Support from foreign governments, organizations, and agencies through financial assistance, technical expertise, and capacity-building is instrumental in facilitating the institutionalization of human security at the local level. In addition, the private sector can contribute through corporate social responsibility initiatives, offering resources, expertise, and funding for projects aimed at enhancing human security within local communities.

Governance's capacity to foster disaster resilience and economic sustainability largely hinges on leadership, engaging civil society, and international cooperation. This involves shaping rules, systems, and policy-implementation mechanisms, guided by political leadership (Kalogiannidis et al., 2023). The endeavor to institutionalize human security at the local level in Nepal requires a concerted effort involving a diverse range of actors and stakeholders. Effective coordination, partnership-building, and consultation with local communities are pivotal to ensure the deep integration of human security principles into local governance structures and initiatives.

Identified state-sponsored scalar narratives around actor capacities and tendencies in DRR, knowledge production, dissemination, and formal and informal institutional roles and responsibilities may pose challenges to transformative collaborative action for DRR in Nepal (Russell et al., 2021). The concept of local engagement gains credibility as stakeholders across local, national, and global levels prioritize state authority and community expertise, reshaping existing approaches and advancing a more innovative disaster governance agenda (Melis & Apthorpe, 2020). This multifaceted perspective offers a promising framework to reshape disaster governance strategies and foster a more revolutionary agenda, consequently offering an avenue for effective institutionalization of human security agenda.

In this intricate landscape, it is crucial to acknowledge the complex polycentric governance configurations in Nepal. The interactions of various state and non-state actors, including government ministries, NGOs, INGOs, and civil society entities, create a competitive environment for resources and differing disaster governance paradigms. This complexity adds an extra layer of challenge to the establishment of human security measures. Nevertheless, recognizing the significance of local engagement and embracing narratives that validate local authority and expertise present an opportunity to reshape approaches and drive innovative disaster governance strategies forward. Effective coordination and partnership-building with local communities are paramount in embedding human security principles within local governance structures and initiatives.

The analysis presented in Chapter 4 of the documents uncovers a complex scenario regarding the integration of human security concerns into local governance in Nepal. While there are positive indicators suggesting that efforts have been initiated in this direction, there is a glaring need for substantial improvements in the overall process. This indicates that while

the intention to address human security is present, the practical implementation and effectiveness of these efforts require attention.

Interviews and case studies highlight a concerning trend regarding the institutionalization of human security concerns within local governance practices. It is evident that the enthusiasm required for fully embedding these concerns into the governance framework is lacking. This suggests that despite the recognition of the importance of human security, the commitment to integrating it into governance remains somewhat tepid.

A crucial aspect of this process involves subject committees, which are expected to play ministerial roles within local governments. However, it is alarming that many of these subject committees are not operating at full capacity. This deficiency in functionality has far-reaching consequences, directly impacting the broader goal of effectively institutionalizing human security concerns within the local governance structure. Further complicating the matter is the absence of clear legal documentation outlining the responsibilities and functioning of subject committees at some local levels. This omission hampers the establishment of a solid foundation for integrating human security concerns into local governance. Moreover, the fact that some subject committee members are unaware of their appointments reflects a communication gap that undermines the legitimacy of these committees.

An unsettling practice that emerges is the tendency to focus on the procedural aspect of institutionalization rather than its substantive implementation. For instance, the prevalent practice of securing individual member signatures solely for budget-related matters portrays a superficial engagement with subject committees. This approach neglects the holistic role these committees should play, thus casting doubts on the true commitment to human security governance. This superficiality not only weakens the committees' efficacy but also has wider implications for local governance resembling the functioning of a government entity.

Beyond the issues already mentioned, the hurdles to effective institutionalization extend to other areas. The frequent turnover of the disaster focal person and the lack of comprehensive capacity-building programs for personnel reflect organizational instability and a lack of strategic investment in building expertise. Additionally, inadequate resourcing even for those few initiatives further hinders the progress toward integrating human security concerns into local governance.

The analysis underscores two pivotal areas that demand attention for successful institutionalization. First, there is a pressing need to enhance the capacity of local authorities. This involves equipping them with the necessary skills, knowledge, and resources to effectively address and implement human security concerns within their jurisdictions. Second, the passage suggests that intertwining income-generating and livelihood-related activities with the concept of human security is essential. This reflects an understanding that the economic wellbeing of individuals and their overall security are intricately linked.

In fact, the analysis of the documents reveals a mixed landscape of progress and challenges in the incorporation of human security concerns into local governance in Nepal. While positive signs exist, the lack of enthusiastic institutionalization, functional deficiencies in subject committees, absence of legal frameworks, and inadequate capacity-building efforts pose significant obstacles. To overcome these challenges, there is a clear call to action: focus on strengthening the capacity of local authorities, integrate livelihood-focused initiatives, and ensure a more substantive, rather than procedural, approach to human security governance. By addressing these aspects, Nepal can pave the way for the beneficial and comprehensive integration of human security concerns into its local governance framework.

The analysis of formulated policies, laws, plans and programs at four local levels reveals mixed results. While some aspects indicate encouraging transformation, others require more focus. This underscores the need for local levels to commit more to mainstreaming their policy and legal frameworks for institutionalizing human security governance. As found in the Chapter 4, higher disaster recovery rates can be achieved through strong political and institutional leadership, supported by robust policy and legal frameworks, as exemplified in Dhulikhel and Bhumlu. However, the fragmented policy and legal framework at the federal level has significantly impacted the institutionalization of human security at the local government level in Nepal. This disjointed approach results in a lack of cohesive and consistent guidelines for local authorities, leading to variations in disaster management across the three levels of government. Furthermore, weak institutional practices at the local level, such as the lack of disaster incident reviews, deficient accountability and transparency, ineffective monitoring and evaluation, and ineffective subject committees, hinder the institutionalization of human security governance.

CHAPTER 6

LOCAL GOVERNMENT IN THE REMAKING OF SOCIETY

This chapter presents the initiatives of the local government to bring the reconstruction process to an end after the 2015 earthquake in Nepal. It also presents prevailing status of perceived human insecurity and the condition of the remaking of society. Furthermore, there is analysis of the reasons for slower and speedy reconstruction process followed by the discussions.

6.1 Physical Reconstruction After the 2015 Earthquake

The handover of responsibilities from the NRA to the NDRRMA and the respective ministries, departments, and agencies on 23 December 2021 marked a significant transition in the aftermath of the devastating 2015 earthquake in the affected region. While there has been some progress in the reconstruction efforts, it is challenging to categorize it as a resounding success, given the persistent challenges and the prolonged timeline of eight years since the earthquake struck. One of the key indicators of reconstruction progress is the physical rebuilding of infrastructure and homes in the affected areas. Although some strides have been made in this regard, with numerous structures being reconstructed, a substantial number of projects remain pending (NRA, 2021a). This backlog has left many people still grappling with the consequences of the earthquake, even today.

The slow pace of reconstruction can be attributed to various factors. Administrative hurdles, bureaucratic inefficiencies, and delays in disbursing funds have all contributed to the protracted timeline. Additionally, the earthquake-affected regions faced unique challenges, including difficult terrain, which made construction efforts more complex and time-consuming. Furthermore, issues related to land disputes and inadequate planning have further impeded progress. It is crucial to acknowledge that there have been commendable efforts while the physical reconstruction may not have yet reached the desired end estate (Sharma et al., 2022). Moreover, rehabilitation programs, livelihood support, and community resilience-building initiatives required to assist those affected by the earthquake have been insufficient. These efforts need address the broader socio-economic impacts of the disaster and provide long-term solutions for the affected communities.

Furthermore, the fact remains that many individuals and families continue to suffer due to the incomplete reconstruction. This has resulted in prolonged displacement, substandard

living conditions, and emotional distress for those still awaiting the rebuilding of their homes. The situation highlights the importance of expediting the remaining reconstruction projects and ensuring that the affected population receives the support they need to rebuild their lives fully. The reconstruction progress is described in the succeeding paragraphs.

Table 6.1

Private Housing Reconstruction Progress in Nepal

Particulars	Numbers
Total Beneficiary	866207
First Tranche Received	827478
Second Tranche Received	741031
Third Tranche Received	694565
Reconstruction Completed	672254
Reconstruction Completion Certified	245044
Total Grievances Registered, Reviewed and Closed	634973
Enrolled Beneficiaries Through Grievance Analysis	264267

Note. The table contains the private houses reconstruction progress in Nepal as of last of the year 2022. The source of the data is <http://www.nra.gov.np/en/mapdistrict/datavisualization> (NRA, 2023b).

The data presented in table 6.1 paints a complex picture of the progress and challenges in private housing reconstruction efforts. Among the 866207 enrolled private housing beneficiaries, a noteworthy 95.5 percent received the first tranche of the reconstruction grant (NRA, 2023b). This initial high percentage suggests that the program was successful in reaching a vast majority of its intended beneficiaries. However, it is important to delve deeper into the subsequent stages of the reconstruction process to understand the nuances of the program's effectiveness. One key statistic stands out: above 81 percent of those who received the first tranche successfully completed reconstructing their houses. This is a promising sign, indicating that a substantial portion of beneficiaries were able to utilize the funds effectively and rebuild their homes. It reflects the program's ability to somehow provide necessary resources and support for beneficiaries during the reconstruction phase.

However, a significant bottleneck arises when considering the issuance of reconstruction completion certificates. Only 36.4 percent of the completed houses were provided with these certificates, highlighting a glaring administrative issue. This low issuance rate indicates a inattentiveness in the administrative system, which can have various negative implications. It may suggest inefficiency in paperwork, bureaucracy, or a lack of coordination among relevant authorities. Such inefficiencies can lead to delays and frustration among beneficiaries, potentially undermining the overall success of the program.

Another concerning aspect is the number of grievances registered in the NRA system, which nearly equals the total number of beneficiaries. This indicates a high level of dissatisfaction among the affected populations. While it is a positive sign that all grievances were reviewed and closed, the sheer number of grievances (264267) adds a substantial number of beneficiaries to the program, surpassing 41 percent of the initially registered grievances (NRA, 2023b). This situation raises questions about the adequacy and accuracy of the initial survey conducted by the NRA. It suggests that the survey may not have captured the full extent of the need, leading to a significant underestimation of beneficiaries' requirements.

In total, the data shows that the private housing reconstruction progress remained progressive with 19 percent of the houses still to be reconstructed. The data reveals a mixed picture of progress in private housing reconstruction. While a substantial majority received the first tranche and completed their houses, administrative shortcomings and a high number of grievances indicate challenges in the program's implementation. Moreover, the fact that socio-economic aspects such as livelihoods and income generation were largely disregarded highlights a potential oversight in the program's objectives. These findings underscore the need for a thorough review of administrative procedures, improved survey methodologies, and a broader focus on the holistic recovery of affected populations beyond just housing reconstruction.

Table 6.2 provides valuable acumens into the progress of physical reconstruction in the public sector in Nepal. While there are some positive developments, there are also areas that require substantial improvement to ensure effective recovery and reconstruction efforts. Firstly, it is encouraging to see that over 80 percent of the targeted public schools have been completed. This suggests that significant strides have been made in restoring educational infrastructure in the affected areas. However, a concerning statistic is that nearly 63 percent of the public-school classrooms remain incomplete. This incompleteness could have adverse

effects on the quality of education provided, as it may disrupt the learning environment and potentially limit access to education for students.

Table 6.2

Public Sector Reconstruction Progress in Nepal

Sector	Target	Completed	Ongoing	Not Started
Public Schools	7553	6085	1329	139
Public School Classrooms	49681	31195	14307	4179
Buildings of Health Institution	1197	698	143	356
Archeological Heritages	973	465	131	377
Government Buildings	442	373	60	9
Buildings of Security Agencies	216	216	-	-
Total Number	60062	39032	15970	5060

Note. The table contains the public sector reconstruction progress in Nepal as of last of the year 2022. The source of the data is <http://www.nra.gov.np/en/mapdistrict/datavisualization> (NRA, 2023b).

Similarly, the completion rate for health institution buildings is just above 58 percent, indicating a substantial gap in restoring crucial healthcare infrastructure. Access to healthcare is essential, especially in post-disaster situations, and further efforts are needed to expedite the reconstruction of health facilities. Likewise, the reconstruction progress for archaeological heritages, which is below 50 percent, raises concerns about preserving cultural and historical assets. It is essential to protect these valuable treasures, not only for cultural reasons but also for tourism and economic purposes.

On a more positive note, government building reconstruction has achieved a completion rate above 84 percent. However, this still suggests room for improvement in bureaucratic efficiency, as there appears to be some delay in the reconstruction of government structures. One notable achievement is the completion of the buildings for security agencies, which reached a hundred percent of the target. This accomplishment underscores the importance of restoring and strengthening security infrastructure in post-disaster scenarios. In total, only about 65 percent of the targeted public sector has been reconstructed. Moreover, more than a quarter of these public sector buildings are still under construction, and reconstruction for

over 8 percent has not even begun. This indicates the need for continued efforts to expedite the reconstruction process and ensure that essential public services can be fully restored.

Shifting focus to population management in risky settlements, the data indicates that 100 percent progress has been made in managing the population at these locations. The total number of the beneficiary management of the settlement at risk was 4720. Among them the number of the land-purchase granted was 3462, provided with government land was 629, and managed with other land was 629 (NRA, 2021b). This is a significant achievement in terms of protecting vulnerable communities. Granting land for settlement and providing other forms of management are crucial steps in reducing the risks associated with living in hazardous areas.

However, when it comes to landless beneficiaries, the progress is mixed. Among the 12757 landless beneficiaries, 11580 were permitted to construct house at the same locations, 757 were land-purchase granted, and 420 were not yet addressed for any kind of management (NRA, 2021b). While the majority have been permitted to construct houses at the same locations, a substantial number are still waiting for any form of management. This suggests the need for a more comprehensive and timely approach to addressing the needs of landless beneficiaries. Finally, it is worth noting that the NRA provided construction skills training to a substantial number of people (70127). This investment in human capital development can have long-term benefits by enhancing the capacity of individuals to engage in the reconstruction process and contribute to the overall recovery effort.

In conclusion, while there have been notable achievements in the physical reconstruction of the public sector and population management in risky settlements, there are still significant challenges to address. These include completing public-school classrooms, health institution buildings, and preserving archaeological heritages. Efforts should also focus on expediting the reconstruction process for government buildings and addressing the needs of landless beneficiaries. Continuous investment in skill development is crucial for building local capacity and sustaining long-term recovery and development.

Table 6.3 offers a comparative analysis of the progress made in private housing reconstruction from the time the study proposal was prepared in March 2021. The data reveals both positive developments and some concerning trends, shedding light on the dynamics of post-disaster recovery efforts in Kavrepalanchowk district. Firstly, it is

noteworthy that the number of beneficiaries in the district increased slightly from 78827 to 79617. This indicates a continued need for support in housing reconstruction, potentially due to the complexities and challenges faced by the affected population in the aftermath of the disaster. One of the most encouraging aspects of this data is the increase in the number of completed houses, rising from 54192 (68.7 percent) to 65268 (81.9 percent). This signifies a significant improvement in the pace of housing reconstruction, reflecting the dedication and efforts of various stakeholders involved in the process.

Table 6.3

Private Houses Reconstruction Progress in Kavrepalanchowk

Name of the Municipalities	Enrolled Beneficiaries	1st Tranche	2nd Tranche	Completed Houses	Percentage (%)
Banepa Municipality	6666	6666	5101	4977	74.6
Dhulikhel Municipality	5661	5661	4669	4502	79.5
Mandandeupur Municipality	8989	7601	7144	6903	76.7
Namobuddha Municipality	7306	7010	5998	5547	75.9
Panchkhal Municipality	9457	9113	8209	8279	87.5
Panauti Municipality	8795	8118	6181	5923	67.3
Bethanchowk Rural Municipality	4134	4134	3706	3445	83.3
Bhumlu Rural Municipality	5994	5994	5754	5622	93.7
Chaurideurali Rural Municipality	6117	6117	5618	5548	90.6
Khanikhola Rural Municipality	2832	2832	2700	2593	91.5
Mahabharat Rural Municipality	2979	2979	2825	2753	92.4
Roshi Rural Municipality	6137	6137	5448	5185	84.4
Temal Rural Municipality	4550	4550	4116	3991	87.7
Total	79617	76912	67469	65268	81.9

Note. The table contains private houses reconstruction progress in Kavrepalanchowk district as of end of the year 2022. The source of the data is respective local levels.

Examining specific municipalities, Dhulikhel stands out with the highest private house reconstruction progress, increasing from above 69 percent to an impressive 79.5 percent. Namobuddha also demonstrates remarkable progress, advancing from 54.5 percent to almost

76 percent. Similarly, Panchkhal has shown substantial improvement, going from 60.7 percent to the highest rate of 87.5 percent. However, it is concerning to note that Panauti has made only nominal progress, moving from 64.1 percent to 67.3 percent, making it the lowest-progress municipality in the district. Bethanchowk, among rural municipalities, also had a lower progress rate at 83.3 percent, although this is still an improvement from the previous rate of 73.7 percent.

A significant trend that emerges is that rural municipalities, in general, have shown significantly higher progress than municipalities. This can be attributed to several factors, such as proactive local authorities who are more closely connected to their communities, immediate and limited local needs, and a collaborative spirit among stakeholders in rural areas. These factors can lead to more efficient and targeted reconstruction efforts. However, the high number of registered grievances in the NRA system, particularly from Kavrepalanchowk (23734, almost 30 percent of total beneficiaries in the district), is a cause for concern. This suggests a very high level of dissatisfaction among the affected people. It may indicate that the reconstruction process has failed to adequately address local needs or that there are unreasonably high expectations among the local population. In either case, it points to a significant gap between the reality of livelihood support needs and the physical reconstruction efforts. This discrepancy underscores the importance of aligning policy and implementation efforts with the actual needs and expectations of the affected communities.

In summary, the data reveals both progress and challenges in private housing reconstruction efforts since the proposal was prepared. While there has been an increase in the number of completed houses and positive developments in certain municipalities, the high number of grievances suggests that there is still work to be done to ensure that reconstruction efforts effectively meet the needs and expectations of the affected population. The collaboration and proactive engagement of local authorities and stakeholders in rural municipalities have proven to be instrumental in driving progress. Addressing the grievances and fine-tuning reconstruction policies will be crucial in bridging the gap between physical reconstruction and the real needs of the people for livelihood support.

6.2 Perceived Human Insecurity After Seven Years of the 2015 Earthquake

The case studies in appendix 'H' shed light on the perceived human insecurity within various local communities, six years after the 2015 earthquake. The examination of these

communities reveals complex patterns of both stability and vulnerability across different dimensions of human security. One common thread across these case studies is the absence of fear related to violent conflicts, suggesting that these communities have achieved a certain level of stability and safety in this regard. This can be attributed, in part, to the absence of violent conflicts within their immediate surroundings.

However, when delving into socioeconomic aspects, the vulnerabilities become more apparent. Many of the studied communities are grappling with a lack of regular cash income, leading to concerns over access to basic necessities such as food, healthcare, and education. This struggle for sufficient income creates pockets of economic vulnerability, particularly for households lacking the means to secure their daily sustenance. The cases also highlight instances where community members need to reach out to local authorities for support, whether it be for food or medical treatment. The experiences of these households underscore the challenges they face in accessing essential services and the limited resources available for addressing their needs.

Education emerges as another dimension of perceived human insecurity. While some communities have access to public schools, the perceived quality and accessibility of education lead some households to opt for private schooling for their children. This points to concerns about the effectiveness of the local education system, impacting the opportunities available to the younger generation and possibly exacerbating intergenerational cycles of insecurity.

Personal and community insecurity present in various forms within these localities. Issues such as alcohol and drug consumption, domestic violence, and theft contribute to a sense of insecurity among residents. The frequent occurrences of these incidents hint at underlying social challenges and a lack of effective mechanisms to address such issues at the local level. This indicates the need for comprehensive approaches that address both immediate security concerns and the broader socio-cultural dynamics that contribute to such behaviors.

Interestingly, the sense of insecurity varies from one community to another, reflecting unique local contexts and challenges. Some communities exhibit higher levels of personal and community insecurity due to specific issues like alcohol consumption, drug abuse, and theft. In contrast, others enjoy a sense of security within their neighborhoods, despite grappling with broader socioeconomic challenges.

In the context of the 2015 earthquake, these case studies show that while some progress has been made in terms of reconstruction and recovery, human security remains a multifaceted challenge. The earthquake may have exposed and exacerbated pre-existing vulnerabilities, underscoring the importance of addressing not only physical infrastructure but also socio-economic and cultural factors that contribute to human insecurity. Overall, the case studies emphasize the need for targeted interventions that encompass economic empowerment, education, healthcare access, and social harmony, all of which are crucial components of building resilient and secure local communities in the aftermath of a disaster.

6.3 Observing the Status of the Remaking of Society

Based on the observation data, the status of various parameters for the remaking of society after the 2015 earthquake in Kavrepalanchowk district is analyzed in different subheadings:

Disaster risk reduction: In terms of disaster risk reduction, the findings show that none of the observed locations had conducted a disaster risk assessment or had an early warning system in place. However, there were some physical measures such as wire netting observed in all nine locations, indicating some level of risk reduction efforts. Additionally, tree plantations for environmental risk reduction were present in four out of nine locations. However, community engagement in disaster risk reduction initiatives and preparedness and response plans at the ward and community level were lacking in all observed locations. There were also no established social networks within the society for emergency support, although some locations had social networks with foreign employees for emergency support. Overall, there is a need for significant improvement in disaster risk reduction measures.

Housing recovery: Regarding housing recovery, the reconstruction progress varied across the observed locations. Only two locations had achieved hundred percent house reconstruction, while the majority were below that level. Guidelines and policies for the reconstruction of grant houses were present in all observed locations, indicating some progress in this area. Community participation in the housing recovery process was observed in five out of nine locations, suggesting a level of engagement. Disaster-resistant houses were provided as grants in all observed locations. Documentation and monitoring of housing reconstruction progress were carried out in all locations, indicating some level of accountability. However, the continued use of cracked houses for various purposes indicates the need for further attention to housing recovery.

Livelihoods restoration: In terms of livelihoods restoration, income generation activities were observed in four out of nine locations, indicating some progress in restoring livelihoods. However, employment opportunities were limited, with only two locations providing such opportunities. There were no specific livelihood support programs or SSN in place to support the affected communities. Diversification of agriculture and farming activities was observed in three out of nine locations, indicating some efforts towards restoring livelihoods in the agricultural sector.

Social cohesion: Social cohesion showed some positive signs in the observed locations. Social networks within the community were present in five out of nine locations, suggesting a sense of community connection. Social participation and mutual trust were observed to some extent in four out of nine locations, indicating efforts towards fostering social cohesion. Community-led approaches to resolving conflicts peacefully were practiced in all observed locations, suggesting a commitment to peaceful coexistence. Collective celebrations were also practiced in all locations, which can contribute to community bonding.

Economic recovery: Economic recovery showed mixed progress in the observed locations. Economic activity was noticed in three out of nine locations, indicating some level of economic revival. However, local market systems were not observed, which may indicate challenges in reestablishing local economic networks. Access to financial services was available in five out of nine locations, suggesting some support for economic recovery. Entrepreneurship and small business activities were observed in three out of nine locations, indicating efforts towards economic revitalization. Tourism and hospitality activities were also observed in three out of nine locations, indicating potential for economic growth.

Infrastructure restoration: Infrastructure restoration varied across different aspects. School and health center restoration were observed in all locations, indicating progress in restoring essential infrastructure. Transportation infrastructure restoration was observed in the majority of locations, indicating efforts to improve connectivity. Information and communication technology infrastructure restoration was also observed in most locations. However, community centers were not observed in any of the locations, suggesting a gap in community infrastructure.

Environmental restoration: Environmental restoration efforts were limited in the observed locations. Biodiversity conservation and community engagement in environmental

restoration were not observed, indicating a need for more attention to environmental concerns. While good vegetation cover in the village was observed in the majority of locations, soil quality degradation was observed in all locations, highlighting the need for soil conservation efforts. The presence of healthy air and good community forest systems in most locations is a positive sign. However, random use of other natural resources and the absence of environmental education and awareness programs suggest a lack of comprehensive environmental restoration strategies.

Cultural preservation: Cultural preservation efforts were observed in the majority of locations, with cultural events and celebrations taking place and budget allocations for cultural preservation being present. However, traditional arts and crafts were observed in only one out of nine locations, indicating a potential loss of cultural heritage. The availability of cultural institutions such as Guthiyar was limited to a few locations, suggesting the need for more support for cultural preservation.

Social inclusion: Social inclusion showed some gaps in the observed locations. Both the head and deputy positions of the local level were male in all observed locations, indicating a lack of gender inclusion. While mandatory inclusion in ward committees was observed, inclusion in TLO was limited to one out of nine locations. Representation and participation of different social groups in decision-making processes and public forums were observed in only two out of nine locations, suggesting a need for more inclusive governance practices. Awareness and sensitization regarding social inclusion were also limited to a few locations, indicating the need for broader efforts to promote inclusivity.

Restoration of services: Restoration of services varied across different sectors. Health services were not fully restored in any of the observed locations, highlighting the challenges in rebuilding the healthcare system. Good water supply was observed in half of the locations, indicating some progress in restoring essential services. Electricity availability and public education services were restored in all observed locations, indicating efforts towards service restoration. However, communication and information services had low coverage in the majority of locations, suggesting the need for improvements in this area.

Prevalence of social justice: The prevalence of social justice showed mixed progress in the observed locations. Caste discrimination was observed in the majority of locations, indicating the persistence of social inequalities. Discrimination against women was also

observed in several locations, highlighting the need for gender equality initiatives. The satisfaction of social security allowances was observed in all locations, indicating some level of support for vulnerable populations. Access to justice needed improvement in the majority of locations, suggesting the need for better access to legal and justice systems. The need for improvement in human rights protection was also noted in several locations, emphasizing the importance of human rights advocacy and protection efforts.

Overall, the analysis of the observation data reveals a mixed condition of parameters related to the remaking of society after the 2015 earthquake in Kavrepalanchowk district. While there have been some positive developments in housing recovery, social cohesion, and cultural preservation, there are significant gaps and challenges in disaster risk reduction, livelihoods restoration, economic recovery, environmental restoration, social inclusion, restoration of services, and prevalence of social justice. These findings underscore the need for targeted interventions and comprehensive strategies to address the observed deficiencies and promote sustainable development in the district. Efforts should be made to strengthen disaster risk reduction measures, enhance livelihood opportunities, promote social inclusion and justice, restore essential services, and foster environmental sustainability.

6.4 Case Study's Results on the Remaking of Society After the 2015 Earthquake

The case studies in appendix 'H' provide insights into the multifaceted process of remaking society in the aftermath of the 2015 earthquake. The process of physical reconstruction, while marked by few successes, has also revealed numerous challenges and disparities that have affected different communities to varying degrees. Disaster risk reduction emerges as a critical aspect that has not received sufficient attention in the remaking efforts. The lack of awareness and active engagement in disaster risk reduction practices highlights the need for improved preparedness measures at the community level. The exclusion of certain households from housing grants and the inadequacy of the provided grants demonstrates the complex dynamics of resource allocation and the difficulties faced by those left without adequate support. This discrepancy in assistance has given rise to financial stress, pushing some community members to rely on loans for reconstruction.

The restoration of livelihoods, a vital component of post-disaster recovery, presents a mixed picture across the case studies. While some communities have managed to restore their agricultural activities, others continue to struggle due to the absence of effective income

generation programs and skill development initiatives. The economic challenges faced by these communities contribute to a sense of marginalization and disengagement, with many individuals seeking employment opportunities outside their villages. However, there are instances of proactive measures, such as climate change adaptation and resilient agriculture programs, that have aimed to empower communities and elevate their economic status.

In terms of social cohesion, there are variations among the communities. While some have managed to maintain strong social bonds even after the earthquake, others have experienced declining cohesion due to factors such as unequal distribution of relief items and political divisions. These shifts in social dynamics reflect the need for community-based interventions that promote unity and solidarity, addressing issues of disparity and discord.

Infrastructure restoration has yielded mixed results, with some communities successfully reconstructing schools and other essential facilities, while others face delays and challenges. Environmental concerns emerge prominently in the cases, highlighting the need for sustainable development and conservation practices. The presence of landslide risks and insufficient environmental management underline the necessity of integrating environmental considerations into reconstruction efforts.

Cultural preservation efforts have been observed, including allocation of budgets for local temples and cultural sites. These initiatives underscore the significance of maintaining cultural heritage in the face of rapid change and disaster recovery. However, social inclusion remains a persistent challenge, with marginalized and vulnerable groups often overlooked in the remaking process. This neglect highlights the importance of fostering equitable access to resources and decision-making processes.

Health and water services have generally seen improvements, with satisfactory provision reported in many communities. These essential services play a crucial role in the overall wellbeing and resilience of the population. Matters concerning social justice, including social security initiatives, have shown varying degrees of success, with efforts to ensure fair access to benefits and opportunities.

In total, the case studies reveal a complex interplay of successes and shortcomings in the remaking of society after the earthquake. While some communities have managed to rebuild with improved infrastructure, livelihoods, and social cohesion, others continue to grapple with challenges related to resource allocation, environmental sustainability, social inclusion,

and disaster preparedness. These case studies underscore the importance of holistic and community-focused approaches to reconstruction that address the diverse needs and vulnerabilities of different communities.

6.5 Reconstruction Pace After the 2015 Earthquake

6.5.1 Reasons for Speedy Reconstruction Progress

The interview data highlights several factors that contributed to the speedy reconstruction progress in certain local levels after the 2015 earthquake. One significant factor was the presence of proactive elected authorities who took initiative in facilitating the reconstruction efforts. These authorities effectively monitored the progress, provided subsidies such as tax exemption, local construction materials for free of cost, and coordinated with the National Reconstruction Authority (NRA) and other relevant stakeholders. They even resorted to coercive measures, such as linking salary payments to reporting progress, which expedited the activities. This proactive approach and strong leadership at the local level played a crucial role in accelerating the reconstruction process.

Sensitizing the local population about the utilization of international support also played a positive role in speeding up the reconstruction. By creating awareness and providing information about available resources, the locals were able to take advantage of external assistance, leading to more efficient and timely reconstruction efforts. This increased understanding and cooperation from the community helped in overcoming potential hurdles and expediting the rebuilding process. Moreover, factors such as easy road access, availability of construction materials, and the presence of skilled technical workers in certain areas facilitated faster reconstruction. These favorable conditions provided the necessary infrastructure and resources for efficient construction activities. With good transportation networks, the timely delivery of construction materials to the affected areas was ensured, reducing delays and enabling swift progress. The availability of skilled technical workers further expedited the reconstruction process by ensuring the availability of expertise and labor required for the construction work.

Additionally, the involvement of indigent community members who rapidly reconstructed their shelters due to urgent needs contributed to the speedy progress. Their immediate need for a safe and secure shelter compelled them to prioritize the reconstruction process. This

proactive engagement from the affected community members, driven by their own urgency, significantly contributed to expediting the overall reconstruction efforts. Furthermore, the presence of proactive people's representatives and a dedicated administrative mechanism at some local level played a beneficial role. These individuals took responsibility and actively engaged in the reconstruction process, ensuring efficient decision-making, effective coordination, and timely implementation of reconstruction activities. Their commitment to the task at hand were instrumental in driving the reconstruction progress forward.

6.5.2 Reasons for Slower Reconstruction Process

The interview data highlights several reasons that contributed to the slower reconstruction progress after the 2015 earthquake. Firstly, the magnitude of loss and damages caused by the earthquake was beyond imagination, and it took time for all actors involved to learn and adapt to the scale of the task, making it difficult to speed up the reconstruction efforts. Moreover, the lack of preparedness and institutional structure to deal with such a large-scale disaster further impeded progress. The absence of people's representatives in the local levels initially hindered coordination and decision-making, adding to the delays. The NRA lacked the administrative system down the chain and the local levels were not prepared. Weak administrative systems in some local levels and the NRA also had a detrimental impact on the reconstruction process. Additionally, inadequate housing grants, insufficient technical human resources, and slow documentation processes further contributed to the delays.

The delayed establishment of the NRA, formulation of policies, guidelines, codes, and house designs, as well as frequent changes to them, also affected the reconstruction process. Limited responsibility, accountability and legal powers given to local levels, as well as weak financial conditions of affected individuals, added to the challenges faced during the reconstruction efforts. At the same time, many of the local levels were also unwilling to take the responsibility. Misuse of grant amounts, technical weaknesses in the survey system, exclusion of needy individuals from housing grants, and the failure to adequately address the socioeconomic needs of the affected people were additional factors that contributed to the slower progress.

Moreover, many NRA technical personnel lacked knowledge, spirit of service, and faced frequent turnover, have resulted in delaying progress. The recurrent replacement rate of personnel and the rapid succession of leadership changes within the NRA left detrimental

effects on the pace and effectiveness of post-disaster reconstruction efforts. The absence of consistent leadership might have led to disruptions in vision, strategy, and decision-making. Each new leader introduced their own priorities and approaches, resulting in a lack of cohesion and direction. Furthermore, the loss of institutional memory with each leadership change might have impeded the understanding of ongoing projects and the application of lessons learned from past endeavors. As it can be noticed that NRA experienced four CEOs and six secretaries within the first five years (NRA, 2023a). This might have caused delays in decision-making, erode stakeholder confidence, and foster inconsistency in project implementation. The influence of politics in these transitions exacerbated the situation, leading to rapid changes in leadership for reasons beyond the core reconstruction objectives. To mitigate these challenges, establishing robust governance structures and minimizing political interference can provide a more stable foundation for effective and timely post-disaster reconstruction.

Additionally, weak coordination and utilization of the NRA's personnel in many local levels remained a challenge. Lack of willpower and dedication among some local authorities and personnel also affected the reconstruction process. Procedural hurdles intentionally created by personnel for personal gain, such as in tender and procurement processes, indirectly disrupted progress. Migration patterns and lack of social mobilization also impacted the reconstruction process. The NRA's housing design did not meet local needs, and some individuals misused grant amounts, discontinuing construction. The interview, case study and observation data concurrently some individuals unnecessarily applied for the housing grants but they discontinued constructing their houses after getting the first tranche and misused the cash for personal pleasure. Coordination challenges between the NRA, DAOs, and local levels slowed down reconstruction.

Furthermore, political restructuring of the local levels just after the 2015 earthquake created a kind of confusions remained among the challenges. Some locals started constructing big houses but had to stop due to insufficient funds, causing delays. Due to the inadequate housing grant, many people were also compelled to get loan that has been cause of prolonged stress. Remoteness of the construction sites to deliver the construction materials in some locations also remained detrimental to speedy progress. Many of the NRA's personnel were unwilling to go to the field due to travel difficulties, unpunctual, not adhering to the local levels' directions became detrimental to the reconstruction progress.

Moreover, public intention has also been unethical in many places such as some genuine people were excluded from the housing grant in a local level and the executive meeting decided to provide the 3 lakhs each to those 25 households, but the number increases to 175 on the very day and the local level was compelled to postpone the project leading to slower reconstruction. The interview, case study and observation data simultaneously individuals were excluded from the housing grants due to technical problems in the NRA's survey system or surveyors missed the locations or local levels lacked to convey the applications of those missed. Many people who have houses in other place also enrolled in the grant with more expectations and they were reluctant later. Similarly, wrong intention of some beneficiaries was also adversative for speedy reconstruction. In fact, many of the beneficiaries constructed "earthquake house" rather than preparing home for themselves due to mismatching design and fewer grant amount, where they keep animals and storages, and most risky concern is they have been using those cracked houses for residing.

Furthermore, insufficient funds for administrative activities and incomplete file processing due to untimely personnel turnover were additional obstacles. Policy from NRA for accepting beneficiaries' house design came lately. NRA's failure to maintain one door policy in housing reconstruction created confusions contributing slow progress. In some local levels, relationship between elected authorities and bureaucracy also impacted overall performance of the local governments. For example, some personnel accepted being uncooperative because most of the procurements are done at the disposal of the elected authorities but personnel get into trouble when sued, so either they obstinate or try getting benefits for those activities of lacking full procedures.

6.5.3 Improving Reconstruction Process and Disaster Recovery

To expedite the reconstruction process, several measures can be implemented. Firstly, it is crucial to strengthen the coordination and utilization of the NRA's personnel by providing adequate technical knowledge and minimizing turnover. Building the willpower and dedication among local authorities and personnel is essential to ensure their active engagement in the reconstruction efforts. Improving coordination between the NRA, DAOs, and local levels is necessary to overcome the challenges posed by coordination gaps. Capacity building programs for NRA personnel should be prioritized to enhance their effectiveness. Effective utilization of social capital, avoiding politicization, and improving

information flow are also important factors that can contribute to faster progress. Adopting a bottom-up approach, where physical and socioeconomic reconstruction is undertaken simultaneously through local governments, can lead to more efficient and coordinated efforts. Integrated plans for livelihood, health, vocational skills, and agriculture should be developed to ensure comprehensive and sustainable reconstruction. Increasing accountability of local levels and streamlining procurement procedures can also help expedite the reconstruction process. Providing sufficient funds for administrative activities and ensuring timely file processing can overcome administrative obstacles. Furthermore, addressing the mismatch between beneficiaries' house designs and grant amounts, as well as promoting ethical practices among beneficiaries, will help avoid delays and misuse of resources.

Likewise, to address the negative impacts of frequent personnel and leadership changes on post-disaster reconstruction, it is crucial to implement measures such as establishing longer-term personnel postings and leadership appointments to ensure continuity of vision and strategy, while also instituting comprehensive knowledge management systems to preserve institutional memory and enable seamless transitions between leaders. Additionally, creating guidelines that limit the influence of political considerations on leadership appointments can help maintain focus on effective reconstruction administration. Moreover, capacity building programs should be implemented to enhance the skills and knowledge of NRA personnel, ensuring they are equipped to effectively carry out their roles. Additionally, it is essential to make proper use of social capital by engaging local communities, organizations, and stakeholders in the reconstruction efforts. Avoiding politicization and promoting effective information flow will contribute to smoother coordination and decision-making.

Furthermore, assigning responsibility to local levels, while ensuring that policies, guidelines, and monitoring are overseen by the federal government, can expedite the process. Functioning local governance systems with adequate funding and competent functionaries will play a crucial role in achieving speedy reconstruction. It is vital to develop integrated plans that encompass both physical and socioeconomic aspects of reconstruction, addressing livelihoods, health, vocational skills, income generation, irrigation, and agriculture. Embracing a bottom-up approach, where local governments actively participate and integrated plans are implemented, can contribute to more efficient and successful reconstruction. Moreover, the Sikkim Model of reconstruction, with its emphasis on single

payment housing grants, local house designs, effective monitoring, and local level involvement, can serve as an effective blueprint for expediting the reconstruction process (Dutta et al., 2015; Rai et al., 2012). Overall, a combination of these measures, along with strong leadership, community involvement, and adequate resources, can contribute to a more efficient and timely reconstruction process.

The post-2017 elections brought significant changes to local governments in Nepal, enhancing the accountability of local political leadership. Notably, disaster governance has been recognized as a key responsibility of local authorities. In the years following state restructuring, proactive elites and institutions successfully developed many legal and policy documents necessary for the effective operation of local governments. However, despite these efforts, significant gaps remain in disaster risk reduction, livelihoods restoration and the restoration of essential services. While there have been positive developments in private housing recovery, social cohesion, and cultural preservation, these advancements have not been sufficient to fully address the broader challenges of the recovery process.

Furthermore, the persistent perception of human insecurities within communities, even years after the 2015 earthquake, reveals the deep-rooted issues that continue to hinder societal remaking. This underscores the complexity of human insecurity, highlighting the need for a comprehensive intervention that goes beyond physical reconstruction. Addressing socio-economic factors such as livelihoods, economic diversification and income generation is crucial (Tafti & Tomlinson, 2015). The overall analysis of local government initiatives suggests that to effectively tackle human insecurity, a multi-faceted approach is required - one that integrates socio-economic development with physical rebuilding efforts to create resilient communities.

6.6 Findings

This study has identified three major findings. Firstly, the role of local elites and institutions have mattered the state and quality of the local governance approaches in addressing the human security concerns. Their role remained conclusive on preparing legal framework, policies and plans, forming functional committees such as subject committees, and institutionalizing those initiatives. Secondly, feeble institutional practices at local level, such as overlooking disaster incident reviews, lacking accountability and transparency, ineffective monitoring and evaluation, and incapable subject committees, could hardly

advance the institutionalization of the human security governance. Lastly, the 2017 local level election was critical juncture on formalization of the human security issues. Despite variances until 2017, the local levels have started similar kind of initiatives of democratic governance, participation and inclusion, and transparency and accountability. Other key findings are objective-wise presented in the ensuing paragraphs.

Identifying the different approaches of the local governance in addressing human security concerns after the 2015 earthquake in Chapter 4, it was observed that Nepal has long history of seismic disasters and the 1255 earthquake was the first recorded one. Arriving up to the 2015 earthquake, the country has to go through losses and damages including depressing human lives, alerting the stakeholders for recurring earthquake events in future as well. The first and foremost finding of the study is that the 2015 earthquake in the Kavrepalanchowk District in Nepal had devastating consequences, including loss of human lives, injuries, and psychological trauma, highlighting the urgent need for disaster preparedness and effective response mechanisms. The destruction of private houses, public infrastructure, and agricultural assets underscored the vulnerability of communities to natural disasters, emphasizing the need for robust reconstruction and rehabilitation programs. The earthquake disrupted education and healthcare services, emphasizing the importance of building resilient educational institutions and healthcare facilities that can withstand future disasters. The earthquake had significant socioeconomic impacts, leading to the loss of livelihoods and economic stagnation in the Kavrepalanchowk District, highlighting the need for comprehensive economic revitalization programs.

Likewise, approaches on the response and recovery efforts, it was found that central-level agencies took a directive role in formulating laws, policies, and guidelines, but challenges in the organization of immediate relief and rescue activities emphasized the importance of streamlining relief distribution mechanisms. District-level bodies served as a crucial link between the central government and local communities, but resource limitations, coordination issues, and decision-making challenges needed to be addressed to improve their effectiveness. The involvement of local bodies in response and recovery efforts varied, with challenges such as a disconnect between response efforts and local needs and limitations in technical expertise. Increased awareness and engagement at the local level post-2017 elections indicate a growing recognition of disaster management's importance, highlighting the importance of sustaining and strengthening democratic processes and empowered local

governance structures. Prioritization of livelihood-related activities in response and recovery plans by local levels was often lacking, underscoring the need to support and restore local economic activities. Informal institutions played a crucial role in providing social support and facilitating relief efforts, but challenges related to corruption and unethical practices were identified. Various actors, social groups, and stakeholders actively engaged in earthquake response and recovery activities, highlighting the importance of coordination, transparency, and a focus on providing essential services. The role of influential people in earthquake response and recovery activities had mixed outcomes, emphasizing the need for safeguards, oversight mechanisms, and ethical behavior.

Next finding is about the approaches for integrating human security into local governance. The data indicates that disaster risk reduction and response plans at the district and local levels often remain on paper, lacking practical implementation. There is a need to shift the focus of disaster management from post-disaster response to proactive risk reduction measures, emphasizing education, awareness campaigns, and comprehensive planning. The absence of effective early warning systems at the district and local levels, especially in disaster-prone areas, poses a significant threat to communities. While challenges exist, there have been positive developments in emergency response capacity, such as the establishment of fire brigade and ambulance services. The data highlights the insufficiency of allocating budgets for disaster response and recovery, including investments in sustainable recovery initiatives and capacity building programs. The data also reveals both challenges and opportunities in DRR capacity building efforts. Further, it was found that challenges in coordinating and cooperating between the district and local levels in disaster management underscore the need for clear guidelines, transparency, and local empowerment. The policy prioritization at the local levels lacks a more holistic perspective, underscoring the focus on addressing livelihood programs, economic development, human security, and social wellbeing, in addition to immediate infrastructure needs.

Similarly, approaches for integrating human security into local governance through laws, programs and plans to state, it was found that local levels have been putting their efforts as 32, 35, 37 and 27 legal documents were endorsed respectively by Dhulikhel, Namobuddha, Bhumlu and Roshi. The analysis of legal documents from various local governments reveals that priorities in governance are highly localized, influenced by local needs, capacities of authorities, and interests. Some procedural documents are common across all jurisdictions,

indicating a shared understanding of their importance. Some 75 percent of local governments have endorsed laws related to essential areas like water resources, disaster management, and education, indicating a shared commitment to addressing these issues. However, only half have endorsed laws on gender equality, social inclusion, and health, suggesting varying emphasis on welfare and education. Some critical issues are only addressed by half or even just 25 percent of local governments, indicating potential gaps in addressing human security concerns. Unfortunately, essential human security matters like child protection, youth empowerment, and COVID-19 response receive limited attention. However, there are commendable efforts in promoting local cash crops and infrastructure development, showing the potential for impactful policies to bring positive change to communities.

Moreover, it was found that proactive and dedicated institutions and elected officials significantly influence outcomes. Bhumlu, with a 41 percent commitment, achieved a 93.7 percent reconstruction rate, while Roshi, despite a 48.27 percent commitment, only reached 84.4 percent. Dhulikhel achieved a 79.5 percent progress rate with 37.93 percent commitment, and Namobuddha attained 75.9 percent. These findings suggest higher recovery rates are possible through committed political and institutional leadership, complemented by strong policy and legal frameworks.

The comparative analysis of local government documents reveals varying levels of commitment to key domains related to human security principles. While some areas, like participatory decision-making and policies safeguarding vulnerable populations, receive strong attention, others, such as promoting local cultural values and effective resource allocation, need more focus. Collaboration with societal groups and fostering inclusion in decision-making also show room for improvement. Mechanisms for accountability are relatively underemphasized. Dhulikhel stands out with higher overall focus, while Bhumlu, Namobuddha, and Roshi demonstrate moderate commitment. The case studies collectively reveal challenges in implementing disaster plans due to limited awareness and capacity. Human security principles often took a backseat to physical infrastructure development in policy priorities. Collaboration with social organizations had mixed success, and inclusive decision-making was challenging. Learning from past disasters was insufficient, and transparency mechanisms lacked practical enforcement. Despite some positive aspects like community engagement, the case studies highlight the need for more integrated disaster governance aligned with human security to address complex disaster challenges effectively.

The case studies and interview data highlighted that the role of elites and institutions in shaping local disaster governance and the integration of human security concerns is evident, indicating the mixed outcomes. Influential individuals and groups activities led to positive outcomes but also bias and neglect of marginalized groups in resource allocation. Political elites, in particular, played a crucial role in disaster governance, with their affiliations and interests influencing policy decisions and resource allocation. Similarly, formal institutions such as government agencies, security forces, and local governments played vital roles in disaster governance by establishing frameworks, allocating resources, and coordinating efforts. Informal institutions like social networks and community-based organizations also influenced disaster governance through relief provision and advocacy, but they influenced by norms and practices, sometimes favoring specific groups. It was found that the intricate interplay between formal and informal institutions and the influence of elites remained decisive in shaping disaster governance outcomes. Thus, concluding that effective governance requires synergy between knowledgeable institutions and proactive elites.

While examining the ways post-disaster governance efforts following the 2015 earthquake matter the institutionalization of human security governance at the local government level in the Chapter 5, it was found that the 2015 earthquake exposed the fragmented disaster-related policy and legal framework which were insufficient to effectively respond to the magnitude of the earthquake, emphasizing the need for periodic review and updating of disaster-related institutional and legal arrangements. These provisions could barely accelerate the institutionalization of the human security at the local government level. Lack of clear roles and responsibilities for stakeholders complicated response efforts, highlighting the need for well-defined coordination mechanisms and enhanced collaboration among government institutions and local bodies.

This study has further identified some crucial issues of local governance impacting institutionalization of the human security. The process of reviewing disaster incidents is inconsistent and not well-established at various levels of disaster management committees in Nepal while the importance of learning from past disasters is recognized. District-level committees discuss past disasters but lack formal reviews, missing opportunities for comprehensive assessments and lesson learning. Similarly, at the local level, meetings touch upon recent disasters but rarely dedicate specific agenda time for in-depth reviews, hindered by infrequent committee gatherings.

Likewise, the study acknowledges efforts by local governments in Nepal to promote transparency and accountability, including uploading annual programs on websites, sharing decisions and progress reports, and using flex boards and social media platforms for information sharing. Transparency and accountability have direct impact on institutionalization through two processes that are trust and know-how. The findings reaffirm the global practice that level of democratic practices matter the institutionalization of human security governance. However, some initiatives have seen limited success. Public hearings, once conducted in all local levels, have declined, raising concerns about citizen engagement and transparency. Tender and finance-related activities are influenced by self-interest, diminishing transparency. Public and social audits, though mentioned, lack implementation. Administrative expenditures like tea and coffee are high and often undisclosed, affecting transparency. Judicial committees often fail to understand their roles effectively, and legislative assemblies are not conducted as they should be in many local levels.

The study further found that there is a lack of technical knowledge among team members involved in monitoring and evaluation, creating a gap in expertise while there is a structure for monitoring and evaluating projects at the local level. Additionally, individuals with ulterior motives can distort the evaluation process. Reluctance to enforce legal compliance and punish wrongdoers, possibly to maintain a favorable image among voters, undermines accountability and fosters a culture of impunity.

The study found that there are still gaps in access to basic income, economic diversification, and housing for human security. The local levels lack SSN in managing vulnerabilities and the significance of support mechanisms during crises. Likewise, there are disparities in access to education and healthcare underscore the need for equitable services and interconnected disease surveillance systems. Sustainable practices, social inequalities and discrimination within communities are ongoing challenges. Moreover, the influence of powerful individuals on governance processes, the absence of early warning systems, and concerns about the enforcement of human rights are recurring themes. The case studies illustrate the complexity of establishing human security governance through local disaster governance, emphasizing the need for comprehensive approaches addressing economic, social, environmental, and governance dimensions for inclusive, resilient communities.

Finally, analyzing the contribution of the local government initiatives after the 2015 earthquake to the remaking of society in Chapter 6, it was found that the speedy progress in

the local levels following the 2015 earthquake was attributed to proactive elected authorities who facilitated reconstruction efforts, raised awareness about international support, favorable conditions such as easy road access and skilled technical workers, and the involvement of indigent community members with urgent needs. Conversely, slower progress was influenced by the magnitude of the disaster, lack of preparedness and institutional structure, the absence of people's representatives, weak administrative systems, inadequate grants, slow documentation processes, leadership changes, political interference, weak coordination, procedural hurdles, migration patterns, and unethical practices among the public. Challenges related to construction design, materials, and transportation, as well as insufficient funds and incomplete file processing, also contributed to delays.

The study found that the handover of post-earthquake responsibilities in Nepal, though showing some progress, is not a resounding success due to challenges and delays in reconstruction efforts. Administrative issues, bureaucratic inefficiencies, and socio-economic impacts have slowed reconstruction. In private housing reconstruction, a majority received initial grants, but administrative problems and grievances hindered the program's effectiveness. The public sector's reconstruction, especially in schools and healthcare, needs attention. In Kavrepalanchowk district, there has been an increase in completed houses, particularly in rural areas. However, a significant number of grievances indicate a gap in addressing community needs during reconstruction. The slow pace and challenges underscore the importance of aligning policies with actual community needs.

The study found a complex landscape of human insecurity within local communities even after six years of the 2015 earthquake in Nepal. While these communities generally enjoy stability and safety from violent conflicts, they face significant vulnerabilities in terms of economic insecurity, limited access to essential services like healthcare and education, and various forms of personal and community insecurity. These challenges vary from one community to another but collectively underscore the need for comprehensive interventions addressing not only physical reconstruction but also socio-economic and cultural factors to build resilient and secure local communities in the aftermath of a disaster.

The study further found a mixed picture of progress and challenges across various parameters to analyze the status of the remaking of society in Kavrepalanchowk district. While some successes have been observed in housing recovery, social cohesion, and cultural preservation, significant gaps and disparities persist. Disaster risk reduction measures are

lacking, highlighting the need for improved preparedness at the community level. Livelihoods restoration varies, with some communities struggling due to limited economic opportunities. Infrastructure restoration is mixed, and environmental concerns underscore the importance of sustainability. Social inclusion remains a challenge, with marginalized groups often left out. Health and water services have improved in many areas, but social justice issues, such as caste and gender discrimination, persist.

The study found that, non-physical reconstruction such as socio-economic aspects, livelihoods and income generation have been overlooked in reconstruction efforts thus putting detrimental effect on the real remaking of the society after the 2015 earthquake in Nepal. Limited employment opportunities, lack of targeted livelihood support programs, and diversification of agricultural and farming activities remained lacking for livelihood recovery. Moreover, the study found that the synergistic relationship between institutions and elected representatives bridges the gap between technical expertise and local needs, offering a holistic approach to disaster governance. Collaboration between bureaucratic structures and elected elites in the local levels fulfil the breakages of local necessities, thus speeding the reconstruction process in some locations. New institutionalism principles ensure structured processes, while elite analysis accounts for influential figures' roles. Further, it was found that effective administration and governance are crucial for successful reconstruction, but bureaucratic inefficiencies have posed roadblocks. Some local levels with proactive local authorities have shown higher progress, emphasizing the role of local governance and community engagement.

6.7 Discussions

The 2015 earthquake in Nepal, particularly in the Kavrepalanchowk District, had far-reaching and devastating consequences, shedding light on the urgent need for comprehensive disaster preparedness and effective response mechanisms. As Karki (2017, 2019) highlights, the tremor resulted in significant loss of life, injuries, and widespread psychological trauma, underscoring the critical importance of building resilience within affected communities. The high death toll and extensive damage to infrastructure emphasize the necessity of constructing buildings and public facilities that can withstand seismic activities. Further, Bothara et al. (2016) and HRRP (2021) stress the importance of enforcing stringent building codes and regulations to minimize the impact of future earthquakes. This calls for a

concerted effort from policymakers, engineers, and local authorities to ensure that reconstruction efforts prioritize safety and resilience.

The aftermath of the earthquake also revealed significant gaps in the legal and policy frameworks for disaster response and recovery. Nepal et al. (2018) point out that existing disaster-related laws and provisions were inadequate to effectively manage the scale of the 2015 earthquake. This highlights the need for a comprehensive review and update of disaster management legislation to ensure its relevance and effectiveness in addressing unforeseen events. Clear delineation of roles and responsibilities among stakeholders, enhanced coordination mechanisms, and improved collaboration between government institutions and local bodies are essential components of a robust disaster management framework. Moreover, the study underscores the importance of preparedness and capacity building in disaster management. The shortage of trained human resources, rescuers, and relief materials, as highlighted by Paudel (2023) and Sharma et al. (2022), points to the need for investing in skill development and ensuring the availability of necessary resources for prompt response and recovery. This involves not only training personnel in search and rescue operations but also in various aspects of disaster management, such as needs assessment, relief distribution, and post-disaster reconstruction.

The study further reveals that prior to the 2017 local level elections, the absence of local political leadership and limited access to administrators hindered effective decision-making and problem-solving. However, as N. Dhungana (2019) notes, the elections brought about significant improvements. The increased involvement and accountability of elected representatives, motivated by the fear of future elections, contributed to greater community representation and decision-making. This shift towards proactive local levels, coupled with improved communication and information flow Acharya (2018b), facilitated more efficient response and recovery efforts. At the same time, the underutilization of authorities granted to local governments highlights the need for support and capacity-building to enhance their effectiveness. Empowering local levels through capacity-building initiatives, resource allocation, and policy reforms that promote active participation and accountability is crucial.

Similarly, disaster risk reduction and response planning at the district and local levels face several critical issues and challenges. Aryal (2023) points out that while there have been improvements since the 2015 earthquake, many elements of these plans are primarily for formalities rather than practical implementation. This highlights the need for a greater focus

on translating plans into action on the ground, ensuring that they are designed with real risks in mind. The lack of trained human resources and sufficient disaster management resources at the district level, as noted by Pariyar and Neupane (2020), pose significant challenges to effective response efforts. Furthermore, the limited involvement and engagement of stakeholders and actors in disaster management hinder the efficiency of these plans. Addressing this requires a shift in focus from post-disaster activities to proactive risk reduction measures. This calls for increased public awareness and sensitization efforts, which can help address issues such as the use of unsafe buildings and harmful practices (Hetényi & Subedi, 2023).

The lack of disaster early warning systems at the district and local levels in Kavrepalanchowk district is a critical issue that demands immediate attention. While localized efforts through FM radio stations demonstrate community-driven initiatives, their limited reach emphasizes the need for more comprehensive and technologically advanced early warning systems. As Banzal (2022) argues, establishing such systems is especially crucial in a district prone to risks from major rivers like Sunkoshi, Indrawati, Bhotekoshi, and Roshi, where timely alerts on water levels and potential hazards can save lives and reduce damages. By prioritizing the establishment of robust early warning mechanisms that utilize various communication channels, disaster resilience and protection of the communities from the adverse impacts of natural hazards can be significantly enhanced (Shukla et al., 2023; Sun et al., 2023).

Enhancing emergency response capacity at the local levels is another critical aspect. The data underscores existing gaps, with the majority of local entities lacking adequate resources and infrastructure. Quang and Thanh (2023) emphasize the importance of investing in necessary infrastructure, such as fire brigades and ambulances, to equip local levels with the resources needed to handle emergencies effectively. This requires a commitment to acquiring appropriate equipment and vehicles. Additionally, capacity building initiatives, including comprehensive and regular disaster management training programs, are essential (Bali, 2022). Improving the relevance of these training programs can enhance engagement and ensure the application of knowledge during emergency situations. Furthermore, the establishment of LEOCs is vital in centralizing emergency response efforts. As Chuang and Ho (2021) and Hashemipour et al. (2017) argue, such centers serve as crucial hubs for information dissemination, decision-making, and resource allocation during disasters.

Significantly, lack of coordination and local empowerment underscores critical deficiencies in addressing disaster preparedness, response mechanisms, and comprehensive recovery programs (Hashemipour et al., 2017; Kemaloğlu & Dakhil, 2023). This situation highlights the pressing need for enhancing collaboration among stakeholders and empowering local communities. To improve coordination, it is primarily essential to establish clear guidelines and mechanisms that address concerns of bias and ensure impartial decision-making processes (Amatya et al., 2017; Takeda, 2017). Transparency and accountability should be prioritized, with a focus on the best interests of affected communities.

Likewise, empowering local levels by strengthening their decision-making authority and resources is also imperative (Kemaloğlu & Dakhil, 2023). State restructuring has resulted in a weakened role for the DAO without providing an effective alternative, highlighting the need to reevaluate the institutional setup. The newly formed NDRRMA should demonstrate its effectiveness to garner support and confidence from the district and local levels. Revisiting the role of the DCC and considering whether it should be legally empowered or repealed is crucial to improving coordination mechanisms. Additionally, practical and legal clarity should be established regarding the relationship between the DDMC and the DCC to avoid confusion and promote effective collaboration.

The findings further highlight the limited formation and effectiveness of TLOs, which are meant to ensure inclusive representation but are lacking in many local levels. Additionally, the rarity of community-level discussions indicates a missed opportunity for engaging local communities in decision-making (Pandeya, 2015). The data also draws attention to the restricted participation of women and minority groups, with women facing practical difficulties in being involved due to social and logistical constraints. These findings suggest a gap between the intended goals of participatory and inclusive governance and the current practices at the local level (Sijapati, 2021). However, the data also reveals some positive measures that can foster effective participation and inclusiveness. Initiatives such as appointing female representatives from each ward and forming councils dedicated to specific groups show a growing recognition of the importance of diverse perspectives in decision-making. The emphasis on active and capable subject committees and the role of CAOs in advocating for inclusiveness reflect potential avenues for improvement. Furthermore, raising awareness and broadening local interest beyond physical infrastructure development can create a more holistic approach to local governance.

Policy prioritization at the local levels is another critical area of discussion, particularly the imbalance between physical infrastructure development and livelihood programs. While the prioritization of roads, electricity, and drinking water reflects the immediate needs and demands of the communities, there is a lack of emphasis on sectors such as agriculture, skill development, and entrepreneurship, which are vital for long-term sustainable development and income generation. Bandari et al. (2023) and Waruwu et al. (2023) argue that local sustainability is possible through policy prioritization on livelihoods and income-generating programs. The findings suggest the importance of allocating sufficient resources and implementing targeted interventions to address the specific needs.

The formulation and organization of laws, policies, programs, and plans is essential for effectively addressing human security concerns. When properly framed and coordinated, they create a unified framework that ensures all aspects of human security are addressed, from legal protections to practical interventions and coordinated responses (Goyal, 2019). This alignment is crucial for ensuring comprehensive and efficient efforts in promoting and safeguarding human security. Examining local governance approaches reveals the critical roles of elites and institutions. Elites often wield influence and resources that can drive development but may also lead to inequalities (Takasaki, 2011). Meanwhile, institutions provide the structural framework for governance but can face challenges like bureaucracy and resource constraints (Prabhakar, 2021). Balancing elite influence with strong, transparent institutions is essential for effective and equitable local governance. Higher disaster recovery rates can be achieved through strong political and institutional leadership, supported by robust policy and legal frameworks, exemplified in Dhulikhel and Bhumlu. These local levels showcase how committed leadership and clear frameworks enable effective coordination, resource allocation and community resilience, essential for swift and efficient disaster recovery.

In the same way, the findings indicate that current practices such as review of disaster incidents, monitoring and evaluation, and accountability and transparency have mattered the institutionalization of human security governance in the local levels. Reviewing past disaster incidents provides lessons to minimize future losses and damages (Apriyadi et al., 2021; Wang et al., 2016; Wiegmann et al., 2021). The study revealed that while there is recognition of the value of drawing lessons from past disasters, the process of reviewing these incidents is lacking in structure and consistency. The absence of a systematic approach to reviewing

incidents hampers the ability to thoroughly assess the events, identify strengths and weaknesses, and extract valuable lessons (Apriyadi et al., 2021; Masi & Nicodemo, 2022). Likewise, the subject committee on disaster, forest, and environment should engage in periodic discussions and reviews of disaster management practices. This specialized committee can provide valuable insights, guidance, and recommendations for enhancing response mechanisms.

In fact, institutionalizing good governance in the public institutions depends upon the prevalence of responsibility, accountability, and transparency within the entities (Burhanudin et al., 2022; Durand et al., 2016; Sulila, 2022). The study of local governance revealed that there was a lack of these methods before the 2017 local level election, but various approaches were implemented afterward. The establishment of websites and the uploading of activities, annual programs, decisions, and progress reports by many local levels, demonstrate efforts to enhance transparency and provide public access to information. Additionally, the use of flex boards and active Facebook pages further contribute to keeping citizens informed about the activities and decisions of their local governments. However, the discontinuation of public hearings in most local levels raises concerns about citizen engagement and transparency in decision-making processes. The data also indicates a diminishing public interest in transparency, partially attributed to the acceptance of reluctance by people's representatives. The findings call for enhanced grievance handling mechanisms, greater accountability of people's representatives, and improved implementation of audits to ensure transparency and effective governance (Burhanudin et al., 2022; Zumofen et al., 2022).

Another significant aspect to discuss is the existing monitoring and evaluation mechanism, that faces various challenges that hinder its effectiveness. These challenges include a lack of technical knowledge among the team members involved, the presence of individuals with wrong intentions, and a reluctance to enforce legal compliance. In this regard, studies clearly indicated result-based performance due to the systematic and effective monitoring and evaluation system in place (Faith et al., 2023; Morkel & Sibanda, 2022; Wasike, 2014). Consequently, monitoring and evaluation with good knowledge and intention have evidently enhanced institutional performance. Standardizing the monitoring and evaluation process through the use of structured templates and conducting regular and comprehensive

monitoring are also important steps (Антонович & Сергеевич, 2022; Hatsu & Ngassam, 2016; Muriuki et al., 2021).

Moreover, the cases underscore that while policy incorporation lays the foundation for integrating human security concepts, the process becomes more meaningful through effective institutionalization. This synthesis emphasizes the importance of policy incorporation complemented by the establishment of dedicated structures and mechanisms to address human security concerns (Gasper & Gómez, 2015; Khoo, 2023). The interplay of socio-economic factors, governance mechanisms, and community resilience emerges as a common thread throughout the study, reaffirming the complexities involved in achieving effective human security governance (Howe, 2013a; Seifi et al., 2021).

Likewise, the findings indicated the multifaceted landscape of local governance and its impact on human security is dissected, highlighting the critical areas that require immediate attention (LaMonica, 2020). These include the enhancement of local authorities' capacity, integrating livelihood-focused initiatives, and a shift from procedural to substantive engagement with subject committees. The discussion recognizes the role of both top-down and bottom-up approaches in fostering effective institutionalization, and underscores the need for comprehensive approaches that address economic, social, environmental, and governance dimensions (Gasper & Gómez, 2015; Samadi & Mirabbassi, 2016).

The analysis of policies, laws, plans and programs formulated by four local levels in the previous chapter reveals mixed results, highlighting the need for stronger commitment to mainstreaming policy and legal frameworks for institutionalizing human security governance. At the same time, fragmented federal policies have hindered human security institutionalization at the local level, resulting in inconsistent disaster management. Additionally, weak local institutional practices, such as weak disaster reviews, lacking accountability and transparency, ineffective monitoring and evaluation, and incompetent subject committees could hardly expedite institutionalization of human security governance.

On the other side, the findings reveal both significant progress and persistent challenges, shedding light on the critical factors that have shaped the recovery process following the 2015 earthquake. One overarching theme that emerges is the vital role of effective administration and governance in the success of reconstruction efforts (Córdova et al., 2023; Sigmund et al., 2022). Administrative hurdles, bureaucratic inefficiencies, and delays in fund

disbursement have been significant roadblocks to a swift recovery. Moreover, the high number of grievances registered in the NRA system underscores the importance of an efficient and responsive bureaucracy in addressing the concerns and needs of the affected population. Addressing bureaucratic inefficiencies, tailoring solutions to local contexts, and prioritizing holistic recovery will be essential in bridging the gap between physical reconstruction and the long-term needs of the affected population (Córdova et al., 2023; Moatty, 2022; Sigmund et al., 2022).

The geographical context also plays a pivotal role in the pace of reconstruction (Apurva et al., 2020; Moatty, 2022; Peng et al., 2017). The challenges posed by difficult terrain in earthquake-affected regions have made construction efforts more complex and time-consuming. Rural municipalities have shown significantly higher progress than municipalities, largely due to proactive local authorities who understand the unique needs of their communities. However, the high number of grievances from Kavrepalanchowk raises questions about whether the reconstruction process has fully considered the specific needs and expectations of local populations. Balancing local autonomy with a coordinated, standardized approach remains a challenge that requires ongoing attention (Joshi & Gauchan, 2017; Wang et al., 2022).

Furthermore, the data highlights the importance of considering holistic recovery beyond physical infrastructure. While progress has been made in private housing and public sector reconstruction, socio-economic aspects such as livelihoods and income generation have been largely disregarded (Çaki & Uzun, 2023; Thahir, 2022). This omission can have long-term consequences for the affected communities, emphasizing the need for comprehensive rehabilitation programs and community resilience-building initiatives.

Likewise, discussing the intricate interplay of stability and vulnerability within local communities following the 2015 earthquake remains significant. The absence of fear related to violent conflicts signifies a notable achievement in terms of community safety, suggesting that these areas have managed to establish a level of stability in this aspect. However, the examination of socioeconomic factors highlights the persistent challenges these communities face. The scarcity of regular cash income presents the prevailing economic vulnerabilities that undermine access to essential resources, giving rise to concerns about food, healthcare, and education (Kemaloğlu & Dakhil, 2023; Ulak, 2016).

Within this complex landscape, education emerges as a pivotal dimension of human security, reflecting both successes and areas of concern (Gauchan et al., 2017; Wang et al., 2016). While some communities possess access to public schools, the preference for private schooling among certain households highlights issues of perceived quality and accessibility within the local education system. This observation resonates with broader challenges, such as socio-economic disparities, that can perpetuate intergenerational cycles of insecurity. Additionally, personal and community insecurities manifest in diverse forms, ranging from substance abuse to domestic violence and theft. Collectively, the case studies highlighted the prevalence of human insecurity within the communities even after seven years of the quake.

Strengthening preparedness and response plans at both ward and community levels, along with establishing social networks for emergency support, emerge as pivotal strategies to bolster resilience against future disasters (Cho, 2023; Duque et al., 2013). Encouragingly, community involvement is observed in housing recovery; however, the continued use of cracked houses raises concerns regarding the safety and adequacy of housing solutions. Thus, housing recovery together with safe practices becomes urgency after such disasters (Costa et al., 2022; Maly et al., 2022; Mukherji, 2017).

The restoration of livelihoods emerges as a critical area warranting significant attention (Liu et al., 2022; Lu et al., 2022; Sadeka et al., 2013). While income-generating activities are evident in certain locations, the availability of employment opportunities remains limited. The absence of targeted livelihood support programs and SSN compounds the difficulties faced by affected communities. While diversification of agricultural and farming activities presents a promising avenue for livelihood recovery, it necessitates concentrated efforts to enhance opportunities, foster entrepreneurship, and establish specialized support initiatives that ensure the long-term sustainability of livelihoods. The analysis underscores the imperative for comprehensive and participatory disaster risk reduction approaches, including the implementation of early warning systems and active community engagement. Livelihood restoration necessitates targeted support programs and the creation of meaningful employment opportunities (Liu et al., 2022; McDowell, 2002).

While there have been notable achievements in physical reconstruction, the case studies also spotlight the disparities and hurdles faced by various communities in accessing resources and support. These disparities manifest in multiple domains, such as housing grants, livelihood restoration and social cohesion, emphasizing the need for equitable distribution

of aid and the recognition of marginalized voices. The absence of comprehensive disaster risk reduction strategies and the importance of fostering community engagement are significant takeaways, pointing towards the importance of proactive preparedness measures to enhance resilience in the face of future disasters.

Moreover, the findings show the complex nature of recovery efforts, revealing the influence of factors like environmental considerations, cultural preservation, and social justice. The variation in successes and challenges across different communities emphasizes the necessity of tailored approaches that acknowledge local contexts and prioritize inclusive development. The importance of preserving social bonds, preserving cultural heritage (Couch, 2023; Sadeka et al., 2023), and ensuring access to essential services like health and water facilities emerges as vital for not only rebuilding physical infrastructure but also for nurturing the overall wellbeing and cohesion of communities (Maly et al., 2022; Moatty, 2022).

Understanding the reasons for both speedy and slower reconstruction progress is crucial for informing future disaster management strategies and improving the effectiveness of reconstruction processes. One key finding from the data is the importance of proactive leadership and governance at the local level in expediting the reconstruction process. The presence of proactive elected authorities who took initiative, effectively monitored progress, and coordinated with relevant stakeholders played a significant role in accelerating reconstruction in certain local levels. This highlights the critical role that local leadership and governance can play in driving efficient and timely reconstruction efforts.

Another important aspect that emerged from the data is the need for effective coordination and collaboration between different stakeholders involved in the reconstruction process. Weak coordination and utilization of resources (Dangi, 2018; Mendis et al., 2022), as well as challenges in coordination between the NRA, DAOs, and local levels, were identified as factors contributing to slower progress. These findings underscore the importance of establishing clear lines of communication and coordination mechanisms among different actors involved in reconstruction efforts.

Furthermore, the study emphasizes the importance of addressing socioeconomic needs and promoting sustainable development in post-disaster reconstruction (Kalogiannidis et al., 2023; Miyazaki, 2022). The data indicates that the physical reconstruction efforts did not adequately address the socioeconomic needs of the affected population. This highlights the

need for integrated plans that encompass not only the physical aspects of reconstruction but also address livelihoods, health, vocational skills and agriculture. The findings underscore the significance of effective leadership, coordination, funding, and planning in expediting reconstruction efforts. By addressing these factors and incorporating lessons learned from the 2015 earthquake reconstruction process, policymakers, stakeholders, and communities can work together to enhance future disaster resilience and ensure more efficient and timely post-disaster reconstruction.

The NRA's post-disaster reconstruction efforts have been severely hindered by frequent turnover in technical personnel and leadership, leading to delays, fragmented decision-making, and erosion of institutional memory. Rapid changes in leadership disrupt strategy and unity, while political interference exacerbates these issues. To overcome these challenges, resilient governance structures are needed to ensure leadership continuity, effective knowledge management, and minimized political interference, thereby improving project outcomes and restoring stakeholder confidence.

In contrast, the Sikkim model of reconstruction offers a promising alternative. This model's focus on streamlined processes, such as single-payment housing grants and localized house designs, highlights the potential benefits of simplifying procedures and involving local communities in decision-making (Dutta et al., 2015; NIDM, 2012; Tambe et al., 2018). The emphasis on effective monitoring and local-level engagement underscores the importance of stakeholder participation and accountability in expediting the reconstruction process. Drawing inspiration from the Sikkim model, stakeholders involved in post-disaster reconstruction can consider adopting similar strategies to overcome challenges and achieve more efficient outcomes (NIDM, 2012; Tambe et al., 2018). By evaluating the applicability of these strategies in different contexts and integrating them into reconstruction efforts, stakeholders can pave the way for a more successful and timely recovery process.

Remarkably, the dynamics between local-level personnel and elected representatives are crucial in effectively formulating and implementing laws and policies, especially in disaster governance. While institutions offer expertise in procedural aspects and policy frameworks (Prabhakar, 2021; Russell et al., 2021), they may lack the nuanced understanding of on-the-ground needs that elected representatives, with their close ties to local communities, often possess. However, institutions may erroneously assume that they fully comprehend local realities, while officials may overestimate their own knowledge. The potential solution lies

in forging a synergistic relationship between these two essential actors - institutions and elites - for incorporating and institutionalizing human security governance within local governance structures. This requires a carefully crafted collaboration that capitalizes on the strengths of both sides (Takeda, 2017; Umesi, 2021).

Moreover, integrating the framework of new institutionalism and elite analysis within local disaster governance can yield the best outcomes. The principles of new institutionalism emphasize the importance of stable and consistent institutions, highlighting the need for effective policy implementation and decision-making processes (Carrigan & Coglianese, 2011; Hossain, 2022). Concurrently, elite analysis sheds light on the roles and influences of key individuals within society, especially those in positions of power (Kifordu, 2022; Strickland, 2023). By combining these approaches, local disaster governance can harness the strengths of both institutions and elected elites. New institutionalism ensures structured processes, clear accountability, and efficient resource utilization (Peters, 2019; Uster, 2022). Meanwhile, elite analysis accounts for the dynamic interactions between influential figures and their impact on policy direction and execution (Dellmuth et al., 2022; Tarasyuk & Drobotun, 2023). This collaboration allows for a holistic approach that is sensitive to local needs, efficient in its implementation, and aligned with overarching policy goals.

The 2017 local level election marked a pivotal moment in addressing human security issues. While there had been inconsistencies until that year, local levels began implementing similar initiatives focused on democratic governance, participation and inclusion, and transparency and accountability (Bhusal, 2023; H. P. Dhungana, 2019). Despite some positive developments in private housing recovery, social cohesion and cultural preservation, significant gaps persist in disaster risk reduction, livelihoods restoration and the restoration of essential services, which have been detrimental to the overall remaking of the society. Moreover, the enduring perception of human insecurities within communities, even years after the 2015 earthquake, underscores deep-rooted issues that continue to hinder societal remaking. The evaluation of local government initiatives highlights the intricate nature of human insecurity, emphasizing the need for a comprehensive intervention that integrates socio-economic factors like livelihoods, economic diversification and income generation together with physical reconstruction efforts.

CHAPTER 7

SUMMARY AND CONCLUSION

The culmination of this exploration brings to the chapter that encapsulates the essence of the whole research journey. In this chapter, the summary of the overall study is presented in brief. Similarly, the findings that have emerged from the study are presented, offering valuable insights into the multifaceted challenges and opportunities that unfolded in the aftermath of the 2015 earthquake in Nepal's Kavrepalanchowk District. These findings lay the foundation for the conclusion, that is written in the subsequent paragraphs. Lastly, the potential areas of further research have been presented as indicated by the exploration.

7.1 Summary

This dissertation provides an analysis of the post-2015 earthquake scenario in Nepal's Kavrepalanchowk district, shedding light on various aspects of disaster governance and the institutionalization of human security at the local government level. The study begins by highlighting the devastating consequences of the earthquake, including loss of lives, injuries, and psychological trauma, underscoring the urgent need for disaster preparedness and effective response mechanisms. It emphasizes the importance of robust reconstruction and rehabilitation programs to address the vulnerability of communities to natural disasters. Additionally, the study identifies shortcomings in Nepal's existing disaster-related laws and provisions, emphasizing the necessity of periodic review and updating of these laws to ensure they can effectively respond to catastrophic events. It also stresses the importance of well-defined coordination mechanisms and enhanced collaboration among government institutions and local levels.

Furthermore, the dissertation delves into the role of various stakeholders in disaster governance, including central-level agencies, district-level bodies, and local governments. It highlights the need for streamlined relief distribution mechanisms, improved resource allocation, and increased awareness at the local level post-2017 elections. The study underscores the importance of prioritizing livelihood-related activities in response and recovery plans and the role of influential individuals and groups, including political elites, in shaping disaster governance outcomes. It also emphasizes the interplay between formal

and informal institutions in disaster governance and their influence on policy decisions and resource allocation.

Moreover, the dissertation evaluates the institutionalization of human security principles in local governance, analyzing the commitment of local governments to key domains related to human security. It emphasizes the need for a comprehensive and holistic approach to local governance, addressing areas like social inclusion, accountability mechanisms, and economic diversification. The study highlights challenges in monitoring and evaluation processes and the importance of technical expertise and transparency in these efforts. Additionally, it underscores persisting gaps in access to basic income, economic opportunities, and essential services, calling for equitable services and social justice within communities.

In summary, this dissertation provides valuable insights into the complex landscape of disaster governance and the institutionalization of human security at the local government level following the 2015 earthquake in Nepal. It emphasizes the importance of effective disaster preparedness and response mechanisms, the need for updated disaster-related laws, and the role of various stakeholders in shaping disaster governance outcomes. The study also underscores the significance of non-physical reconstruction efforts, social inclusion, and economic diversification in achieving a successful remaking of society in the aftermath of natural disasters. Ultimately, it highlights the pivotal role of local governance in ensuring the resilience and security of communities facing such challenges.

7.2 Conclusion

The 2015 earthquake had devastating consequences, emphasizing the urgent need for disaster preparedness and effective response mechanisms. The destruction of private houses, public infrastructure and agricultural assets underscored the vulnerability of communities and the need for robust reconstruction and rehabilitation programs, that can be called remaking of society. The earthquake disrupted education and healthcare services, highlighting the importance of building resilient institutions that can withstand future disasters. The significant socioeconomic impacts, including the loss of livelihoods and economic stagnation, further emphasized the need for comprehensive economic revitalization programs.

Following the 2015 quake, the central-level agencies played a directive role in formulating laws, policies and guidelines for disaster response and recovery. However, challenges in organizing immediate relief and rescue activities highlighted the need for streamlined relief distribution mechanisms. District-level agencies, serving as a crucial link between the federal government and local communities, faced resource limitations, coordination issues and decision-making challenges. Then local bodies' involvement in response and recovery efforts was varied, with significant challenges in aligning response efforts with local needs and technical expertise. The increased awareness and engagement at the local level post-2017 elections indicate a growing recognition of the importance of disaster management.

The integration of human security into local governance has been uneven. Disaster risk reduction and response plans often remain on paper, lacking practical implementation. The absence of effective early warning systems poses significant threats to communities. Despite challenges, there have been positive developments in emergency response capacity, such as the establishment of fire brigade and ambulance services. However, budget allocations for disaster response and recovery remain insufficient, highlighting the need for sustainable recovery initiatives and capacity-building programs. Coordination and cooperation challenges between district and local levels further underscore the need for clear guidelines, transparency, and local empowerment.

Notably, local governments have made efforts to endorse various legal documents related to human security. However, the prioritization of governance issues has been highly localized, influenced by local needs, capacities, and interests. While some areas like water resources, disaster management, and education receive significant attention, others such as gender equality, social inclusion, and health are less emphasized. Critical issues like child protection and youth empowerment receive limited attention, indicating gaps in addressing human security concerns comprehensively.

On the other side, local elites and institutions have been pivotal in shaping the state and quality of local governance approaches. Their influence is evident in the preparation of legal frameworks, policies and plans, and the formation of functional committees. However, the effectiveness of these initiatives has varied significantly. The study highlights the importance of committed political and institutional leadership in achieving higher recovery rates and effective governance. For instance, Bhumlu's notable reconstruction rate despite moderate commitment underscores the potential impact of proactive and dedicated

leadership. Conversely, the mixed outcomes in other local levels reflect the variability in commitment and capability among local authorities.

Likewise, feeble institutional practices at the local level have hindered the advancement of human security governance. Issues such as lack of accountability and transparency, ineffective monitoring and evaluation, and the incapacity of subject committees have been significant barriers. The 2017 local level elections marked a critical juncture in formalizing human security issues. Post-2017, there has been an increased emphasis on democratic governance, participation, inclusion, transparency and accountability. However, the persistence of weak institutional practices indicates that more robust measures are needed to strengthen local governance frameworks. The study identifies several factors impacting the institutionalization of human security governance. Inconsistent disaster incident reviews, lack of formal assessments and limited lesson learning hinder comprehensive disaster management. Transparency and accountability initiatives, although present, have seen limited success, with public hearings and social audits declining. The reluctance to enforce legal compliance and punish wrongdoers further undermines accountability.

At the same time, significant gaps in access to basic income, economic diversification and housing remain. The lack of social safety nets during crises, disparities in access to education and healthcare, ongoing social inequalities and the influence of powerful individuals on governance processes are recurring themes. These challenges underscore the complexity of establishing human security governance through local disaster governance.

Pointedly, the reconstruction efforts post-2015 earthquake show a mixed picture. While there has been progress in housing recovery and infrastructure restoration, significant gaps remain in addressing socioeconomic and cultural aspects. The study found that non-physical reconstruction, such as livelihoods and income generation, has been overlooked, impacting the real remaking of society. Limited employment opportunities, lack of targeted livelihood support programs and insufficient diversification of agricultural activities have hindered livelihood recovery. Evidently, the synergy between institutions and elected representatives has been crucial in bridging the gap between technical expertise and local needs. Collaboration between bureaucratic structures and elected elites has facilitated reconstruction in some areas, emphasizing the importance of effective administration and governance.

Finally, the study underscores the significance of non-physical reconstruction efforts, particularly in the realms of socio-economic aspects, livelihoods, economic and agricultural diversification, and income generation. These aspects have frequently been disregarded in post-disaster reconstruction endeavors, thereby undermining the vital role of local governance and consequently impacting the holistic remaking of society. Furthermore, it is essential to recognize that the primary and proactive responsibilities for remaking of such disaster-affected societies need to rest with local governments, as explicitly mandated by the Constitution of Nepal, 2015 for disaster management. To ensure the restoration of economic and social wellbeing in affected communities, comprehensive societal remaking programs and initiatives aimed at building community resilience are imperative. Thus, the study concludes that achieving a seamless and successful remaking of the society following natural disasters, such as the 2015 earthquake, hinges on good local disaster governance, with a paramount consideration of human security concerns.

7.3 Contribution to Knowledge

The TUCL digital record of the theses and dissertations reveals that this exploratory dissertation marks a significant milestone as it is the first ever disaster governance related study within the discipline of political science at Tribhuvan University, making it a prominent addition to the body of knowledge. The study makes several key contributions. Firstly, it highlights the critical role of local elites and institutions in shaping the state and quality of local governance approaches in addressing human security concerns. These actors played a conclusive role in preparing legal frameworks, policies and plans, forming functional committees, and institutionalizing these initiatives.

However, the study also identifies weaknesses in local institutional practices, such as neglecting disaster incident reviews, lack of accountability and transparency, ineffective monitoring and evaluation, and the inefficacy of subject committees, which have hindered the institutionalization of human security governance. Additionally, the fragmented policy and legal framework at the federal level has impacted the institutionalization of human security at the local government level. The study further reveals significant gaps in disaster risk reduction, livelihood restoration and the restoration of services, despite some positive developments in private housing recovery, social cohesion and cultural preservation. Moreover, the persistence of perceived human insecurities within communities, even seven

years after the 2015 earthquake, underscores the existence of deep-rooted issues exposing the incomplete remaking of society.

Markedly, the 2017 local level elections marked a critical juncture in the formalization of human security issues. Despite variations in approaches prior to 2017, local governments have since initiated similar democratic governance practices, emphasizing participation, inclusion, transparency and accountability. The examination underscores the complexity of human insecurity, necessitating comprehensive interventions that address socio-economic factors such as livelihoods, economic diversification and income generation alongside physical reconstruction. Finally, the study emphasizes the crucial role of a synergistic relationship between proactive elected elites and knowledgeable institutions in aligning local needs with technical expertise for successful post-disaster recovery. It concludes that the successful remaking of society post-disaster relies on robust local disaster governance with a paramount focus on human security.

7.4 Area of Further Research

In order to advance our knowledge and enhance the effectiveness of disaster management, several crucial areas for future research have been identified. These research proposals underscore the importance of evidence-based practices and a deeper understanding of the intricacies surrounding disaster governance, all with the ultimate goal of fostering more resilient and prepared communities. One key area of focus involves delving into the intersection between pandemics and natural disasters. Further research is needed to develop comprehensive response strategies that can address the unique challenges posed by the convergence of these two crises.

Another critical avenue of inquiry pertains to the effectiveness of capacity-building initiatives at the local level. Investigating how these initiatives impact the preparedness and response capabilities of local institutions is essential for ensuring that communities are adequately equipped to handle disasters. In parallel, there is a pressing need for in-depth research into the effectiveness of disaster governance structures and mechanisms, particularly the roles of the DCC and DDMC, that will shed light on their functioning and identify areas for improvement. Community-based disaster risk reduction programs have gained prominence, and their impact on disaster resilience and preparedness warrants further investigation. Additionally, it is crucial to explore the barriers and facilitators to inclusivity

and participation of marginalized groups, including women and minority communities, in disaster management processes.

Furthermore, a comprehensive study on the performance of local governance entities is imperative. Understanding how these entities function in practice and their impact on disaster management outcomes is key to improving their effectiveness. Lastly, there is a call for further exploring the amalgamation of theoretical frameworks such as elite analysis and new institutionalism for more effective local disaster governance. The concept of “elite institutionalism” holds promise as a beneficial policy and theoretical framework, and further exploration can reveal its practical implementations and implications. By advancing research in these areas, collective contribution can be made to the development of more robust disaster management practices and create communities that are better prepared and resilient in the face of adversity.

APPENDICES

Appendix 'A': Interview Schedule

Name:

1. Tell me about the impact of the 2015 earthquake in Kavrepalanchowk district.
.....
2. What were the legal, policy and institutional arrangements for response and recovery after the 2015 earthquake? Tell me the challenges faced explaining whether those provisions were adequate or not.
.....
3. Tell me the role played by the central and state level agencies in the response and recovery of the earthquake, and share your opinion about the measures to make it more effective.
.....
4. Describe the role played by the district level bodies in the response and recovery of the earthquake, and talk about the measures to make it more effective.
.....
5. Explain the role played by local levels in the earthquake response and recovery, and share your experience about measures to make them more effective.
.....
6. Mentioning the role played by other institutions in the earthquake response and recovery, give your opinion on ways to make it more effective.
.....
7. Explain the significant role played by various formal and informal institutions in the earthquake response and recovery activities, and suggest ways to make them more effective.
.....
8. Mentioning the role played by various actors, social groups and stakeholders in the earthquake response and recovery activities, give your suggestions on ways to make them more effective.
.....
9. Describe the remarkable role played by various influential people in the earthquake response and recovery activities.
.....
10. Tell us about the similarities and differences in the roles played by the local levels in response and recovery before and after the 2017 local level elections.

.....
 11. State disaster risk reduction and response plans at the district and local levels, and tell the measures to make them more effective.

.....
 12. Tell about the arrangement of disaster early warning system at district and local level.

.....
 13. Suggest measures for more effective capacity building, including factors contributing to existing conditions, while uncovering emergency response capacity at local levels.

.....
 14. Tell about the status of resourcing including funds, equipment, experts for disaster response in local levels.

.....
 15. Tell about the capacity building programs in disaster risk reduction at local levels.

.....
 16. Mentioning the arrangement for continuous coordination, communication and cooperation at the district and local levels, give your opinion about the measures to make it more effective.

.....
 17. State the measures taken to ensure local participation and inclusion in decision-making and implementation processes at local levels.

.....
 18. Mention the priorities of the local levels including human security during the process of policy and programs formulation, give your views on the relevance of those priorities.

.....
 19. Explain the arrangement of reviewing disaster incidents for learning purposes.

.....
 20. Mention the methods adopted to promote responsibility, accountability and transparency at local levels, and give your views on ways to make them more effective.

.....
 21. State about the monitoring and evaluation system at the local levels and give your opinion about the measures to make it more effective.

.....
 22. Give your opinion about the reasons why the reconstruction process after the 2015 earthquake did not pick up as expected.

.....

Appendix 'B': Interview Schedule (Nepali Version)

नाम:

१. काभ्रेपलाञ्चोक जिल्लामा वि. सं. २०७२ को भूकम्पको असरको विषयमा भनिदिनुहोस् न ।
.....
२. वि. सं. २०७२ को भूकम्प पछि प्रतिकार्य र पुनर्लाभका लागि के कस्ता कानूनी, नितिगत र संस्थागत व्यवस्थाहरू थिए? ति व्यवस्थाहरू यथस्त थिए थिएनन् खुलाउँदै भोगिएका चुनौतिहरू भनिदिनुहोस् न ।
.....
३. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभमा केन्द्रिय र प्रदेश तहका निकायहरूबाट निर्वाह भएको भूमिका खुलाउँदै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको विचार राखिदिनुहोस् न ।
.....
४. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभमा जिल्ला तहका निकायहरूबाट निर्वाह भएको भूमिका खुलाउँदै थप प्रभावकारी बनाउने उपायहरूको बारेमा भनिदिनुहोस् न ।
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५. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभमा स्थानिय तहहरूबाट निर्वाह भएको भूमिका खुलाउँदै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको अनुभव राखिदिनुहोस् न ।
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६. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभमा अन्य संस्थाहरूबाट निर्वाह भएको भूमिका उल्लेख गर्दै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको विचार राखिदिनुहोस् न ।
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७. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभ क्रियाकलापमा विभिन्न औपचारिक तथा अनौपचारिक संस्थाहरूबाट निर्वाह भएको उल्लेखनीय भूमिका खुलाउँदै थप प्रभावकारी बनाउने उपायहरूको बारेमा सुझाव राखिदिनुहोस् न ।
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८. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभ क्रियाकलापमा विभिन्न अभियन्ताहरू, सामाजिक समूहहरू र सरोकारवालाहरूबाट निर्वाह भएको भूमिका उल्लेख गर्दै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको सुझाव राखिदिनुहोस् न ।
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९. उक्त भूकम्पको प्रतिकार्य र पुनर्लाभ क्रियाकलापमा विभिन्न प्रभावशाली व्यक्तिहरूबाट निर्वाह भएको उल्लेखनीय भूमिकाको बारेमा भनिदिनुहोस् न ।
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१०. वि. सं. २०७४ को स्थानिय तह निर्वाचन अगाडि र पछाडि स्थानिय तहहरूले प्रतिकार्य र पुनर्लाभमा निर्वाह गरेको भूमिकाको समानताहरू र फरकपनाहरूको बारेमा भनिदिनुहोस् न ।
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११. जिल्ला स्तर र स्थानिय तहहरूमा भएका विपद् जोखिम न्युनिकरण र प्रतिकार्य योजनाहरू बताउँदै थप प्रभावकारी बनाउने उपायहरू भनिदिनुहोस् न ।

१२. जिल्ला र स्थानिय स्तरमा विपद् पूर्व सूचना प्रणालीको व्यवस्थाको बारेमा भनिदिनुहोस् न ।

१३. स्थानिय तहहरूमा भएको आपतकालिन प्रतिकार्य क्षमताको बारेमा खुलाउँदै विध्यमान अवस्थाका कारक तत्वहरू सहित थप प्रभावकारी क्षमता अभिवृद्धिका उपायहरू सुझाउनुहोस् ।

१४. स्थानिय तहहरूमा व्यवस्था भएको विपद् प्रतिकार्यमा बजेट, सामग्रीहरू र विशेषज्ञहरू आदिको बारेमा भनिदिनुहोस् न ।

१५. स्थानिय तहहरूमा विपद् जोखिम न्युनिकरणमा क्षमता अभिवृद्धिमा भएका कार्यक्रमहरूको बारेमा भनिदिनुहोस् न ।

१६. जिल्ला स्तर र स्थानिय तहहरूमा निरन्तर समन्वय, संचार र सहकार्यको लागि भएको व्यवस्था उल्लेख गर्दै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको बिचार राखिदिनुहोस् न ।

१७. स्थानिय तहहरूमा निर्णय र कार्यान्वयन प्रकृत्यामा स्थानिय सहभागिता र समावेशिता सुनिश्चित गर्न अवलम्बन गरिएका उपायहरूको बारेमा भनिदिनुहोस् न ।

१८. स्थानिय तहहरूले निति तथा कार्यक्रम निर्माण प्रकृत्यामा प्राथमिकता राखेका मानव सुरक्षा लगायतका बिषयहरू उल्लेख गर्दै ति प्राथमिकताहरूको सान्दर्भिकतामा तपाईंको बिचार राखिदिनुहोस् न ।

१९. सिकाई उद्देश्यले विपद्का घटनाहरूको समिक्षा गर्ने के कस्तो व्यवस्था थियो भनिदिनुहोस् न ।

२०. स्थानिय तहहरूमा उत्तरदायित्व, जवाफदेहिता र पारदर्शिता प्रवर्धन गर्न अवलम्बन गरिएका विधिहरू उल्लेख गर्दै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको बिचार राखिदिनुहोस् न ।

२१. स्थानिय तहहरूमा भएको अनुगमन र मुल्यांकनको व्यवस्थाको बारेमा खुलाउँदै थप प्रभावकारी बनाउने उपायहरूको बारेमा तपाईंको बिचार राखिदिनुहोस् न ।

२२. वि. सं. २०७२ को भूकम्प पछिको पुनःनिर्माण प्रकृत्याले अपेक्षाकृत गति लिन नसक्नुका कारणहरूको बारेमा तपाईंको बिचार राखिदिनुहोस् न ।

Appendix 'C': List of the Interviewees

S.N.	Names	S.N.	Names
1.	Ashok Kumar Byanju Shrestha	21.	Jaya Raj Sapkota
2.	Bimala Chaulagain (Sharma)	22.	Bisheshwor Thapa
3.	Tek Prasad Timalsina	23.	Prakash Wagle
4.	Ram Devi Tamang	24.	Rabi KC
5.	Dal Bahadur Lama	25.	Benu Prasad Pathak
6.	Laxmi Kumari Upredi	26.	Purushottam Thapa
7.	Guman Dhwoj Kunwar	27.	Dhan Bahadur Budhathoki
8.	Kalpana Shrestha	28.	Hari Chandra Shrestha
9.	Nirajan Jangam	29.	Saroj Niraula
10.	Kunsang Lama	30.	Arun Karki
11.	Dinesh Lama	31.	Chiranjibi Timalsina
12.	Prem Bahadur Bhujel	32.	Damuru Prasad Dahal
13.	Sudarshan Prasad Dhakal	33.	Tara Nath Luitel
14.	Madan Bhujel	34.	Bhola Prasad Chapagain
15.	Balkrishna Panthi	35.	Hari Ballav Ghimire
16.	Shiva Prasad Simkhada	36.	Abhishek BC
17.	Prakash Chand	37.	Chandra Lama
18.	Subash Khadka	38.	Raghubar Chaupradhan
19.	Sahakul Bahadur Thapa	39.	Manju Kumar Koju
20.	Rabi Raj Khadka	40.	Motiram Timalsina

Note. Out of forty-four interviewees, four chose to remain anonymous.

Appendix ‘D’: Observation Checklist

Location:

Parameters to examine the status of the remaking of the society:

1. Disaster risk reduction
2. Housing recovery
3. Livelihoods restoration
4. Social cohesion
5. Economic recovery
6. Infrastructure restoration
7. Environmental restoration
8. Cultural preservation
9. Social inclusion
10. Restoration of services
11. Prevalence of social justice

Appendix ‘E’: Locations of Observation

1. Bhumlu Rural Municipality, Ward No 1, Saping
2. Bhumlu Rural Municipality, Ward No 8, Dumre
3. Bhumlu Rural Municipality, Ward No 5, Salle
4. Namobuddha Municipality, Ward No 9, Dapcha
5. Namobuddha Municipality, Ward No 8, Pipaltar
6. Roshi Rural Municipality, Ward No 1, Narayantar
7. Roshi Rural Municipality, Ward No 3, Shikhar
8. Dhulikhel Municipality, Ward No 3, Mathillo Kuttal
9. Dhulikhel Municipality, Ward No 8, Bhattedanda

Appendix 'F': Checklist for Case Study

Location:

1. Effects of the 2015 earthquake
2. Status of parameters to examine the remaking of the society:
 - 2.1 Disaster risk reduction
 - 2.2 Housing recovery
 - 2.3 Livelihoods restoration
 - 2.4 Social cohesion
 - 2.5 Economic recovery
 - 2.6 Infrastructure restoration
 - 2.7 Environmental restoration
 - 2.8 Cultural preservation
 - 2.9 Social inclusion
 - 2.10 Restoration of services
 - 2.11 Prevalence of social justice
3. The ways policies and practices of local level promoting good local disaster governance through incorporation of human security:
 - 3.1 Local disaster risk reduction and management plans
 - 3.2 Capacity building
 - 3.3 Emergency response capacity
 - 3.4 Adopting a people-centered approach to governance
 - 3.5 Formulating policies that prioritize human security
 - 3.6 Adequate resource allocation for prioritized policies
 - 3.7 Close collaboration, coordination and communication with the societies and social organization
 - 3.8 Fostering a culture of inclusion and participation in decision-making processes
 - 3.9 Learning, flexibility and adaptability
 - 3.10 Creating mechanisms for accountability and transparency by reporting and evaluating those programs and policies
4. Status of strategies of local level for institutionalizing human security governance:
 - 4.1 Assured access to housing
 - 4.2 Assured access to basic income

- 4.3 Public and private sector employment, wage employment, self-employment
- 4.4 Diversified agriculture and economy
- 4.5 Entitlement to food, by growing it themselves or having the ability to purchase it or through a public food distribution system
- 4.6 Availability of government financed social safety nets in case of necessary for poor
- 4.7 Assured child education
- 4.8 Access to basic health care and health services
- 4.9 Risk-sharing arrangements that pool membership funds and promote community-based insurance schemes
- 4.10 Interconnected surveillance systems to identify disease outbreaks
- 4.11 Sustainable practices that take into account natural resource and environmental degradation (deforestation, desertification)
- 4.12 Early warning and response mechanisms for natural hazards and/or man-made disasters
- 4.13 Resilience of communities and their ability to respond to and recover from tremors and stresses such as natural disasters, conflict, and economic declines
- 4.14 Protection of individuals from physical violence, including crime, conflict, and abuse
- 4.15 Explicit and enforced protection of ethnic groups and community identity
- 4.16 Protection from oppressive traditional practices, harsh treatment towards women, or discrimination against ethnic/indigenous/minority groups
- 4.17 Protection of human rights
- 4.18 Protection from state's unlawful actions and abuse
- 4.19 Protection from political or state repression, torture, ill treatment, unlawful detention and imprisonment
- 4.20 Access of individuals to political rights and freedoms, including freedom of expression, association, and peaceful assembly
5. Status of institutional arrangements and mechanism for the assurance of the above listed strategies.
6. Influence of powerful individuals and groups in the disaster governance
7. Role of formal and informal institutions in the disaster governance
8. Status of perceived human insecurity:

8.1 Fear of violent conflict:

- War
- Civil war
- Terrorist attack

8.2 Socioeconomic insecurity:

- No cash income
- Not enough food to eat
- No access to needed medicines or treatment
- Worried about giving children a good education

8.3 Personal and community insecurity:

- Incidents of insecurity in neighbourhood (robbery, enforcement abuse, racist behavior, alcohol on the streets, drug sale)
- Felt unsafe from crime
- Changed behavior because of insecurity (carrying money, mobility at night)
- Overall insecurity in neighbourhood

9. Others:

Appendix 'G': Locations of Case Study

1. Bhumlu Rural Municipality, Ward No 1, Saping
2. Bhumlu Rural Municipality, Ward No 8, Rahupakha
3. Roshi Rural Municipality, Ward No 2, Bohoratal
4. Roshi Rural Municipality, Ward No 3, Shikharaambote
5. Namobuddha Municipality, Ward No 3, Paudelbensi
6. Namobuddha Municipality, Ward No 4, Kaflethok
7. Dhulikhel Municipality, Ward No 3, Tallo Kuttal
8. Dhulikhel Municipality, Ward No 8, Bhattedanda

Appendix 'H': Case Studies Conducted in the Local Levels

The 2015 earthquake severely hit Nepal leaving thousands of populations homeless. As the event was occurred before seven years, actual scenario in the affected areas cannot be observed. In such instance, case study is established method of study for gathering perceived and experienced information making the study effective. Therefore, studying past events through case study has been evidently beneficial (Yin, 2009). The eight villages were sampled and studied as per the research objectives. Some of the affected villagers were personally communicated and some were requested to participate in the focused group discussions. The ward chairpersons and ward members were also interacted to understand the matters under study. The personnels of the local levels including those working in the ward offices were also communicated. Available documents of the ward offices were also examined in order to comprehend the factual status of the facets being studied. Some of the information about individuals, communities, groups, and offices were not mentioned in the description for maintaining research ethics. Here, the cases are described as per the checklist for the case study, where if other cases miss some matters for description, it is intentional and resembles similar portrayal as in the first case study.

(a) Case Study at Sapling Village

It was mid-day on 25 April 2015 when a devastating earthquake terrorized the beautiful village of Bhumlu, killing five people. The tremor and aftershocks, including a major one on 12 May 2015, turned the whole community into a homeless village. All 24 houses in the village were either destroyed or partially damaged, forcing all residents into temporary shelters. The fear of frequent aftershocks made people restless and sleepless. Some cattle were also killed. Loss of houses and animals, and death and injury of family members, added more agony to the affected people, intensifying trauma and mental health problems. A 43-year-old villager explained his disturbance, "I used to flinch almost every hour in the night and many times in the day as well. I cried repeatedly remembering my beloved father who died inside the house on the very day."

There was nobody for immediate rescue and relief as all the population in and around were also affected by the earthquake. The villagers became unprecedentedly kindhearted, rescuing and supporting each other. They shared food and places to stay. After some days, relief items arrived in the village, and they were provided with a few kilos of rice and some tarpaulins.

Slowly, the supply of relief items stopped, but people failed to prepare themselves for their usual daily activities. It took eight months to form the NRA, and another two years for a few people to migrate from showering huts to reconstructed houses, with more years for other displaced people.

Talking about the village's remaking after the 2015 earthquake, almost 90 percent of private houses were reconstructed. Three houses have not received the third installment of reconstruction cash grants, and two were excluded from the program. Villagers believe this exclusion may be due to survey errors or issues in the NRA's database system. Evaluating disaster risk reduction, the reconstructed new houses have reduced risk, but over 40 percent of partially damaged houses await another painful disaster. People are reluctant to dismantle these cracked houses, using some of those for animal husbandry and people. When asked, people's answers indicated the inadequate capacity of reconstructed houses to accommodate family members and animals. Livelihood restoration status was just satisfactory, as it was before the earthquake. Agriculture, the base for economic progress, could not recover. Social cohesion remained strong for a few months post-earthquake but deteriorated due to unequal relief distribution, favoritism in reconstruction beneficiary selection, and political activities during local elections.

Infrastructurally, the school was nicely reconstructed in the village, but two schools in the ward are still under reconstruction. Environmental concerns remained neglected; roads were constructed, but plant conservation and landslide possibilities due to unmanaged excavation became key alarms. Local government addressed public sentiments by preserving cultural locations through small budget allocations. Villagers receive free water service, marking good service restoration. Social justice prevalence was felt during village discussions, but social inclusion of marginalized communities, women, and vulnerable groups remains challenging.

Examining local levels' policies and practices in promoting good disaster governance through human security incorporation, observations were mixed. The local level has the DPRP as per the *Disaster Preparedness and Response Plan Formulation Guideline* (MoHA, 2019). However, only the ward chairperson knows little about it; ward members and villagers are unaware. Only the former ward chairperson received a two-day disaster management training, but could not attend fully, so knowledge was not transferred. The village lacks emergency response capacity except for domestic tools. The local level tries to

adopt a people-centric governance approach, prioritizing road and water facility construction. However, human security was less prioritized in policy formulation. An NGO project for sewing skills and goat husbandry did not address real requirements. Few received subsidized sewing machines but locked them away. The ward chairperson lamented that their declaration to reward those utilizing skill training for income generation failed due to public ignorance. Due to resource and fund scarcity and mounting public demands, there is a trend of formulating numerous small projects with inadequate budgets.

On the positive side, collaboration, coordination, and communication with societies and social organizations were best on mutual interests. The local level, including the ward office, has good relations with villagers due to aligned political and social beliefs. The village and ward foster participation and inclusion by forming TLOs as per the *Tole Development Organization (Formation and Operation) Model Procedure* (MoFAGA, 2020). The ward has nine active TLOs, ensuring female participation and rapid information sharing via mobile phones and social media. However, learning from past events is not observed, providing little room for flexibility and adaptability. Monitoring committees formed lack standard forms and templates, resulting in ineffectiveness. For accountability and transparency, the ward office pastes program descriptions on less-accessible notice boards.

Strategies for institutionalizing human security governance are weak. There are no concrete plans for ensuring basic income access. Housing access is somewhat assured. The local level allocated budget for those excluded from NRA's housing grants, but unexpected beneficiary increases caused confusion. Some young villagers are in government services, private jobs in Kathmandu, wages within village, or self-employed in agriculture and animal husbandry. Some are in foreign employment as well. The local government lacks SSN funds for the poor and needy, though there is a disaster relief fund. The village continues traditional farming without diversification. Most arrange food from agriculture, animal husbandry, wages, and children's earnings. There is no public food distribution system.

The village has inadequate public healthcare access, forcing villagers to travel to Dhulikhel. Villagers can enroll in health insurance for 3,500 rupees, benefiting five family members yearly. The village is unaware of disease outbreak surveillance systems. Developmental activities neglect natural resources and environmental degradation. Random road digging and improper excavation management show less seriousness in environmental protection and disaster risk reduction. Early warning and response mechanisms for disasters are absent.

People know they are legally protected from physical violence, but oppressive practices like restricting menstruating women and ethnic discrimination persist. Post-2015 earthquake, the community is not resilient enough to respond to similar disasters.

Most people know about human rights but doubt protection from state repression, torture, and unlawful detention. One villager narrated how police did not respond to an assault complaint due to the offender's political access, and the victim was pressured into silence. Despite knowing constitutional rights like freedom of expression, assembly, and association, villagers fear bias from local leaders if these freedoms are exercised against their activities. Institutionally, the local level has five subject committees as per the sample law *Subject Committee (Operation) Procedure* (MoFAGA, 2022) but has not enacted related laws. Most committee members are ignorant of their roles, though names and roles are published. Positively, the local level fulfills some performance indicators.

Likewise, powerful individuals and groups significantly influence disaster governance. They can access relief items, grants, funds, training, NGO resources, and budget allocations. This can benefit their village but deprive the needy. Some groups have collective bargaining power, as the local level will not neglect voter groups. These influential people may distribute resources biasedly. Some government jobholders amassed relief items for family and friends while indigent people waited for support. Formal institutions like NRA, DAO, security forces, Dhulikhel Hospital, and local levels play crucial roles in disaster governance due to defined roles and structures. They establish frameworks, provide resources, and coordinate efforts. Informal institutions like social networks, CBOs (Women Groups, Guthiyar), and religious organizations (Hindu, Buddhist, Christian) also influence disaster response, providing relief, information, and assistance. Sometimes, religious favoritism was felt.

Examining perceived human insecurity, villagers fear no violent conflict. Over 60 percent lack regular cash income, but only two families regularly seek food support. Some lack needed healthcare access. The ward sees 40-50 people seeking free treatment recommendations. There is an infrastructurally good public school, but dissatisfaction with learning quality worries parents about their children's education, leading many to private schools. Personal and community insecurities include alcohol-related squabbles, beatings, and domestic violence. But they feel relatively safe from other crimes, feeling secure in the neighborhood.

(b) Case Study at Rahupakha Village

This case study focuses on a naturally hidden village in Bhumlu, one of the settlements relocated due to the 2015 earthquake's impact. All houses in the ward were damaged, with sixteen fatalities, though none in this particular village. Villagers faced injuries, animal deaths, crop destruction, and land ruptures, forcing them to abandon their ancestral home. A 58-year-old woman shared, "We do not empathetically feel the agony of damaged houses but our memory and sentiment are deeply associated with that original place of resident that was providing sanctuary to them since generations." Some villagers still frequently visit their former land, a few even farming there despite the products are very nominal.

It took four years to relocate nine households 150-300 meters from their original locations. They vividly recall sleepless nights in temporary shelters, awaiting resettlement. The NRA provided 200,000 rupees each to the local level for land purchase, matched by the rural municipality. Each family received two ropani, adequate for housing but insufficient for livelihoods. The researcher felt apologetic for evoking these memories, seeing emotional, tearful faces. In terms of remaking, eight houses were reconstructed. One poorly-built house with a leaky roof belongs to two differently-abled adults, and one is half-built without roof, doors, or windows. Disaster risk reduction is deficient; a newly opened mid-hill highway track puts the village at increased landslide risk due to surface cracks.

Livelihood restoration remains as pre-earthquake, with no income generation or skill development programs from any government tier. Villagers nicknamed their settlement the "forgotten settlement." Only one young male is in foreign employment, with many youths working in Kathmandu Valley, significantly contributing to livelihoods. Social cohesion remained unchanged post-disaster. Villagers cut trees for temporary shelters and houses without objection or sensitization, thinning the uphill forest without replantation, causing environmental degradation. The local level provided a small budget for a nearby temple's cultural preservation. Depressingly, social inclusion is disregarded, with no TLO or other forums. The health facility is restored with relatively good services. However, the earthquake dried up the water source, leaving the old tap dry. A new, loose-piped arrangement needs frequent maintenance. On the positive side, social justice, particularly well-managed social security allowances, remains virtuous at the local level.

In promoting good local disaster governance through human security, the local level's efforts are lacking. Local disaster risk reduction and management plans are mostly elapsed. Road construction lacks strategies for reducing potential landslides from haphazard digging. Villagers' capacity building on disaster management is almost nil, though the ward Chairperson, members, and disaster focal personnel are somewhat sensitized through a two-day training. The local level has a documented disaster response plan for all wards but lacks emergency response capacity. The ward has not constituted a TLO for the village, blurring people-centered governance and overlooking participation and inclusion in decision-making. Human security concepts are not comprehended in policy formulation, and resource inadequacy constrains even prioritized programs. Collaboration with society, learning from past events, accountability, and transparency remain poor.

Strategies for institutionalizing human security governance and related institutional arrangements are meager. Destitute basic income severely impacts village life. No villager has public sector or permanent employment. Post-earthquake housing is almost assured, except one under-construction house awaiting the final grant installment. There are no SSN or public food distribution, making daily staple a struggle. Traditional agriculture on small land feeds them less than two months. Despite ward enrollment in the national health insurance program, no villager could purchase social health protection due to financial disability. The ward and village lack disease outbreak surveillance and disaster early warning systems. Unsustainable practices against natural resources and environmental degradation need timely solutions. The municipality should properly protect the illiterate, poor ethnicity.

Villagers feel forgotten by the local level, attributing this to the absence of an influential individual or leader. They believe only formal institutions play a critical role in disaster governance. Paradoxically, they note the local level is far, and they do not get some financial services from the ward office that they used to when it was a VDC. Regarding perceived human insecurity, villagers fear no conflict. Socioeconomically, they lack regular cash income, despite some from small-scale goat rearing and poultry farming. They struggle daily for food due to lack of employment, income-generating skills and sufficient farmland. Many lack money for medicines and treatment. A good practice is mutual assistance, including small amounts of money and food. The public school is challenging to reach uphill, and they wish to enroll children in private schools like some do. Positively, there are no neighborhood security incidents, and they leave rooms unlocked anytime.

(c) Case Study at Bohoratal Village

This remote village in Roshi, comprising thirty-four households, was relatively less affected by the 2015 earthquake. While there were no human or animal casualties, over fifty percent of the houses were fully damaged, and the remaining suffered partial damages. Some individuals were injured, and a few crop storages were also damaged. The villagers reported psychological distress due to the fear and rumors of another quake, which persists even today for some. The downhill rough road from the district headquarters to the village was also damaged, making it difficult to access the village for rescue and relief, further causing stress for the villagers.

Discussing the remaking of the society, villagers noted that disaster risk promotion is being realized in local government practices due to haphazard developmental activities. In terms of housing recovery, all private houses have been reconstructed, even the four excluded by the NRA's grant program, which the villagers built themselves. Livelihoods restoration has been as it was before the earthquake, with neither government focusing on the affected people's livelihoods. The villagers did not receive any skill training. In the last five years, the ward office distributed two kilos of maize seeds to each household and one blanket to each Dalit household. Influential people manage to get more fertilizer. Economic aspects and social cohesion remain unchanged. However, infrastructural development such as school buildings, bridges, and roads is progressing well. Cultural preservation is observed through budget allocations for the local temple and stupa. Environmental protection is prioritized by the villagers, led by a local school headmaster. Social inclusion of the backward ethnicity is relatively good. Restoration of services like the health post and water pipes is satisfactory. The ward office's effort to reach out for social security allowance was fine.

Regarding policies and practices promoting good local disaster governance through human security incorporation, local disaster risk reduction and management plans exist only in documents. Neither the local government structure is functional, nor are stakeholders sensitized to disaster management mechanisms and implications. Only the ward chairperson and members participated in a disaster management training, but many skipped due to other commitments. They failed to transfer the knowledge gained, lacking capability and not perceiving the training's critical value. The local level, ward, and village lack emergency response capacity and preparedness. The ward has not adopted a people-centered governance approach, with only a few individuals favoring the people's representatives being consulted

during plan and program preparation. This hinders fostering a culture of inclusion and participation in decision-making. The ward has not prioritized human security concerns in policy formulation and faces a lack of financial and other resources. The ward chair and members are attempting close collaboration with societies and social organizations. However, the ward does not review disaster events, disregarding flexibility and adaptability. The village has not yet witnessed public hearings or audits.

Discussing strategies for institutionalizing human security governance, most villagers have access to basic income through traditional farming, animal husbandry, government employment, skilled work like masonry and carpentry, or advanced farming like vegetables, fruits, and Buddhachitta seeds. This is possible due to the ancestral tradition of educating children. However, some Dalits lack such regular income activities. Access to housing is assured, while SSN is unavailable. The village has diversified agriculture and economy. Most villagers, except a few Dalit families, can afford their children's education. People can grow or afford food, have access to basic healthcare and services. Most villagers have purchased a health policy covering treatment expenses for five family members annually. However, the village lacks interconnected surveillance systems for disease outbreak identification. The village practices sustainable natural resource and environmental protection but lacks early warning systems and disaster response mechanisms.

No villagers reported threats of physical violence. Although unaware of local-level provisions for explicit protection of ethnic groups and community identity, they do not perceive intimidations. However, discriminatory behavior against women during menstruation persists. The village has much to do towards becoming a resilient community. No human rights violations were reported, but villagers have less faith in police administration due to powerful people's influence. There is objection to political rights and freedoms, with most villagers admitting their votes are easily swayed by power, money, and election-oriented activities. The local level has subject committees for various affairs, but people's representatives lack defined concepts, and personnel doubt these committees' effectiveness.

Regarding powerful individuals' and groups' influence on disaster governance, most villagers said, "Brokers run the local government, influencing policies, programs, and resources. Influential people enroll all family members into the housing grant program, while some genuine households receive none." Villagers blame political leaders for hoarding relief

items. Locals complain that the local government listens only to power, threats, or warnings. They acknowledge formal institutions heavily influence disaster governance but are themselves more heavily influenced by powerful individuals and groups.

In terms of perceived human insecurity, villagers do not fear violent conflict. Within perceived socioeconomic insecurity, most have agriculture or animal farming for cash income, can afford adequate food, have access to needed medicines and treatment, and provide good education to their children. However, there are frequent personal and community insecurity events like alcohol-related fights, domestic violence, and drug sale and consumption. Some bad people and groups of young boys on streets at night make villagers feel unsafe from crimes, posing overall neighborhood insecurity.

(d) Case Study at Shikharaambote Village

This remote scenic community in Roshi was profoundly impacted by the 2015 earthquake, rendering more than eighty percent of the population homeless. Most private houses were partially damaged, while the remaining were fully destroyed. Although there were no human fatalities, many residents were injured. The road connecting the community to the district center, Dhulikhel, was temporarily damaged, causing additional anxiety as response activities, including relief item delivery and transfer of the injured, were obstructed. Some crop storages were lost, and a few animals perished. IDPs struggled for food and shelter support, spending the rainy months in leaky temporary sheds. The community was left reeling from the earthquake's aftermath, grappling to rebuild their lives and regain normalcy.

Assessing the status of societal remaking in the village, the foremost concern is disaster risk reduction, which is depressingly unnoticed. Regarding housing recovery, three houses deemed genuine by villagers were disqualified for the housing grant. Four houses were excluded after the first or second installment. The ward office informed the researcher that forty houses ineligible for the NRA's cash grant received nothing. Livelihoods were restored to pre-earthquake conditions without innovative economic recovery or income generation methods. Social cohesion has slightly declined due to political community segmentation and disparities in post-tremor grant and support distribution. The ward's school is still under reconstruction. Environmental protection is less prioritized by authorities and villagers. An attractive Buddha statue was constructed by the local government for preserving local culture. However, social inclusion of marginalized and vulnerable groups is neglected.

Services were restored in the ward, but the health post is inconveniently located in another corner. The local government has made commendable efforts to ensure social justice through perfect enrollment of eligible individuals for social security allowances, providing disability benefits, and ensuring equal access to public education for all.

Describing how local level policies and practices promote good disaster governance through human security incorporation, the local level has well-crafted disaster risk reduction and management plans to fulfill good governance indicators. However, direct stakeholders and actors, including local officials, have a low understanding of disaster management and human security essence. Two ward members received disaster management training but have not transferred this knowledge to the community. The ward office lacks any emergency response capacity. It attempted a people-centered governance approach by involving locals in policy-making, but villagers accuse them of only communicating with supporters. The ward chairperson, members, and local political leadership have nominal knowledge of human security, hindering its prioritization. Like other local levels, there is a resource and fund shortfall. Societies and social groups are ineffectively coordinated and communicated, adversely affecting inclusive and participatory decision-making. Absence of disaster reviewing culture provides no space for learning, flexibility, and adaptability. The ward office posts notices on the noticeboard to maintain transparency and accountability.

Describing local level strategies for institutionalizing human security governance, the moderately impoverished community lacks basic income for livelihoods. Some private houses were knowingly excluded from the reconstruction process, upsetting public access to housing. Few have sufficient land for crops, while many are unemployed. Some youths work in Kathmandu's private sector, and very few are self-employed in small-scale goat and poultry farming. There is no SSN provision at ward or local levels. The village relies on traditional agriculture and economy. Despite a public school, they prefer private schools for their children. Many villagers manage to feed their families, but some frequently approach the ward office for food support. Villagers prefer a nearby private clinic for healthcare, stating their health post is distant and offers poor services. Most villagers cannot afford the health insurance policy despite the program's existence. The ward has not introduced interconnected surveillance systems for disease outbreak identification. Villagers lack understanding of sustainable practices for natural resource and environmental protection. Instead, random digging for local roads, tree-cutting, and stream excavation for construction

materials pose governance challenges due to local officials' involvement. The ward and village lack any disaster early warning system.

Villagers report increased impunity due to youth drug and alcohol consumption. Some were beaten without reason, and fear of further intimidation prevented reporting. The ward funds a Gumba to protect the community's ethnic identity. Caste untouchability persists, but there is no discrimination against menstruating women. The community seems less resilient and lacks disaster response and recovery capacity. Villagers feel no hindrance to their political rights and freedoms. The local government has feeble institutional arrangements to ensure the above-described strategies.

Discussing powerful individuals' and groups' influence on disaster governance, villagers indicated more undesirable societal fallouts. They stated that people close to officials were prioritized during relief distribution. Some genuinely affected were intentionally biased against in relief distribution and cash grant enrollment. Their behavior was worryingly prejudiced by party-political panels. Residents experienced formal institutions like the local level, ward, DAO and NRA having decisive roles in disaster governance and other affairs. Their policies and plans are implemented, and some needy people did not receive housing grants.

Unfolding perceived human insecurity, villagers do not fear violent conflict. Many experience socioeconomic insecurity, lacking sufficient cash income and adequate food access. Some approach the ward office monthly for treatment support but receive only recommendation letters. Villagers strongly suggested legalizing marijuana farming to strengthen their socioeconomic status. Regarding personal and community insecurity, there are alcohol and drug consumption issues but no theft cases. People reported terror from monkeys making most crops useless.

(e) Case Study at Paudelbensi Village

The recently formed village in Namobuddha, situated close to the market and highway, has become home to families who have relocated due to the 2015 earthquake. Rather than referring to these individuals as migrants, the villagers consider them fellow community members who have moved from a village 1.5 kilometers away. Importantly, both the original village and the new location fall within the same ward. It is noteworthy that all villagers, including newcomers, previously owned agricultural land in the area. Their ancestral homes

at the ridge of the hill were completely destroyed by the earthquake, rendering them homeless and triggering their migration. They stayed in temporary shelters at the same location for almost a year and a half. A few Dalits still reside there as they do not own land in the plain areas. Seven houses among those shifted from the hilltop have resettled in this community. Some animals were killed by the shaking, and a few individuals were injured, but there were no human fatalities.

Examining the status of societal remaking, one crucial area overlooked in the community is disaster risk reduction (DRR). A ward member from the same village, previously employed in the local government, has only nominal knowledge of DRR. Four houses in the community and around twenty in the ward could not receive the NRA's housing grant. Villagers stated that grant responsibility has shifted to the Department of Urban Development and Building Construction after NRA's tenure ended, and they are following up from there. Approximately 150 'sack houses' (rice bag houses) constructed by an INGO named Operation Hope Foundation (OHF) in the ward are troubling owners due to holes and breakages.

Livelihoods restoration through agriculture seems promising in the community. A knowledge park on climate change adaptation and resilient agriculture technology runs with a conditional grant program from Nepal's Ministry of Forest and Environment (MoFE), funded by the International Center for Integrated Mountain Development (ICIMOD) and Center for Environmental and Agricultural Policy Research, Extension and Development (CEAPRED). This program targets environmental protection but has been less effective. Such activities and the active nature of community members help elevate people's economic status. However, the land they left behind has been barren for years.

Meanwhile, social cohesion remains similar to pre-quake levels. Schools are reconstructed as high-quality infrastructure. The ward allocated a small fund for the local temple as part of cultural preservation. Social inclusion aspects like access to education and participation in decision-making processes have been neglected at the local level, as in others. Public health service is satisfactory in the local level, and private services are also available. However, there is water scarcity due to a lack of proper water management. Villagers feel positively about matters regarding social justice.

Next on the case study checklist are ways local level policies and practices promote good disaster governance through human security incorporation. Although the local level has passed disaster risk reduction and management plans up to the ward level, actors remain quite passive before disasters strike. Locals also do not prioritize risk reduction and preparedness. Most perceive immediate rescue and relief distribution as disaster management, which they believe is the federal government's responsibility. A few local individuals have received disaster management training but fail to follow through with subsequent activities. The local level has a fire brigade and limited other disaster response equipment, whereas the ward and community have no such capacity.

The community stated they are consulted about their actual requirements before formulating the ward's annual programs, exemplifying a people-centered governance approach. However, the local level does not prioritize human security concerns during policy formulation because people's desires are for roads, bridges, poles, and pipes. The local government has very limited revenue collection and funds.

Similarly, collaboration, coordination, and communication with societies and social organizations seem less effective in finding solutions to public problems. Likewise, inclusion and participation of all ethnicities, languages, religions, and groups in decision-making processes have been challenging to transform from writing to doing. Past events are discussed in local executive meetings for relief and compensation purposes rather than for learning, consequently creating narrow room for flexibility and adaptability. All local levels have established monitoring and evaluation arrangements but need technical knowledge on the process, format, and effectiveness. Mechanisms for accountability and transparency in the ward are limited to notice boards and the local level's website.

Within the local level's strategies for institutionalizing human security governance, most villagers have access to basic income except five indigent households, primarily from engagement in cash crop farming like vegetables. This diversified agriculture and economy has self-employed many community members. Most villagers manage food for their families, but impoverished families often request food support from the ward office. The ward and local level do not have SSN to back these deprived persons, and elected officials usually give something from their pockets. Some villagers are government service holders. A few have gone to Kathmandu valley and abroad for employment. All houses in the village are reconstructed, although a few did not receive cash grants in the ward. The community

has access to a public school, though many children attend private schools. Villagers have access to basic public healthcare, health services, and private medical services. Few villagers could not purchase the health insurance policy, even though the ward has provisions for it.

The society lacks surveillance systems to identify disease outbreaks, except for a few less-active Female Community Health Volunteers (FCHVs) in the ward. Villagers randomly use pesticides in farming, posing hazards to human health and the environment. Public awareness of sustainable practices for natural resources and environmental protection needs improvement. The local level, ward, and community lack early warning systems and disaster response mechanisms. However, their relatively sound financial status positively impacts community resilience, but poor households require more focus. Despite proximity to security forces, the community feels insecure due to thefts and roadblocks, particularly at night.

The local government lacks arrangements for explicit and enforced protection of ethnic groups and community identities. Caste discrimination and discriminating against menstruating women are widely practiced. Although most villagers are aware of legal human rights protections, they doubt the police administration's impartiality due to apparent influence from powerful individuals. Villagers said they did not experience impediments to their political rights and freedoms, including expression, association, and peaceful assembly. Like others, the local level has constituted subject committees to address such issues, but many members have limited understanding of the committees' roles and responsibilities.

Interestingly, villagers found more constructive roles of powerful individuals in disaster governance for accessing resources for sound disaster recovery. They understand that approaches to federal and provincial governments and non-state actors can facilitate disaster governance, although there is a possibility of favoritism and nepotism. Villagers thought formal institutions have substantial roles, and informal ones have minor roles in disaster governance.

Unfolding perceived human insecurity, villagers do not fear violent conflict. Within socioeconomic insecurity, some villagers, including the indigent, lack adequate cash income, struggle for food and treatment. The ward office issues three to four treatment recommendation letters for these individuals monthly. These underprivileged households constantly worry about their children's education. Regarding personal and community insecurity, alcohol and drug consumption, burglary (especially of crops, goats, and chickens)

are common. Villagers feel unsafe walking on the village road after sunset due to fear of drug and alcohol consumers. The changed behavior of most villagers is observed with increased overall neighborhood insecurity.

(f) Case Study at Kaflethok Village

The newly established community in Namobuddha, strategically located near a market and highway, has become a beacon of hope for families displaced by the devastating 2015 earthquake. These families include local migrants from nearby hilltop villages within a 2-3 kilometers range, as well as individuals from other local levels and districts. The earthquake wreaked havoc, demolishing most houses, injuring numerous people, damaging crop storage facilities, and causing animal casualties. In the aftermath, the community faced significant challenges: rebuilding homes, restoring livelihoods, and grappling with the physical and psychological toll of the disaster.

Examining the status of societal remaking, one crucial yet overlooked aspect is DRR. Despite the existence of a committee, it remains inactive and lacks comprehensive DRR knowledge. Tragically, three households in the community and around twenty-five in the ward were ineligible for the NRA's housing grant. Additionally, the 'sack house' constructed by OHF using rice bags are causing concern due to holes and breakages. These houses also lack legal documentation, exacerbating the residents' uncertainties.

While livelihood restoration through agriculture shows promise, much remains to be done. A significant number of youths have become disengaged and indifferent to contributing to their community and future at home. Moreover, many residents find their original lands barren after years of neglect. Interestingly, some individuals have managed to construct larger houses post-earthquake, beyond what the grant money would allow. However, this has led to financial stress, with loans from financial institutions burdening them without adequate repayment plans.

Despite these challenges, social cohesion largely remains intact. The reconstruction of schools has resulted in impressive infrastructure, and the ward's allocation of funds for the local temple's preservation demonstrates a commitment to cultural heritage. However, social inclusion, encompassing access to education and participation in decision-making, has been largely overlooked, mirroring situations in other case studies. While public health services are satisfactory, a lack of proper water management has resulted in scarcity. Although

villagers feel positive about social justice matters, there are areas requiring attention and improvement.

Next, we examine how local-level policies and practices promote effective disaster governance while incorporating human security. Despite having disaster risk reduction and management plans up to the ward level, local actors remain passive until disaster strikes. Community members do not prioritize risk reduction and preparedness, often viewing immediate rescue and relief distribution as the federal government's sole responsibility. A few locals have received disaster management training but struggle to translate knowledge into action. The local level has a fire brigade and limited disaster response equipment, but the ward and community lack such capacity. Community discussions before annual budget formulation reflect a people-centered governance approach. However, human security concerns are not prioritized during policy formulation, with focus primarily on infrastructural development like roads, bridges, electricity poles, and water pipes. Additionally, the local government faces significant revenue collection and fund limitations.

Collaboration with societies and social organizations appears ineffective, formal, and non-functional. Achieving inclusive participation of all ethnicities, languages, religions, and groups in decision-making is challenging, with a disconnect between written intentions and actual implementation. Past events are primarily discussed in local executive meetings for relief and compensation, rather than as learning opportunities for flexible and adaptable strategies. While monitoring and evaluation arrangements exist at all local levels, there is a lack of technical knowledge regarding process, format, and effectiveness. Accountability and transparency mechanisms in the ward are limited to notice boards, project display boards, and the local-level website.

Regarding institutionalizing human security governance, most villagers access basic income through cash crop farming, particularly vegetables. This diversified agricultural economy provides self-employment for many. While most secure food for their families, some impoverished households seek food support from the ward office. The ward and local level lack SSN for those in need, leading elected officials to provide personal support. Some villagers hold government positions, while others seek employment in Kathmandu and abroad. All houses in the community have been reconstructed, although a few ward households did not receive cash grants. The community accesses public schools, but many

children attend private institutions. Basic public healthcare and private medical services are accessible, though some cannot afford health insurance despite ward-level provisions.

However, the society lacks disease outbreak surveillance systems, with only a few female community health volunteers in the ward. Indiscriminate pesticide use in farming poses human health and environmental hazards, underscoring the need for increased awareness of sustainable practices and environmental protection. The local level lacks early warning systems, and the community lacks disaster response mechanisms. The community seems somewhat resilient due to stable financial status, but poor households require more attention. Despite proximity to the city center, the community faces concerns about theft and roadblocks, particularly at night. The local government has not established explicit protections for ethnic groups and community identities. Caste discrimination and marginalization of menstruating women persist. Most villagers are aware of legal rights and protections but doubt police impartiality due to powerful individuals' influence. Villagers have not experienced significant obstacles to political rights and freedoms. The local level has subject committees to address these issues, but many members lack clear understanding of their roles and responsibilities.

Villagers expressed powerlessness, lacking influential advocates at higher levels, which they believe hinders disaster governance and access to resources for effective recovery. They felt such individuals could secure resources for long-term sustainability and livelihood programs. Villagers perceived a stark disparity between formal institutions' significant power and informal institutions' minor roles in disaster governance. This was evident in the exclusion of private houses from cash grants, highlighting technical and legal obstacles preventing certain households from receiving needed support. Overall, villagers recognized the need for greater representation and support at higher levels to achieve sound, sustainable recovery.

Regarding human insecurity, villagers do not fear violent conflicts. However, they face significant socioeconomic insecurity, with some lacking sufficient cash income and struggling to meet basic needs like food and healthcare. The ward office's few monthly treatment recommendation letters highlight challenges in accessing necessary medical care. Underprivileged households are constantly concerned about their children's education, adding to overall insecurity. Personal and community security issues include alcohol and drug consumption, and burglary of crops, goats, and chickens. Villagers feel unsafe on

village roads after sunset due to drug and alcohol consumers, leading to noticeable behavior changes in many. These forms of insecurity contribute to an overall sense of neighborhood insecurity, impacting villagers' daily lives and wellbeing.

(g) Case Study at Tallo Kuttal Village

This village in Dhulikhel is located in close proximity to the Kathmandu valley, but it needed to walk for approximately forty-five minutes to reach it from a vehicle pickup point. Some twenty-three households in this community were desperately hit by the earthquake with devastating effects. Many people were injured, and the earthquake caused extensive damage to crops, with seventy percent of houses in the village being damaged. Additionally, some animals lost their lives. The community also faced challenges with communication, as the earthquake disrupted connectivity. Tragically, three members of families from the village lost their lives in Kathmandu during the quake. The aftershocks created a sense of fear, trauma, and terror among the residents, exacerbating the already difficult situation. As the rainy season passed, the villagers had to endure the hardships of living in leaky shelters, further adding to their difficulties and struggles in the aftermath of the earthquake.

The remaking of society after the earthquake has been a mixed bag of achievements and shortcomings. While all houses have been reconstructed, the grant provided for this purpose was insufficient, leading many individuals to take loans to complete their construction. This situation reflects the Nepali proverb, "Suggest your neighbor with advice and a small loan for building a house if you are angry with them". This will consequently bother the related neighbour at least for next decade. Unfortunately, twelve houses were excluded from the housing grants provided by the NRA, which left some families without the necessary support. Vulnerably, many of the locals have been using the cracked houses for various purpose instead of dismantling them. Livelihoods have not been adequately addressed, impacting the economic recovery of the community. However, social cohesion has improved as people recognized the importance of relying on their neighbors during emergencies. Infrastructural restoration, including school buildings, has been relatively successful. On the other hand, environmental protection has received little attention, indicating a lack of focus on this crucial aspect. Despite this, a small budget has been allocated for the preservation of a temple as part of the cultural heritage.

In terms of social inclusion, progress has been made, with efforts being made to involve all concerned individuals and groups. Health and water services in the village are reported to be in good condition, but there is disappointment with the passive role of the health volunteer. People have found satisfaction in aspects of social justice, such as social security measures and other initiatives. Overall, the rebuilding process has seen both positive developments and areas that require further attention and improvement.

Despite the existence of disaster risk reduction and management plans at the local level, there are several challenges that hinder the promotion of good local disaster governance and the incorporation of human security. Stakeholders, including local community members, are not taking the DRR seriously, which undermines the effectiveness of the plans. Furthermore, there has been a lack of training on disaster management for the villagers, neglecting the crucial aspect of capacity building within the community. As a result, the community lacks emergency response capacity, making them vulnerable in the face of future disasters. While the ward seeks input from villagers before formulating plans and programs, the absence of a TLO suggests limited grassroots involvement. Additionally, the local level's focus has primarily been on physical infrastructure, such as roads and buildings, rather than prioritizing human security, reflecting a potential gap in governance approach and local orientation.

The local level, like many others, faces resource scarcity, which further limits its ability to effectively address disaster governance. Although collaboration and coordination with societies and social organizations are present, their impact remains limited, often being carried out for formalities rather than resulting in productive outcomes. The inclusion and participation of all concerned individuals, groups, and classes in the decision-making process have not been effectively realized, indicating a lack of genuine engagement and representation. Furthermore, the failure to review past disaster events for learning purposes reflects a lack of emphasis on flexibility and adaptability in disaster governance. Finally, while the ward has mechanisms for communication through notice boards and websites, the monitoring and evaluation process appears to be inactive, potentially impeding the ability to learn from experiences and improve future disaster management practices.

Describing the status of strategies of local level for institutionalizing human security governance after the 2015 earthquake, one significant achievement was the reconstruction of houses in the community, ensuring that all houses were reconstructed and providing

assured access to housing for all residents. This was a crucial step in restoring stability and security to the affected population. However, despite this progress, the villagers still face challenges related to low basic income. The traditional agricultural and economic practices prevalent in the area contribute to the limited financial resources available to the villagers. This situation has led to some individuals seeking employment opportunities in urban areas or engaging in self-employment activities such as agricultural and animal farming. The lack of diverse employment options further exacerbates the economic constraints faced by the community.

Regarding social welfare, while most villagers are entitled to food, there is a significant number of poor individuals who struggle with hand-to-mouth existence. Unfortunately, there are no SSN in place at the village, ward, or local level to address this issue and provide support to those in need. Education is another aspect where disparities exist within the community. Although there is a public school available, many children from the village attend private schools instead. This suggests a preference for private education, which may be indicative of perceived inadequacies or limitations in the public schooling system.

Concerning healthcare, the community has access to a health facility in a nearby town, which can be reached within one hour. While this is a positive development, only a small proportion of villagers have health insurance due to financial constraints. Additionally, there is a lack of interconnected surveillance systems for disease outbreak identification at the local level. This hinders proactive measures to address public health concerns and prevent the spread of diseases within the community. Unfortunately, there is a prevalence of social issues that threaten the protection and human rights of individuals within the community. Cases of theft, alcohol consumption, fighting, and domestic violence have been reported. This indicates a need for interventions that address these challenges and safeguard the wellbeing and rights of community members. Furthermore, explicit and enforced protection of ethnic groups and community identity is lacking at the local level. Discrimination based on caste and gender, such as untouchability practices and discrimination against women during their monthly periods, persists, highlighting the need for concerted efforts to address these social inequalities.

The community's trust in government institutions has been weakened, as some perceive an excessive influence of powerful individuals. This sentiment is reinforced by concerns over the easily influenced nature of voting processes and the exploitation of marginalized

populations by politicians. While individual rights and freedoms are legally protected, there is a perception among community members that these rights are not always upheld in practice. Likewise, the resilience of the community to respond and recover from future disasters appears to be weak, necessitating the implementation of comprehensive disaster early warning and response mechanisms to enhance preparedness and mitigate the impact of future calamities. In the same way, the assuring these issues through institutional arrangements seems to be meager thus demanding substantial attention on the refined local governance.

The role of powerful individuals and groups in disaster governance within the community has been perceived as mixed. While they have played a crucial role in accessing and bringing in relief items, their influence has also resulted in instances of favoritism based on political ideology and personal relationships. Both formal and informal institutions have been involved in combating the impact of the 2015 earthquake, highlighting the importance of a collaborative approach. However, it is concerning that the villagers lack knowledge regarding the roles and responsibilities of the district administration office in disaster management. This knowledge gap could hinder effective coordination and communication between the community and the relevant authorities, emphasizing the need for increased awareness and understanding of the institutional framework in place for disaster management at the local level.

After the 2015 earthquake, the perceived human insecurity in the community encompasses various aspects. Firstly, there is a lack of fear regarding violent conflict, indicating a relatively stable security situation in that regard. However, socioeconomic insecurities are prevalent, with villagers facing inadequate cash income. While most individuals have managed to secure their food, a few poor families frequently approach the ward office and community members seeking assistance for their basic needs. Moreover, there are cases where individuals come to the ward office seeking support for medical treatment, but they are only provided with a recommendation letter instead. This highlights the limited resources available for addressing healthcare needs in the community. Education is also a concern for some villagers, as they worry about the quality and accessibility of their children's schooling. Additionally, incidents of theft, alcohol consumption, squabbles, and domestic violence have increased personal and community insecurity in the neighborhood, further intensifying the overall sense of vulnerability experienced by community members.

(h) Case Study at Bhattedanda Village

The village in Dhulikhel, although located near the city center, faced numerous challenges due to its difficult road conditions, particularly for four-wheelers. It comprises nineteen houses representing diverse castes. Unfortunately, the community experienced the devastating effects of the 2015 earthquake. Two lives were lost, many people were injured, crops and storage facilities were damaged, and a significant sixty-five percent of the houses were rendered uninhabitable. Tragically, an individual from the village also perished in the earthquake while in Kathmandu. The earthquake left the community in a state of fear, trauma, and constant anxiety due to subsequent shocks. Residents had to endure prolonged periods in leaky shelters, further impairing their adversities. Despite these hardships, the village demonstrated determination, embarking on the path to recovery and reconstruction.

The remaking of the society in the village and ward has been marked by dissatisfying disaster risk reduction efforts. Three houses are still under construction, indicating a slow progress in rebuilding after a disaster. Additionally, two houses have been excluded from the housing grant, highlighting the lack of adequate support for those in need. The insufficiency of the grant has forced many community members to take loans, putting them in a vulnerable financial situation. While livelihoods have received less attention, some individuals have taken up vegetable farming and goat rearing, with a few receiving small supports at the local level for their goat rearing initiatives. The village's social cohesion has remained unchanged, providing a stable foundation for community resilience. However, the economic recovery has been slow, impacting the overall wellbeing of the community.

In terms of infrastructure, the reconstruction of the school building has been positive, ensuring a suitable learning environment for children. However, the protection of the environment seems to have been overlooked, as there is a risk of landslides in the area. Nevertheless, the youth club of the village has been proactive in engaging in a small-scale tree plantation program for the past two years, demonstrating their commitment to environmental sustainability. A small amount has also been allocated to the temple for cultural preservation, highlighting the importance of preserving local heritage. At the local level, efforts have been made to promote social inclusion, ensuring that all individuals and groups are considered and supported. Services such as health and water have been reported as good in the village, indicating a satisfactory level of provision. People have expressed

satisfaction with social justice in the community, as local authorities prioritize issues like social security and other related matters, demonstrating a commitment to fairness and equity.

The policies and practices of the local level in promoting good local disaster governance and incorporating human security after the 2015 earthquake have been largely ineffective. The stakeholders lack understanding of local disaster risk reduction and management plans, leading to a significant gap in their implementation. Furthermore, there has been a complete disregard for capacity building within the community, as no one from the village received disaster management training. This has resulted in a lack of emergency response capacity, leaving the village vulnerable in the face of future disasters. The ward has also failed to establish TLOs, which are essential for adopting a people-centered approach to governance. Instead, some locals have expressed that developmental activities are carried out based on political affiliations rather than the actual needs of the community. The ward and local level have struggled to prioritize human security due to public demand for physical development. Additionally, the local level faces resource shortages similar to other local levels.

Similarly, collaboration and coordination with societies and social organizations have been attempted, but their effectiveness has been limited. The local level has also been facing challenges in implementing inclusive and participatory decision-making processes, failing to involve all concerned individuals and groups. There is a lack of emphasis on learning from past disaster events, leading to a disregard for flexibility and adaptability in disaster preparedness and response. Moreover, the locals revealed that the strained relationship between the head and deputy of the local level has negatively impacted the monitoring and evaluation process. The notice board and local level's websites serve merely as symbolic arrangements to promote accountability and transparency, lacking meaningful actions to address these principles effectively.

The strategies implemented at the local level to institutionalize human security governance after the 2015 earthquake have yielded mixed results. While some progress has been made, challenges persist in ensuring access to housing. Construction of houses is still ongoing, and some households have been excluded from the cash grant, indicating a lack of assurance in securing adequate housing. On a positive note, the villagers have managed to achieve a somewhat good basic income through diversified agricultural and economic activities such as vegetable farming and goat rearing. Additionally, some individuals have got employment opportunities in Kathmandu's private sector, while others engage in wage employment or

are self-employed in agricultural and animal farming. However, it is worth noting that a few locals continue to face food shortages, highlighting the need for interventions to address this issue. Unfortunately, there are no SSNs available at the village, ward, or local level, which further emphasizes the vulnerability of certain community members.

Relating to education, despite the availability of a public school, some children from the village attend private schools. While this may indicate a preference for certain educational institutions, it also raises questions about the quality and accessibility of public education in the area. On the healthcare front, the adjacent city provides good medical services, and over fifty percent of the villagers have purchased health insurance. However, there is a lack of interconnected surveillance systems to identify disease outbreaks within the village, posing potential health risks to the community. Environmental protection efforts, such as the use of wire nets and tree plantation, are present in the village, but more comprehensive measures are needed. One major gap in disaster preparedness is the absence of a disaster early warning and response mechanism within the village, which compromises the community's ability to effectively respond and recover from future disasters, leaving their resilience feeble.

Unfortunately, there are instances of crime, alcohol consumption, domestic violence, and incidents that threaten the safety and human rights of the villagers. These issues underscore the need for stronger measures to ensure the wellbeing and protection of the community. The local level also falls short in explicitly and effectively protecting the rights, identities, and interests of ethnic groups within the community. Discrimination against women during their scheduled periods and the persistence of caste-based untouchability further highlight the existing social challenges that need to be addressed. Furthermore, there is a lack of faith in government institutions, such as the court and police, as they are believed to be heavily influenced by powerful individuals. However, the people acknowledge that their rights and freedoms are legally protected, indicating a recognition of their entitlements but a need for better implementation and enforcement.

The villagers have experienced a mixed role of influential individuals in disaster governance. While these individuals play a critical role in accessing vital resources for the affected people, there have been instances where their influence has led to bias in resource distribution. As a result, some needy individuals did not receive the relief items they required. The community members recognize the crucial role of formal institutions in disaster governance, especially in situations like the 2015 earthquake. They understand the

importance of these institutions in providing effective and equitable support to the affected population. However, the involvement of influential individuals highlights the need for transparency, accountability, and fairness in resource allocation to ensure that all those in need receive the necessary assistance.

After the 2015 earthquake, the community members in the village perceive certain human insecurities while also experiencing progress in certain areas. There is no perceived fear of violent conflict among the villagers. Socioeconomic insecurities are prevalent, as many households do not have adequate cash income, although their status is gradually improving. While most families are able to arrange food for their households, there are a few families in the village that struggle in this regard. Some individuals seek assistance for medical treatment at the ward office, but unfortunately, the local level does not have any dedicated funds to support them. Education is a concern for some community members, as they face difficulties in providing education for their children. The incidents of theft of crops, goats, and vegetables, along with issues related to alcohol consumption, squabbles, and domestic violence, have increased personal and community insecurities in the neighborhood, posing challenges to the wellbeing and safety of the villagers.

Appendix 'P': Human Security Oriented Laws, Programs and Plans in the Local Levels (2017 to 2021)

Document Types	Document Names	Dhulikhel	Namobuddha	Bhumlu	Roshi
Laws	Gender Equality and Social Inclusion Strategy	√	-	-	√
	Water Resource Utilization Act/Regulations/Procedure	√	-	√	√
	Women with Deputy Mayor Program Operation Procedure	√	-	-	-
	Subject Committee Operating Procedure	-	√	-	√
	Market Management Procedure	-	√	-	-
	Local Festivals and Fairs Management Regulations	√	-	-	-
	Plan Formulation and Implementation Procedure	√	√	√	√
	Gender Violence Prevention Fund Operating Procedure	√	-	√	-
	Excreta Management Policy	√	-	-	-
	Grievance Management Procedure	√	-	-	-
	Homestay Operation and Management Procedure	√	-	-	-
	Tole Development Organization Formation and Operation Procedure	√	-	-	√
	Local Emergency Operation Procedure	√	-	-	-
	Farmer Group Formation and Management Procedure	√	-	-	-
	Child Rights Protection and Promotion Procedure	√	-	-	-
	Bodhichitta Garland Preservation and Management Procedure	-	√	-	√
	Youth Council Act	-	√	-	-
	Disaster Relief Distribution Standard	-	√	-	-
	Child Club Formation and Operation Procedure	-	-	√	-
	Child Protection Policy and Code of Conduct	√	-	-	-
	Health and Sanitation Management Act/Procedure	√	√	√	-
	FM Radio Management and Operation Procedure	√	√	√	-
	Market Monitoring Directive	√	√	-	-
	Monitoring and Supervision Procedure	-	-	-	√
	Monitoring and Evaluation Procedure	-	-	-	√
	Annual Project Selection Procedure	-	-	-	√
	Good Governance Policy	-	-	-	√
	Procedures Related to Handing Over Cash to Extremely Poor Families Affected by the Epidemic of COVID-19	√	-	-	-
	Youth Council Procedure	-	√	-	-

Relief Items Distribution Procedure	-	√	-	-
Football Competition Operation Procedure	-	√	-	-
Drinking Water and Sanitation Consumer Committee Management Procedure	-	√	-	-
Fire Brigade Operation Procedure	-	√	-	-
Ambulance Operation Procedure	-	√	√	-
Consumer Committee Formulation and Operation Act/Procedure	-	√	√	√
Disaster Risk Reduction and Management Act	-	√	√	√
Cooperative Merger Procedure	-	√	-	-
Disability Identity Card Distribution Procedure	-	√	√	√
Child Protection Fund Operation Procedure	-	√	-	-
Disaster Management Fund Operation Procedure	-	√	-	-
Act on Judicial Committee's Procedure	-	√	-	-
Environment Protection Act	-	√	-	-
Waste Management Act	-	√	-	-
Police Operation and Management Act	√	√	-	√
Forest Act	√	-	-	-
Education Act	√	-	√	-
Cooperative Act	√	√	√	-
Agricultural Business Promotion Act	√	√	√	-
School Education Operation, Management and Regulation Procedure	√	√	-	√
Financial Procedure Regulation and Management Act/Procedure	√	√	-	√
Judicial Committee Member Election Procedure	√	-	-	-
Code of Conduct of Municipal Officials	√	√	√	-
Municipal Executive (Division of Work) Regulations	√	√	√	√
Municipal Executive (Performance) Regulations	√	√	√	√
Direction Related to Local Level Planning and Budget Formulation	-	√	-	√
Procedure on Operation of Municipal Assembly	√	√	√	√
Risk Allowance Procedure	-	-	√	-
Laboratory Operation Procedure	-	-	√	-
COVID-19 Response Procedure	-	-	√	-
COVID-19 Fund Operation Procedure	-	-	√	-
Subject Expert Selection Procedure	-	-	√	-
Health Institution Operation and Management Procedure	-	-	√	-
Public Accountability Promotion Procedure	-	-	√	-
Initial Environmental Examination Procedure	-	-	√	√
Target Group Mobilization Procedure	-	-	√	-
Procedure on Program Against Child Marriage	-	-	√	-
Animal Insurance Directive	-	-	√	-

	Employee Incentive Standard	-	-	√	-
	Employee Welfare Fund Operation Procedure	-	-	√	-
	Financial Assistance Procedure	-	-	√	√
	Standard on Relief Distribution for Unorganized Labors and Helpless	-	-	√	-
	Senior Citizen Identity Card Distribution Directive	-	√	-	-
	Infrastructure Development Act	-	-	√	-
	Reconciliation Center Operation Procedure	-	-	√	√
Programs	Policy, Program and Budget, 2078/079	√	√	√	√
	Policy, Program and Budget, 2077/078	√	√	√	√
	Policy, Program and Budget, 2076/077	√	√	√	√
	Policy, Program and Budget, 2075/076	√	√	√	√
	Policy, Program and Budget, 2074/075	√	√	√	√
Plans	Periodic Plan	√	-	√	√
	Four Year Agricultural Development Strategic Plan	√	-	-	-
	Small Agro Business Production Pocket Area Development Plan	-	-	√	-
	Capacity Building Plan	-	√	-	-
	Integrated Urban Development Plan (IUDP)	√	-	-	-
	Local Reconstruction Plan	-	-	-	√
	Drinking Water, Sanitation and Cleanliness Master Plan	-	-	√	-

Note. The list of the documents is derived from the websites of the local levels (<https://dhulikhelmun.gov.np>, <https://namobuddhamun.gov.np>, <https://bhumlumun.gov.np>, <https://roshimun.gov.np>) and field visits by the researcher, where the sign √ signifies availability of the document. The documents cover the formulation years 2074 to 2079 BS.

**Appendix ‘J’: Integrating Human Security into Local Governance Through Laws,
Programs and Plans**

Domains	Matters	Dhulikhel	Namobuddha	Bhumlu	Roshi
Adopting a people-centered approach to governance	Participatory decision-making through involvement of local communities in shaping policies and programs by consultations and feedback mechanisms	√	√	√	√
	Tailoring governance approaches to respect and incorporate local cultural values and traditions	√	-	-	-
	Designing contextually localized and relevant solutions that address the unique challenges of different locations	√	√	√	√
	Empowerment of marginalized groups through ensuring equal access and participation for women, minorities, and disadvantaged communities	√	-	-	-
	Incorporating traditional wisdom and local expertise into decision-making	-	-	-	-
	Capacity building of locals through training and skill development for effective governance	-	-	-	-
	Responsive service delivery by providing accessible and citizen-centric public services	√	√	√	√
	Conflict resolution through establishing mechanisms for peaceful dialogue and dispute mediation	-	√	√	√
	Prioritizing initiatives that promote sustainable development for current and future generations	√	√	√	√
Formulating policies that prioritize human security	Identify local human security challenges by thorough assessments	-	-	-	-
	Focus policies on safeguarding vulnerable populations such as women, children, and marginalized communities	√	√	√	√
	Develop policies to mitigate risks and respond effectively to natural disasters	-	√	√	√
	Ensure access to quality healthcare, sanitation, and disease prevention	√	-	√	-
	Policies to provide equitable and quality education for all community members	√	√	√	√
	Livelihood opportunities through promoting policies that create sustainable economic prospects	-	-	-	-
	Establish support mechanisms for social welfare and poverty reduction	-	-	√	√
	Environmental protection through prioritizing policies that preserve and sustain local ecosystems	-	√	√	√
	Develop strategies for ensuring public safety and security	√	√	-	√
	Address local conflicts through policy frameworks and mediation	-	√	√	√

Adequate resource allocation for prioritized policies	Allocate sufficient funds to implement human security-focused policies	-	-	-	-
	Ensure optimal utilization of available resources for maximum impact	√	-	√	√
	Explore various funding sources including grants and aid to support prioritized policies	√	√	√	√
	Allocate resources for effective monitoring and evaluation of policy outcomes	-	-	-	-
	Invest in training and skill development to enhance resource management	-	√	-	-
	Collaborate with private sector for additional resources and expertise	√	√	√	√
	Involve local communities in resource-sharing and co-financing	-	-	-	-
	Adapt resource allocation based on evolving priorities and needs	-	-	-	-
	Develop strategies for long-term financial sustainability of prioritized policies	-	-	-	-
Partnership and close collaboration with the societies and social organization	Community engagement through fostering active participation and collaboration with local residents	√	-	-	√
	Partner with NGOs for expertise and community reach	√	√	√	√
	Collaborate with civil society for advocacy and implementation	-	-	-	-
	Support and amplify community-led projects and initiatives	-	-	-	-
	Pool resources and knowledge through partnerships for mutual benefit	-	-	-	-
	Facilitate knowledge transfer between local authorities and organizations	-	-	-	-
	Develop and implement projects through joint efforts and resources	√	√	√	√
	Partner with cultural groups to integrate local traditions into policies	√	-	-	-
	Collaborate to gather and share valuable local data and research	-	-	-	-
Conduct training and workshops in collaboration with social organizations	√	√	√	√	
Fostering a culture of inclusion and participation in decision-making processes	Ensure diverse community representation in decision-making bodies	√	√	√	√
	Promote equal participation of women in all decision-making processes	-	-	-	-
	Provide platforms for marginalized groups to express their perspectives	-	-	√	-
	Establish regular community consultations for input on policies	-	-	-	-
	Conduct open forums for citizens to share opinions on local governance	√	√	√	√
	Ensure easy access to information on decision-making processes	-	-	-	-
	Develop policies that consider input from various community segments	√	√	√	√
	Educate communities on their rights and involvement in governance	-	-	-	-
	Support and empower local leaders to facilitate inclusive participation	-	-	-	-
	Communicate decisions and their rationales to foster trust, transparency and accountability	-	-	-	-

Creating mechanisms for accountability by reporting and evaluating those programs and policies	Develop structured systems for regular reporting on program progress	√	√	√	√
	Establish clear indicators and matrix to assess the effectiveness of policies	-	-	-	-
	Gather relevant data to support evidence-based reporting and evaluation	-	-	-	√
	Conduct periodic reviews of policies and programs	-	-	-	-
	Engage stakeholders in evaluating outcomes and impact	-	-	-	√
	Transparency by sharing evaluation findings and reports with the public	-	-	-	-
	Incorporate insights and lesson learnt from evaluations to improve future initiatives	-	-	-	-
	Review progress midway through program implementation	-	-	-	√
	Accountability mechanisms by establishing consequences for unmet targets or mismanagement	-	-	√	√
	Use evaluation results constructively to enhance program efficiency and impact	-	-	-	√

Note. The matters enlisted in the table are extracted after examining the documents presented in the table of appendix F, which covers the years 2074 to 2079 BS, where the sign √ signifies focus of the documents. It is worth acknowledging that some more documents are formulated after this period as well, but those documents pose insignificant difference to this examination.

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