An Analysis of Post-Disaster Recovery Management in the 2016 and 2019 National Disaster Management Plans of India

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ABSTRACT

This thesis analyzes how the Central Government of India (GoI) frames and justifies the post-disaster recovery phase in the recovery chapters of its 2016 and 2019 National Disaster Management Plans using Constructivist Grounded Theory and Textual Analysis. My analysis of the National Disaster Management Policy of 2009 demonstrates how disaster management mainly focuses on pre-disaster activities and how, as a result, recovery activities are less explored. I observed the same results in the National Plans, justifying the relevance of my thesis. The most significant findings of this research include: first, the GoI uses both Plans to detail decentralized efforts in recovery activities. Second, the GoI successfully puts the needs of communities at the heart of both Plans but fails to address communities as stakeholders and lacks consistency concerning the most vulnerable sections of the communities. Third, the GoI highlights psychological needs similarly in both Plans but does not acknowledge how psychological recovery is a long and ongoing process when explaining the recovery process. Lastly, it overly uses the "Build Back Better" (BBB) term but does provide details about concrete ways to achieve it. Drawing on the concepts of "disaster" and "recovery", I argue that the GoI focuses on recovery based on hazards and fails to address the underlying causes of disasters in the recovery chapters of its Plans. Moreover, I argue that it successfully harmonizes with the dominant discourse of the international community but uses some institutional concepts such as BBB as buzzwords. Finally, I argue that the Plans reflect the priorities of the Government and that the 2019 Plan is not more inclusive as it aspires to be.

Keywords: Disaster, Disaster management, India, Post-disaster recovery

RÉSUMÉ

Cette thèse analyse la façon dont le Gouvernement central de l'Inde (GoI) encadre et justifie la phase de relèvement post-désastre dans les chapitres sur le relèvement de ses Plans nationaux de gestion des catastrophes de 2016 et 2019, en utilisant une méthodologie mixte, soit la théorisation ancrée constructiviste et l'analyse textuelle. Une première analyse de la Politique nationale de gestion des catastrophes de 2009 m'a permis de constater que la gestion des catastrophes se concentre principalement sur les activités pré-désastres. En conséquence, les activités de relèvement sont moins détaillées. Cette tendance est également observable dans les Plans nationaux, justifiant par le fait même la pertinence de ma thèse. Les conclusions les plus importantes de cette recherche incluent la manière dont le GoI utilise ses deux Plans pour expliquer la décentralisation des activités de relèvement. Par ailleurs, le GoI met efficacement les besoins des communautés au cœur des Plans, mais ne traite pas celles-ci en tant que parties prenantes du processus de relèvement et manque de cohérence lorsqu'il discute des groupes les plus vulnérables. Puis, il met en évidence les besoins psychologiques de la même manière dans les deux Plans. Cependant, lorsqu'il explique le processus de relèvement, il ne reconnaît pas l'aspect psychologique comme étant un processus long et continu. Enfin, le GoI utilise abondamment le terme « Build Back Better » (BBB), mais ne donne pas davantage de détails sur les moyens concrets d'y parvenir. Tout en m'appuyant sur les concepts de « désastre » et de « relèvement », je soutiens que le GoI se concentre sur le relèvement en fonction des aléas et ne traite pas les causes sous-

jacentes des catastrophes dans les chapitres sur le relèvement de ses Plans. De plus, je soutiens qu'il s'harmonise avec succès avec le discours dominant de la communauté internationale, mais utilise certains concepts institutionnels tels que BBB comme *buzzwords*. Finalement, je soutiens que les plans reflètent les priorités du GoI et que le Plan de 2019 n'est pas plus inclusif tel qu'il prétend pourtant l'être.

Mots-clés : Catastrophes, Gestion des catastrophes, Inde, Relèvement post-catastrophe

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TABLE OF CONTENTS

ABBREVIATIONS

2016 Plan	Chapter 6 of the Indian National Disaster Management Plan of 2016, unless stated otherwise
2019 Plan	Chapter 9 of the Indian National Disaster Management Plan of 2019, unless stated otherwise
BBB	Build Back Better
DM	Disaster Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
GoI	Government of India
PWD	People with disabilities
SFDRR	The Sendai Framework of Disaster Risk Reduction
ST/SC	Scheduled Tribes and Scheduled Castes
States/UTs	States and union territories of India
UNDRR	United Nations Office for Disaster Risk Reduction (formerly UNISDR)

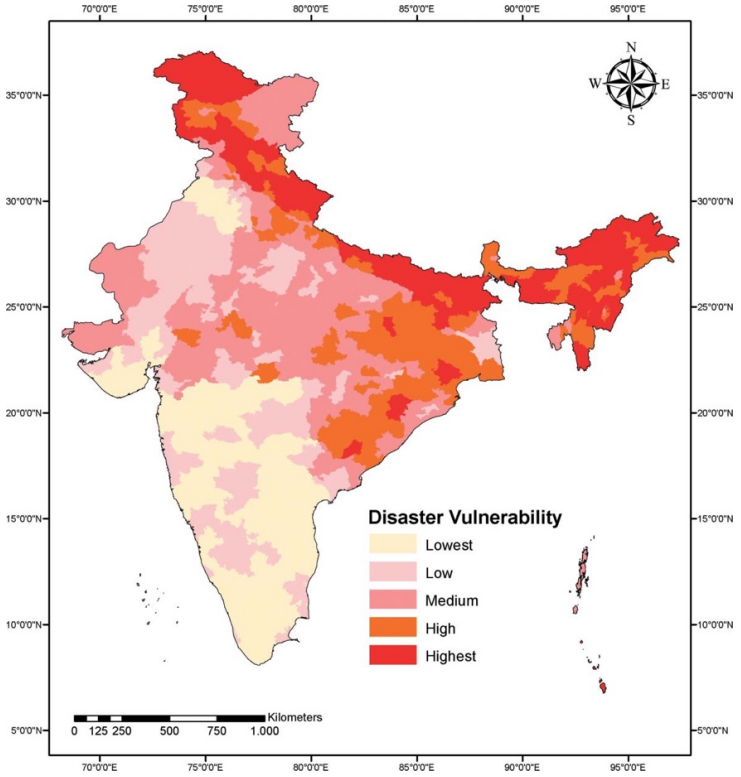
1. INTRODUCTION

Between 2000 and 2019, 7,348 disaster events occurred in the world, affecting 4 billion people, causing the death of 1,23 million people, and creating US$2,97 trillion in economic losses (CRED and UNDRR, 2020, p.6). This equals 3,136 more disasters and 1 billion more people affected than between 1980-1999 (*ibid*). Unsurprisingly, this rise is notably linked to climate change and is expected to continue increasing in future years (*ibid*). Of these events, 321 took place in India, making it the 3rd-ranking country where the most disasters have occurred (*ibid*). India is, indeed, particularly vulnerable to disasters, including those from sudden or slow-onset hazards such as earthquakes and cyclones (IMC, 2021; UNDRR, 2020). Some of these hazards, such as floods, are seasonal and, therefore, recurring (IMC, 2021). This is because of the geographical localization of this South Asian country, where "complex interactions of the atmosphere" occur (Krishnan and al., 2020, p.2). While these are not new to the country, they are greatly influenced by human activities, which, ironically, pose a threat to humans themselves (*ibid*). Thus, the alteration of climatic events typical to the region, such as the monsoon, can lead to disastrous consequences, including the increase in frequency and intensity of cyclones and floods (*ibid*). But these disasters are not always triggered by environmental factors. For instance, development projects such as dams, mines, and industrial plants, can also generate catastrophic situations (IMC, 2021).

Whether they are related to an environmental factor or not, these events have severe consequences on the affected communities. Although significant, these impacts go well beyond the number of fatalities or economic losses. For example, between January 1 and December 31, 2020, 3.9 million people were forced to move within India due to a disaster (IMC, 2021). The communities most at risk of experiencing forced displacement include scheduled castes (SC) and indigenous populations (*ibid*). As a result, it also increases their level of poverty and marginalization (*ibid*).

Figure 1

"*District-level mapping of disaster vulnerability in India, measured as a composite of exposure, sensitivity, and adaptive capacity indices*."



Note. From "Mapping disaster vulnerability in India using analytical hierarchy process", by Chakraborty and Joshi, 2016, *Geomatics, Natural Hazards and Risk*, *7*(1), p.318, https://doi.org/10.1080/19475705.2014.897656

Because of the vulnerability of India to disasters and intending to learn from past lessons, the scientific community has often studied the causes and consequences of these (for instance, see Bhat and Shah, 2017; Chakraborty and Joshi, 2016; Chhotray and Few, 2012; Chowdhury, Parida and Kumar, 2021; Joshi and Aoki, 2014; Krishna and al., 2021; Saharia and al., 2021 and Régnier and al., 2008). To deal with these disasters and their consequences, the Government of India (GoI) has adopted the Disaster Management Act of 2005 and the National Policy on Disaster Management of 2009. It was not until 2016 that the GoI established its first National Disaster Management Plan. It then adopted the revised version of the Plan in 2019 with the aim, notably, of making it more inclusive (NDMA, 2019). To this date, the 2019 Plan is the most recent one. Several researchers

have also studied how the government manages these events (see Jha, Basu and Basu, 2016; Nath, 2019 and Shakeri, Vizvari and Nazerian, 2021). However, few studies on the subject have been conducted by researchers since the adoption of the second Plan.

Moreover, while analyzing the 2009 Policy of India, I could see that disaster management particularly emphasizes the pre-disaster phases. It is consistent with the paradigm shift observed across the international community (Fernandez and Ahmed, 2019; Mannakkara and Wilkinson, 2014). Indeed, the increased frequency and intensity of disasters demonstrate the importance of preventing them, thereby justifying the importance of focusing on the pre-disaster phases. At the same time, however, it means that recovery is less detailed and explored than other phases (Joseph and al., 2021; Mannakkara and Wilkinson, 2014).

While noting the increase of hazards globally, the vulnerability of India to them, and the emphasis placed by the GoI on managing the pre-disaster phases with fewer details of the recovery phase, this led me to questions regarding the way the Indian government handles the recovery phase. It is in the light of these observations that my thesis took shape. My research question is as follows: How does the central Government of India frame and justify "post-disaster recovery" in its 2016 and 2019 National Plans?

Thus, I am particularly interested in how the Government plans this phase. The following sub-questions guide me in this research:

- Is focusing more specifically on the pre-disaster phase made to the detriment of the recovery phase? If so, does this appear justified in the National Plans? I wonder whether emphasizing the pre-disaster phases means that recovery is less developed and detailed in the 2016 and 2019 plans like the 2009 Policy. If this is the case, I wonder how the Government justifies this lack of detail.
- What are the most significant themes and sub-themes in the National Plans? I guided my analysis of the plans and the Policy using the Constructivist Grounded Theory methodology. Thus, I did not code the data according to pre-established codes. Instead, I created them, line by line, to explore what the

predominant categories are in the 2016 and 2019 Plans. As a result, my research question and objectives took shape while analyzing the data, rather than choosing my data according to my question and objectives.

- How is the recovery process explained? Who goes through it, and who manages it?
- Finally, how do the Plans adhere to the dominant discourses of the international community, especially the writings of the UNDRR?

The objective of my thesis is so not much to compare both Plans but rather to analyze how the GoI justifies the recovery phase in its two most recent Plans. This thesis will contribute to the literature on the issue of disaster management and the vulnerability of India to hazards. To my knowledge, there are no other studies that specifically analyze the recovery phase of both the 2016 and 2019 National Disaster Management Plans of India.

Three key elements represent the starting point of my research: increasing hazards, vulnerability, and impacts. First, there is the fact that, as just mentioned, hazards are increasing in frequency and intensity, notably as a result of climate change. Then, the geographic location of India allows for various hazards to occur, and the Indian population is quite vulnerable to these for various reasons. These lead to impacts that actually create the disaster. I address these three points in Chapter 2, where I discuss the multifaced vulnerability of India to hazards. I will explore some of the most common hazards in the country and demonstrate how the impacts are beyond the number of fatalities.

Then, in Chapter 3, I explore disaster management in India and the paradigm shift that occurred in the previous years in the way disasters are dealt with. It also allows me to discuss the international discourse related to disaster risk reduction and management, notably the top-down global agreement under the United Nations for Disaster Risk Reduction called the Sendai Framework. This leads me to Chapter 4, where I discuss India's social and political context under which disaster management occurs. A quick review of the political aspirations of the current Prime Minister of India, Narendra Modi,

also helps understand the development perspective of the National Disaster Management Plans. In that Chapter, I also raise some of the criticisms made by NGOs about these Plans.

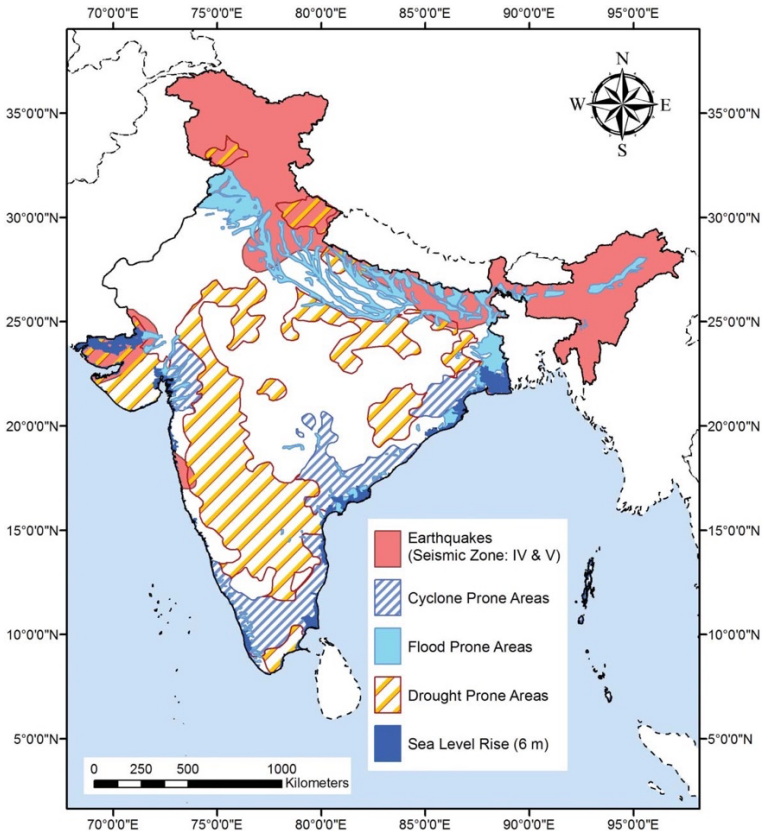
Once that post-disaster recovery management in India has been introduced and put into perspective, I explain my conceptual and theoretical framework in Chapter 5. To answer my research question, I relied on the concept of "recovery" and "disaster", which I define in that fifth chapter. Chapter 6 dives into the methodology I used to answer my research question, namely Constructivist Grounded Theory and Textual Analysis. I also raise some of the limits of my thesis and position myself as a researcher. It leads me to explore my findings, which I analyze in Chapter 7. Chapter 8 discusses some of the relevant results to my research question, and I discuss these in relation to my conceptual and theoretical framework. Finally, Chapter 9 is my conclusion.

2. DISASTERS IN INDIA: A VULNERABILITY STORY

India is among the most vulnerable and prone to disasters countries in the world (NIDM, 2014; Shakeri, Vizvari and Nazerian, 2021; UNDRR, 2020). With 2267 disaster-related deaths in 2019, it was ranked the 7th most affected country by catastrophes on the Global Climate Risk Index of 2019, which compiles impacts of extreme weather-related events in terms of economic losses and death tolls. The vastness of this South Asian country allows for a very diversified ecological system (Bhat and Shah, 2017; UNDRR, 2020). The Arabian Sea, the Bay of Bengal of the Indian Ocean, and the Laccadive Sea surround the country's west, east and south coasts, while the North is home to the Himalayan mountains (Bhat and Shah, 2017). As a result, a wide range of environmentally-related hazards exposes the country to potential threats, especially during monsoon seasons (Bhat and Shah, 2017; Eckstein, Künzel and Schäfer, 2021; NIDM, 2014; UNDRR, 2020). A total of 27 of its 36 States/UTs are prone to disasters (NIDM, 2014).

Figure 2

"Location of the study area showing the natural and climate-induced disaster in the country"



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The National Disaster Management Authority (NDMA) website includes a list of the most common hazards related to the environment, namely cyclones, floods, landslides, earthquakes, heatwaves, and tsunamis (NDMA, n.d.). On its website, NDMA refers to these as "natural hazards" as opposed to "man-made hazards" (*ibid*). The latter refers to chemical, nuclear, or biological hazards (*ibid*).

This chapter represents the starting point of my research. I start by briefly exploring the most common hazards in India according to NDMA and presenting how these have led to disruptive disasters in the past. I include human-made hazards. I refer to these as "human-made" intending to harmonize with the vocabulary used by NDMA. However, as I will explain in Chapter 5, I recognize that so-called "natural" hazards also have

anthropogenic roots. Then, I explore the various impacts of disasters in India, going beyond fatalities. It leads me to see how disasters do not impact everyone the same way. Finally, I present some lessons learned from two post-disaster recoveries in India.

2.1. Common hazards in India

a) Cyclones

Among the most common hazards are tropical cyclones, which are most dominant during pre-and post-monsoon (April, May, October, November) and more frequent in the Bay of Bengal, along the East Coast of the country (Bhat and Shah, 2017). Around five or six cyclones, including two or three severe, affect India every year, which accounts for approximately 10% of the totality of similar storms in the world (NIDM, 2014). Out of 7,516 km of the total coastline distance of the country, around 5,700 km are prone to cyclones risks (*ibid*). These storms, characterized by fast wind and rainfalls, are particularly destructive (Bhat and Shah, 2017). In May 2021, two cyclones took place in India, one on the East Coast and the other on the West Coast, killing 199 people (Chowdhury, Parida and Kumar, 2021). Since 1999, an estimated 12,000 people have perished due to this type of hazard in India (Chowdhury, Parida and Kumar, 2021, p.35).

b) Floods

Cyclones, storm surges, and heavy rainfall during monsoon seasons can also lead to floods (Saharia and al., 2021; Bhat and Shah, 2017). Around 12% of the land is prone to floods, affecting 33 states/UTs (NIDM, 2014). During the summer of 2019, 1 800 people perished from floods in 14 different states (Eckstein, Künzel, and Schäfer, 2021). Floods can also result from the obstruction of rivers and, in some states, rapid snow melts (Bhat and Shah, 2017). But the roots of natural hazards do not always strictly come from the weather or the climate. In some cases, floods are also a result of dam failure (*ibid*). As for floods that happen seasonally, these are well enough documented to be mitigated if well managed (Saharia and al., 2021). The most affected states include Uttar Pradesh, Assam, Maharashtra, Bihar, and West Bengal (*ibid*).

c) Landslides and earthquakes

Landslides also constitute a significant risk in India (NIDM, 2014). These sloping movements of rock or mud can notably result from heavy rainfalls and earthquakes (Bhat and Shah, 2017). Landslides happen more specifically in hilly regions, such as the Himalayans in the North or the Western Ghats and the Nilgiri range in the South (Bhat and Shah, 2017; NIDM, 2014). In total, earthquakes represent a risk in 56,6% of the land of India (*ibid*). Between 1999 and 2014, six severe earthquakes affected the country (*ibid*). The earthquake of 2001 in Gujarat was one of the most important, with a magnitude of approximately 7,7 on the Ritcher scale, killing thousands of people (Zutshi, Borah, and Bhakat, 2019).

d) Heatwaves

Seasonally, heatwaves can strike. They are prolonged episodes of extreme temperature during the summer months, which, in severe cases, lead to casualties (Bhat and Shah, 2017; NIDM, 2014). Heatwaves exceed the normal temperature by 4.5 to 6.4 °C, while severe heatwaves temperature exceeds 6.4 °C (Singh, Mall and Singh, 2021; WHO, n.d.). In the last years, they have significantly increased in frequency and severity and should continue escalating because of climate change (NIDM, 2014; Singh, Mall and Singh, 2021; WHO, n.d.). In May 2015, heatwaves were particularly fatal, leading to 2,248 deaths (*ibid*). The most affected States include Rajasthan, West Bengal, Odisha, Bihar, and Gujarat (Singh, Mall and Singh, 2021; WHO, n.d.).

e) Tsunamis

Although not as frequent as other calamities, India is also at risk of tsunamis. These tsunamis happen most of the time because of earthquakes and cause the displacement of a large amount of water in the form of waves (NIDM, 2014). The Government of India (GoI) added tsunamis to the common disasters list after 2005 (*ibid*). The most recent and destructive in years was the 2004 Indian Ocean tsunami, where 12 405 lost their lives in India only, most coming from the Tamil Nadu and the Andaman & Nicobar Islands states (Reliefweb, 2005).

f) "Human-made" hazards

The GoI distinguishes other hazards as being anthropogenic. These include chemical and nuclear hazards resulting, for example, from industrial activities or transportation (NIDM, 2014). Between 2002 and 2010, 130 chemical incidents of this nature occurred, leading to the death of 259 people (*ibid*). Similar disasters include biological hazards such as epidemics, which recall the covid-19 pandemic (NIDM, 2014; NDMA, 2021). As of December 16th, 2021, a total of 476,478 people have passed away since the beginning of the pandemic in 2020 (New York Times, 2021).

2.2. Impacts of disasters in India: beyond fatalities

I presented these various hazards in terms of their casualties. However, disasters affect people in many other ways. For example, they also disrupt socio-economic conditions (UNDRR, 2020). Sometimes, these disruptions may be explicit, like collapsed buildings and destroyed livelihoods. For instance, after the 2004 tsunami, many lost their livelihoods because of damaged cropped areas, destroyed boats, and lost livestock (Reliefweb, 2005). The waves destroyed infrastructures, such as schools, health facilities, water supplies, and more (*ibid*). Around 235,000 residences were damaged (Reliefweb, 2005), and 50,000 people were left homeless (Joshi and Aoki, 2014). However, these socio-economic impacts may also be less explicit. For example, heatwaves can lead to loss of work capacity and power shortages affecting transport (WHO, n.d.).

Other impacts include the displacement of people. In 2019, floods led to 1.8 million displaced people (Eckstein, Künzel, and Schäfer, 2021). They can also put the health of people at risk. For example, floods can lead to malaria and cholera epidemics, while heatwaves can worsen cardiovascular and respiratory conditions (NIDM, 2014; WHO, n.d.). Disasters can also increase the conditions and vulnerabilities that lead to crimes, such as human trafficking or corruption (Krishna, 2021; Zutshi, Borah, and Bhakat, 2019). Importantly, all these impacts can happen simultaneously (NIDM, 2014).

2.3. The multiple facets of vulnerability in India

The geographical localization of India may explain why the country is at risk of some hazards. But disasters vulnerability goes beyond hazards exposition (Chakraborty and Joshi, 2016). For example, the most vulnerable States in India are not necessarily the most exposed ones (*ibid*). Rapid urbanization and poor planning, because of bad governance, enhance this vulnerability as it leads to weak infrastructures, facilities, and settlements, prone to falling when facing a hazard (UNDRR, 2020; Zutshi, Borah and Bhakat, 2019). Unplanned land use and population growth also lead to population and infrastructure density, making building collapses even more fatal (Zutshi, Borah, and Bhakat, 2019). Other reasons include that a large part of India's economy relies on agriculture and other climate-related activities, with few livelihood alternatives (Chakraborty and Joshi, 2016). Cyclones and floods can significantly destroy agriculture, destabilizing food security and threatening people's livelihoods (*ibid*).

Moreover, not everyone is equally affected by these disasters in India. Overall, the "impacts of disasters mirror the everyday condition of marginalized people in India" (Kumar, 2019, p. 212). For instance, farmers are particularly affected because they are dependent on the environment for their livelihoods (UNDRR, 2020). Factors of vulnerability include age, gender, and poverty (Krishna, 2021). Thus, the poorest sections of the society and most marginalized are among the most vulnerable, including scheduled tribes and scheduled castes (Chakraborty and Joshi, 2016; Khanna, 2009; UNDRR, 2020). Women, children, the elderly, the differently-abled, and the sick are also at most risk because of socially constructed power relations (Khanna, 2009). Kelman (2020) explores the idea of disasters vulnerability by ideology. From this point of view, some groups, such as women, are not more vulnerable to disasters (*ibid*). After all, hazards do not target some groups more than others. Instead, society creates roles and norms which make some people vulnerable in different ways (*ibid*). Women may be confined to societal norms (Kelman, 2020, Sikandar and Khan, 2019). Therefore, they may have more social restrictions limiting their capacity to face hazards (*ibid*). They can face discrimination and suffer from sexual violence, notably in temporary shelters (Kelman, 2020; Krishna, 2021; Sikandar

and Khan, 2019). They can experience illiteracy, limiting their capacity to access disaster information and be well prepared and receive warnings (Sikandar and Khan, 2019).

People belonging to lower castes may also face similar problems because of their status in Indian society. For example, they may have less access to relief materials and face discrimination (Krishna, 2021). They may also suffer from the exclusion from relief shelters if higher castes refuse to share them (*ibid*). Lower caste families also lack access to preparedness and protection information (*ibid*). Pre-disaster, they may have to settle in areas prone to hazards, most of the time in informal settlements, as they cannot afford to live anywhere else (Kumar, 2019). If they are not entitled to a property or land, they will not receive governmental post-disaster compensation, increasing their poverty (*ibid*).

2.4. Recovery stories

This section does not intend to do an in-depth review of all recovery activities of past disasters in India. Instead, it aims to explore some of the recovery lessons learned from two very disruptive disasters, namely the 2004 Tsunami and the 1999 Super-cyclone of Odisha.

a) The 2004 Indian Ocean Tsunami

The 2004 Tsunami recovery exposed how people have more faith in their local government than the national government (Joshi and Aoki, 2014). Thus, the recovery process was more successful when people had a great attachment to their communities and community leaders (*ibid*). However, local economy restoration was not a priority compared to infrastructures reconstruction (Régnier and al., 2008). Moreover, these reconstruction projects did not contribute to helping the local economy but rather enriching external contractors (*ibid*). Besides, many from the most marginalized sections of the society, such as fishers and lower caste, helped clean up post-disaster without receiving pay or safety gear (Kumar, 2019). They suffer from discrimination and prejudices (*ibid*). Two years after the event, it was unclear if the recovery should have stopped there or if, instead, it was an opportunity to develop socio-economic activities for the affected communities (Régnier and al., 2008). Humanitarian aid overlapped with development projects, recalling the

development and disasters nexus (*ibid*). Coordination between humanitarian and development aid was of great value, yet it was often missing (*ibid*). This raised questions about whether development agencies were using these events as opportunities to push their own agendas (*ibid*).

b) The 1999 super-cyclone of Odisha

Another recovery story comes from the post-super cyclone that occurred in the state of Odisha in 1999, with winds of about 260 km/h and storm surge up to 20 km inland, leading to more than 10,000 deaths (Chhotray and Few, 2012). As mentioned before, casualties are not the only impact of such disasters. Post-cyclone, much of the agriculture had been wiped out, many losing their livelihood (*ibid*). Lack of alternative livelihoods limited the recovery process of communities, and, as a result, many decided to migrate to other states, which led to displacement (*ibid*). People had worse economic capacity than in pre-disaster and could not build back their houses better, leaving them in worse conditions than before (*ibid*). As a result, people were left with ongoing vulnerabilities perpetuating the disaster long after the hazard hit (*ibid*). To ensure better recovery would have needed the government to play an accountable role with a holistic approach (*ibid*). It is especially true for lower castes, which were significantly excluded from the beneficiary list and were not entitled to compensation (Kumar, 2019). Overall, after the super-cyclone, the tsunami, and other major disasters, the recovery process showed to be more effective within communities with strong social capital and people with social networks (Chhotray and Few, 2012; Joshi and Aoki, 2014; Krishna, 2021). For example, people with families living in cities could migrate with them post-disaster or send one of their children for education and work with the hope of receiving money occasionally (Chhotray and Few, 2012).

2.5. Conclusion

This chapter highlighted how the geographical location of India allows for a diverse range of hazards. I presented some of the most common hazards in India, according to the National Disaster Management Authority. These included cyclones, floods, landslides, earthquakes, heatwaves, tsunamis, and "human-made" hazards. Although disasters may lead to fatalities, I presented examples of how impacts go beyond death tolls, such as loss

of livelihoods, homelessness, displacement, health problems, and criminality. I also explored how everyone is not equally vulnerable to disasters. I presented ways that societal norms limit people in their capabilities to prepare, face, and recover from disasters. I explored some of the learned lessons from two previous disasters, which showed that recovery is more successful in communities with social cohesion and networks. In the next chapter, I will explore how governments can manage these hazards and disasters through disaster risk activities. I will discuss it from the point of view of scholars but also the international community discourse, such as UNDRR. I will also present disaster management in India

3. MANAGING DISASTER RISKS

Disaster risk management (DRM) has two components, namely disaster risk reduction (DRR) and disaster management (DM) (Begum and al., 2014). DRR and DRM terms are formally accepted and recognized in the glossary of the United Nations Office for Disaster Risk Reduction (UNDRR, formerly UNISDR) to standardize practices (Kelman, 2018). In a few words, UNDRR (2017) defines Disaster Risk Reduction (DRR) as the "policy objective" of Disaster Risk Management (DRM). Or, as Kelman (2018) puts it, DRR is the framework while DRM is the actions.

This chapter aims to explore how disasters are dealt with in India and to put into perspective the establishment of the two Plans from an international discourse perspective. Thus, it first seems essential to start by presenting DRM in a comprehensive manner as well as the international DRR discourse, most specifically the Sendai Framework of Disaster Risk Reduction (SFDRR). The SFDRR is a top-down global agreement adopted in 2015, which India has signed. The Government of India (GoI) refers to it when dealing with disasters. A review of this international discourse is necessary to understand better how DRM and DRR reflect in disaster management in India.

3.1. Disaster risk management

Governance and disaster risk management (DRM) are crucial keys to facing disasters and minimizing their impacts (Ishiwatari, 2013; Oktari and al., 2020). When facing disasters, governments should ensure the fulfillment of communities' needs and safety (Crosweller and Tschakert, 2021). If well managed, governance can reduce vulnerability and risk exposure for better prevention (Oktari and al., 2020). To do so effectively, however, Ishiwatari (2013) argues that countries should have a focal agency coordinating efforts at various levels and whose responsibility is to plan, provide guidelines, and foresee budget provisions at the national level. In the case of India, the focal agency coordinating efforts is the National Institute of Disaster Management, part of the Ministry of Home Affairs (Ishiwatari, 2013). Moreover, Amaratunga and colleagues

(2016) argue that there is a need for accountability mechanisms to be in place to ensure that States are accountable to concerned communities.

Shaw (2020) pinpoints how science and technology have gained importance in DRR since the early 90s because of lessons learned from past disasters. The disaster risk reduction paradigm has shifted from understanding risk assessment to fostering resilience (*ibid*). On this, Albris and colleagues (2020, p.2) expose the crucial need for scientific expert knowledge in DRM, arguing that it plays a "vital role" in "identifying best practices", "producing risk assessments", and "refining models that anticipate future patterns of natural hazards".

In DRM, various stakeholders such as the government, communities, and the private sector should have responsibilities as they all have a role to play (Amaratunga and al., 2016; Ishiwatari, 2013; Nath, 2019). Ishiwatari (2013) argues that there might be gaps between the national institutional arrangements and the lived realities of the communities, therefore valuing shared responsibility between all actors, including the private sector, communities, and local governments. However, the actors in DRM do not always have the same interests at heart (Albris and al., 2020).

Yet, research and past lessons have also exposed the importance of community engagement to ensure that DRR efforts are effective (Tozier de la Poterie and Baudoin, 2015). Communities are first responders and suffer the most from disasters, justifying the need to involve them and foster their capacities and resilience (Nath, 2019). Oktari and colleagues (2020) argue that shared responsibility is genuinely possible and add that the engagement of communities is a way to promote their agency. Importantly, they warn of the governance's ineffectiveness at showing leadership and expecting too much from citizens' resilience (*ibid*). Community participation in DRM and DRR efforts suggests that people can have agency and participate in the decision-making that concerns them (Cornwall and Brock, 2015). It should also protect of the most vulnerable sections of the community (Nath, 2019).

3.2. Disaster Risk Reduction and the Sendai Framework for Disaster Risk Reduction

According to UNDRR (2017, online), disaster risk reduction (DRR) "is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development". DRR's objectives include minimizing, limiting, and adapting to disaster vulnerabilities and risks through policies and practices (Begum and al., 2014). Countries' disaster management plans should specify DRR goals, targets, indicators, and strategies, all under the guidance of The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) (UNDRR, 2017). The Third United Nations World Conference on DRR adopted the SFDRR in 2015 in Sendai, Japan, the same year as two other international meetings focusing on sustainable development and leading to global agreements:

- The United Nations Sustainable Development Summit in New York that led to the establishment of the 17 sustainable development goals (SDGs) and
- The United Nations Climate Change Conference in Paris that led to the Paris Agreement (Kelman, 2017; Shaw, 2020; Tozier de la Poterie and Baudoin, 2015).

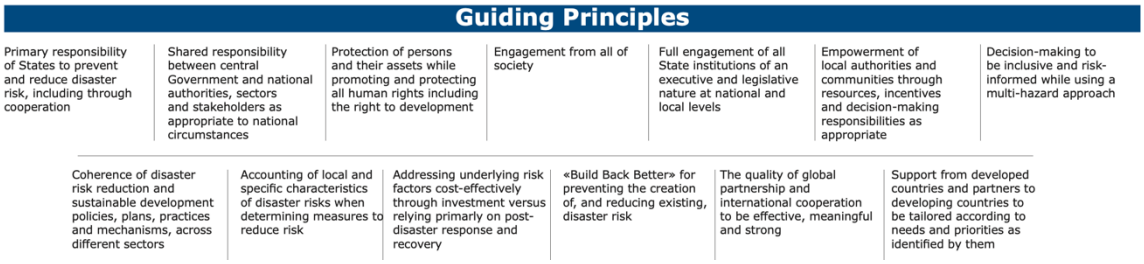
Although they are different in nature, these agreements share the same 2015-2030 timeframe and intend to ensure sustainability (Kelman, 2017).

The SFDRR is the third top-down global agreement on DRR, following the Hyogo Framework for Action of 2005-2015 and the Yokohama Strategy and Plan of Action for a Safer World adopted in 1994 (*ibid*). Signatory countries, including India, are not legally bound by the agreement, and their participation is therefore voluntary (Kelman, 2017). The Hyogo Framework led to changes in the disaster risk reduction discourse, focusing less on vulnerability and more on enhancing resilience, an idea that the SFDRR then fostered (Nath, 2019). The SFDRR aims to guide the "multi-hazard management of disaster risk in development at all levels as well as within and across all sectors" (UNISDR, p.36). By the year 2030, it expects "the substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries" (UNISDR, p.12). Its goal is to "prevent new and reduce existing disaster risk through the implementation of integrated

and inclusive (…) measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience" (*ibid*, p.12).

Figure 3

SFDRR Guiding principles



Note. From "Sendai Framework for Disaster Risk Reduction 2015 - 2030", by UNISDR, 2015, p.36. https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

Figure 3 presents the SFDRR's guiding principles. Among these, there is the responsibility of States to ensure DRR through shared responsibilities between all stakeholders, in coherence with sustainable development. There is also the need to empower communities and local authorities and to prevent future risks by building back better post-disaster. Finally, the framework suggests four priorities that States should consider in their disaster management:

1. "Understanding disaster risk
2. Strengthening disaster risk governance to manage disaster risk
3. Investing in disaster risk reduction for resilience
4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction" (*ibid*, p. 14).

Each priority includes recommendations for DM at national, local, global, and regional levels. The fourth priority, which notably refers to the recovery process, reflects the need to empower women and people with disabilities to ensure equal access to response and recovery activities (UNISDR, 2015). It notes how recovery, including rehabilitation and reconstruction, "is a critical opportunity to "Build Back Better", including through integrating disaster risk reduction into development measures, making nations and

communities resilient to disasters" (*ibid*, p. 21). At the national and local levels, the SFDRR recommends the implementation of its fourth priority through the cooperation of all stakeholders, including communities and the private sector, and the use of recovery as an opportunity to reduce future risks and integrate sustainable development practices while relying on lessons learned from the past (*ibid*, p. 22). In consultation with concerned people, relocating infrastructures and facilities outside of the disaster area is also recommended (*ibid*). Other recommendation includes enhancing local authorities' capacity to evacuate affected people and ensuring psychosocial support services (*ibid*).

The SFDRR considers the lessons learned from the Hyogo Framework (*ibid*), one of which was the better involvement of community participation that can take various forms, including Community-Based DRM and integration of indigenous knowledge (Tozier de la Poterie and Baudoin, 2015). According to UNDRR (2017, online), Community-based DRM "promotes the involvement of potentially affected communities in disaster risk management at the local level. This includes community assessments of hazards, vulnerabilities and capacities, and their involvement in planning, implementation, monitoring and evaluation of local action for disaster risk reduction". UNDRR also defines the "local and indigenous peoples' approach to disaster risk management" as "the recognition and use of traditional, indigenous and local knowledge and practices to complement scientific knowledge in disaster risk assessments and for the planning and implementation of local disaster risk management" (*ibid*).

a) Criticisms of the SFDRR

While the SFDRR supposedly considers lessons learned from previous frameworks, scholars and NGOs have also criticized it for not addressing essential elements regarding disaster risk reduction practices. For instance, Tozier de la Poterie and Baudoin (2015) argued that the SFDRR's focus on community involvement remained the same, but its focus on science, technology, and research has significantly increased. In other words, they argue that the agreement is even more expert-centered than community-centered compared to Hyogo or Yokohama, while it should have been the opposite (*ibid*). They call it a "regression" where communities went from valued "partners" to "aid recipients" (*ibid*,

p.137). Tozier de la Poterie and Baudoin (2015) have pointed out how references to community involvement are somehow imprecise in the framework and do not include significant ways to increase population engagement. It recalls the idea of buzzwords (*ibid*). "Buzzwords" are words with a positive connotation used in development discourse to give the impression that development actions and interventions are legitimate and justified (Cornwall and Brock, 2015, Schnable and al., 2021). The use of "participation" as a buzzword in development discourses can strengthen power relations rather than achieve the very essence of the word (Cornwall and Brock, 2015; Tozier de la Poterie and Baudoin, 2015).

Other criticisms of the SFDRR include that it focuses on climate change as a root of disasters to the detriment of other causes (Kelman, 2017). DRR practices should harmonize with climate adaptation (CA) strategies as we know disasters increase in frequency and intensity because of climate change (Begum and al., 2014). However, this focus also downplays other causes of disasters, including political reasons (Kelman, 2017). NGOs in South Asia have also argued that the SFDRR, hence the international community, overall fails to contribute to financing the required actions to achieve DRR (AIDMI, 2015). As a result, they argue that the SFDRR fails to truly address the needs of the most vulnerable (*ibid*). Lastly, other scholars such as Peters, Holloway, and Peters (2019) also raised the lack of consideration for the disaster-security nexus in the SFDRR. For instance, it fails to acknowledge how the DRR activities can be severely disrupted by conflicts already occurring in the country or enhanced by disasters, including gender-based violence, especially in the context of post-disaster (*ibid*). Indeed, disasters can jeopardize the security of some sections of the society, including the most marginalized, and this needs to be addressed to reduce the post-disaster vulnerabilities (*ibid*).

3.3.Disaster Management in India

Over the last two decades, Disaster Management (DM) in India changed its direction and has consolidated its establishment. Before 2005, the DM approach of the GoI focused on post-disaster activities, especially relief and response (Jha, Basu and Basu, 2015; Shakeri, Vizvari, and Nazerian, 2021). Since then, its approach has shifted from

reactive and relief-centric to proactive, centered on pre-disaster preparedness, mitigation, and prevention (Shakeri, Vizvari, and Nazerian, 2021). Four major disasters have expedited this shift, namely the Latur earthquake of 1993, the Odisha super cyclone of 1999, the Gujarat earthquake of 2001, and the Indian Ocean Tsunami of 2004 (Jha, Basu, and Basu, 2015; Shakeri, Vizvari, and Nazerian, 2021; Madan and Routray, 2015; Khanna, 2009). I presented in the previous chapter how these events were particularly destructive and caused massive losses in lives, infrastructures, and livelihoods. Knowing that disaster risks can be mitigated, this paradigm change aimed to minimize future losses while not impacting the country's development (Khanna, 2009).

The establishment of the Disaster Management Act of 2015 (hereafter referred to as "the Act"), as a legal framework of DM at all levels, concretized the paradigm shift (Shakeri, Vizvari, and Nazerian, 2021; Khanna, 2009). The Act defines DM in clause 2. (e) as a "continuous and integrated process of planning, organising, coordinating, and implementing measures which are or expedient for (i) prevention of danger or threat of any disaster; (ii) mitigation or reduction of risk of any disaster or its severity or consequences; (iii) capacity-building; (iv) preparedness to deal with any disaster; (v) prompt response to any threatening disaster situation or disaster; (vi) assessing the severity or magnitude of effects of any disasters; (vii) evacuation, rescue, and relief; (viii) rehabilitation and reconstruction" (Government of India, 2005, p. 2).

Under the Act, the GoI, specifically the Ministry of Home Affairs, created various DM authorities categorized into four levels, namely national, state, district, and local (*ibid*). The Act defines these authorities and their respective responsibilities and exposes the multi-level structure of DM in India (Madan and Routray, 2015; Shakeri, Vizvari, and Nazerian, 2021). Figure 5 shows some of the main authorities and institutions of DM in India by levels.

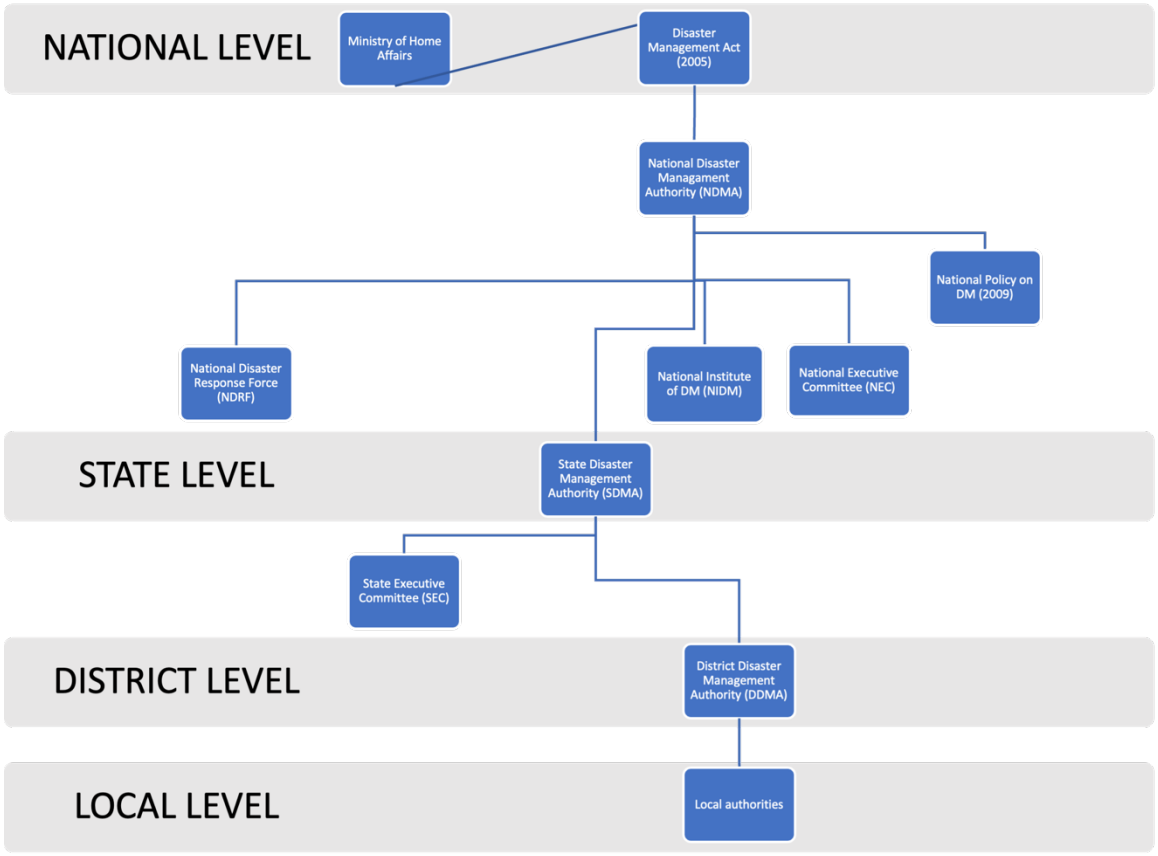
Among these is the National Disaster Management Authority (NDMA), which lays out policies and formulates DM guidelines for other stakeholders to follow (Jha, Basu, and Basu, 2015). Thus, the 2009 Policy was defined and created by the NDMA. The National

Executive Committee (NEC) under the NDMA has the mission of developing national plans that respect the Policy and its guidelines (Government of India, 2005). Then, the NDMA approves these plans (*ibid*). Other responsibilities of the NDMA include providing funds and resources (*ibid*). The Act and the Policy both enable the participation of stakeholders at all levels and across various sectors of activities (Shakeri, Vizvari, and Nazerian, 2021). Nath (2019) points out how coordination between stakeholders at all levels is essential to ensure DM success.

While the Central Government formulates policies, guidelines, and plans and reinforces the coordination among stakeholders, State Governments have the primary responsibility for DM activities (Shakeri, Vizvari, and Nazerian, 2021). The State Disaster Management Authority (SDMA) holds similar responsibilities to the NDMA but at the State Level (Government of India, 2005). The SDMA lays down policies and approves and coordinates the implementation of State DM plans, which the State Executive Committee (SEC) elaborates (*ibid*). Then, the District Disaster Management Authority (DDMA) has responsibilities at the district level (*ibid*). It oversees the preparation of district plans in collaboration with local authorities (*ibid*). The SDMA then approves DDMA plans (*ibid*). Local authorities also ensure the coordination of activities provided by the national, state, and district DM projects (*ibid*). The creation of the DDMA exposes a significant change in DM towards decentralization (Jha, Basu, and Basu, 2015). Along with responsibilities reserved for local authorities, it enables the inclusion of local knowledge and community involvement in DM (Jha, Basu, and Basu, 2015).

Figure 5

The institutional framework of disaster management in India



Note. Inspired from the "National Disaster Management Plan", by the NDMA, 2019, p. 15, https://ndma.gov.in/sites/default/files/PDF/ndmp-2019.pdf [1]

This review of the National Disaster Management Act in India helps understand its context. It also allows for a better comprehension of the purpose of the 2016 and 2019 National Plans in this multi-level approach. Thus, some events have rushed a paradigm shift in DM. Since 2005, attention has been laid on pre-disaster activities to prevent and mitigate future disasters. It had also led to an establishment and consolidation of DM authorities, leading to creation of the 2016 and 2019 National Plans. National Plans offer guidelines to apply at all levels through different stakeholders (Government of India, 2005). Under the reserves of the Act, they should include prevention, mitigation,

[1] This framework aims to show some of the main institutions and authorities. The 2019 framework Plan inspired this figure. However, as mentioned in the Plan, it shows a coordination pathway, but it is not a chain of command.

preparedness, and capacity-building measures. Importantly, these need to be in harmony with developmental plans (*ibid*). They lay down stakeholders' roles and responsibilities and articulate financing provisions (*ibid*). The 2016 Plan was the first National Disaster Management Plan of India and the first in the world to align with the SFDRR (AIDMI, 2016, UNDRR, 2016a). It has the merit of aligning with the SFDRR and successfully applying its four priorities (Shakeri, Vizvari, and Nazerian, 2021). Notably, the 2016 Plan reflects the resilience discourse prevailing in the SFDRR (Nath, 2019). The UNDRR also praised it and acknowledged India's leadership in terms of DRM (UNDRR, 2016b). As soon as 2017, the revision of the 2016 plan was collaboratively taking place with stakeholders (NDMA, 2019). Eventually, this led to the 2019 Plan, which aims to be more inclusive (*ibid*). The revised Plan also intends to be coherent with the three important international agreements of 2015, namely the SFDRR, the SDGs, and the Paris Agreement (*ibid*).

NGOs and local organizations in India have also committed to ensuring disaster management and applying the SFDRR into practice. It is the case, for instance, of the All India Disaster Mitigation Institute, an Indian public charitable trust, which promotes the efforts of the SFDRR through various outreach and advocacy initiatives (AIDMI, n.d.). Other examples include the work of the Confederation of Risk Reduction Professionals in India, which empowers the youth through capacity building programs and training so that they become agents of change in disaster risk reduction while relying on the SFDRR priorities action (UNDRR, 2021).

3.4.Conclusion

This chapter started by exploring disaster risk management (DRM) and its relevance. Governments have responsibilities towards communities affected by disasters. Through governance, most specifically with a focal agent coordinating efforts, risks and vulnerabilities can be reduced. Science and knowledge have roles in DRM to ensure best practices. DRM should include all stakeholders' participation. However, there might be gaps between the interests of some stakeholders, including the government or private

sector, and the communities' lived realities. This chapter has also shown the importance of involving communities in DRM.

I then briefly explored the disaster risk reduction discourse and the Sendai Framework of Disaster Risk Reduction (SFDRR). I presented SFDRR priorities and guidelines and some of its criticisms. It led me to explore disaster management in India through the responsibilities of its various institutions. I also presented some examples of the involvement and commitment of Indian local organizations regarding the SFDRR. It offered an outlook on the institutional context that led to the 2016 and 2019 National Plans in relation to the international discourse perspective. I will continue the exploration of this context in the next chapter, but from the national perspective, hence the social and political context in India.

Across these three previous sections, one theme was predominant. Indeed, there is a need for coordinating efforts between all stakeholders, including communities. A literature review has shown how stakeholders' participation and community engagement should be part of DRM practices. The SFDRR also explicitly refers to it, but some scholars have criticized community participation for being vaguely mentioned and being yet another buzzword. Still, India's local organizations are committed to implementing the SFDRR despite its criticisms. Finally, disaster management in India also emphasizes decentralized efforts at all levels and through all stakeholders. However, it is still unclear if all phases of the Indian national plans, including recovery, embody this strategy. It is worth mentioning that although the Act, the Policy, and 2016 Plan all promote stakeholders' coordination, Nath (2019) argues that in practice, it has been ineffective.

4. SOCIAL AND POLITICAL CONTEXT

The government of India is a federal state (UNDRR, 2020). Thus, the Central government has more power than the States and Union Territories (UT) (*ibid*). The country consists of 28 states and 8 UTs, divided into districts and local districts (*ibid*). According to the World Bank (2020), the population of India in 2020 was approximately 1.38 billion.

Figure 4

Map of India's States and Union Territories

Note. From "India", by Encyclopedia Britannica, 2021, online, https://www.britannica.com/place/India

In this chapter, I will continue exploring the context under which the government of India established the National Disaster Management Plan of 2016 and 2019, but now from a national perspective. To do so, I will highlight the political history of India until the 2014 election of the current Prime Minister of the country, Narendra Modi. This review will lead me to explore the bases of the political and social ambitions of Modi for India and

the current impacts on the communities. Doing so will put into perspective the implementation of the 2016 Plan. Then, I will explain the context of the second Plan published at the end of 2019. Throughout this chapter, I will also identify various criticisms from NGOs concerning disaster management in India.

4.1. From the independence to Narendra Modi

After the independence of India from the British colonial rule in 1947, the Indian National Congress Party and the Nehru-Gandhi family mainly dominated the country's political landscape within a secularized democracy (Jaffrelot, 2019a). Since then, according to Jaffrelot (2019a, p.15), India's democracy underwent two phases, namely "democratization of democracy"[2] and "ethnic democracy"[3]. The author argues that the first phase started in the late 80s and aimed to break the political tradition hitherto dominated by the elites of the society. Then, in 2014, the Bharatiya Janata Party (BJP) and its chief, Narendra Modi, came to power, effectively plunging the country into the second phase, with a democracy ruled on the basis of ethnic differences and Hindu nationalism (*ibid*). Modi was re-elected for a second mandate in 2019 and has been in power since then (Jaffrelot, 2019b).

To understand the political aspirations of the government and the development of India in general today, one must first take a look at the story of its Prime Minister, Narendra Modi. Before becoming head of the country, Modi was the Chief Minister of the State of Gujarat, where he had undeniable success among his electorate (Jaffrelot, 2019a). One key element of this success was his populist approach (*ibid*). Indeed, Modi comes from a low caste family, which considerably differs from the Indian political approach traditionally dominated by upper castes (*ibid*). He then became the favorite of the middle-class people (Jaffrelot, 2019a and Jaffrelot, 2015). In 2014, he won the national elections promoting the development of India based on the "Gujarat Model," meaning that he wanted to reproduce what he had successfully done in Gujarat as a Chief Minister in terms of development and apply it to India (Jaffrelot, 2015). Needless to say, he won his bet and reached the steps of

[2] My translation from French
[3] My translation from French

power in the country. While this *may* seem like a success story for the man himself and part of his electorate, it is far from the only side of the coin.

4.2. The "Gujarat model" and the 2016 National Disaster Management Plan

Reproducing the Gujarat development model has been the slogan of the first election of Modi and represents his political and economic aspirations for the country (Sud, 2022). It has been pictured as an opportunity for India to achieve the development other countries reached, such as Japan (Drèze, 2014). Since the Indian economy was declining, public opinion welcomed this development promise with the hope of a better life (Jaffrelot, 2019a). Recall that sustainable development maintains that basic needs should be met through economic development while considering the environment to ensure sustainability for societies of today and tomorrow (WCED, 1987). Although it may hold its share of critics, sustainable development is necessary to ensure social justice (Holden and al., 2017a). However, the question is: is that what the Gujarat model is really about?

Indian economists Jean Drèze and Amartya Sen argued that it "exemplified fast growth, slow development" (cited in Jaffrelot, 2015, p.837). Jean Drèze has also reframed it as the "Gujarat muddle", arguing that it is not a model to follow (Drèze, 2014). There are some visible markers of the growth within this eastern state. Still, other indicators such as poverty, education, or health have different outcomes, not to mention the "state repression" and "environmental destruction" (*ibid,* online). In other words, the model reflects economic growth, but it failed to be translated into sustainable development and human growth (Jaffrelot, 2015). Using a politic of "us" versus "others", this "cracked" model also deepened the social inequalities through an authoritarian approach (Sud, 2022, p.120). As a result, not everyone gained from this growth, and some people suffered more than others. Specifically, Adivasis[4], Dalits[5], and Muslims[6] are among the groups who did not gain from the governance of Modi in Gujarat and actually lost the most from it (Jaffrelot, 2015).

[4] Scheduled Tribes
[5] Scheduled Castes
[6] Although India has a history of communal violence attacks against Muslims, the situation has been incredibly violent under the governance of Modi, which promotes Hindu Nationalism and encourages Hindu nationalist movements at the expense of other religions, explicitly discriminating against Muslims (See Jaffrelot, 2019a, Sharma, 2019, and Sud, 2022).

First, the Dalits and the Adivasis ended up economically and socially worse than before and worse than in other states (Jaffrelot, 2015). Their debt increased, ending up in more poverty (*ibid*). Also, many of them faced eviction from their land (*ibid*). As for Muslims, they were poorer in Gujarat than in other states and faced more discrimination (*ibid*). For instance, they were discriminated against by the state government, which left them out of some funds and schemes (*ibid*). However, the most explicit examples of this ethnic discrimination and violence remain the 2002 Gujarat riots targeting the Muslim communities while Modi was in power and lacked the will to end it. (Sud, 2022). Overall, as Jaffrelot (2015) puts it, the Modi government in Gujarat, now being translated at the national scale, is an expert at religious and social polarization.

Another important point regarding the Gujarat Model is specifically related to disaster management. In January 2001, an earthquake of 7.9 on the Ritcher scale hit Gujarat, near the Pakistan borders, leaving 300,000 people and killing at least 30,000 people (Save the Children, 2002). While Narendra Modi was not the Chief Minister of Gujarat when it happened, he assumed this position a couple of months later, when the state was still suffering from the impacts of the earthquake (Sud, 2022). This post-disaster phase became an opportunity for Modi to justify the need to do things differently and to start applying his Gujarat model (Smith, 2018). It also led to more Hindu nationalist sentiments, as rebuilding the affected areas served to "reinforce new identities" and exclude those who did not correspond to this vision, namely the Muslim population (*ibid*, p. 47). Thus, the earthquake pushed Modi into power and helped him implement his development vision focused on capitalism and Hindu nationalism (Sud, 2022).

This review of Gujarat's political and social context helps understand the background of Modi and his goals for India when he won his first election in 2014. As of 2016, it was clear that his ambitions were not going to take form yet, as Indian agriculture faced a severe crisis following previous bad monsoon seasons in 2014 and 2015, which led to a decline in job opportunities (Jaffrelot, 2017). But Modi continued pushing his "development" agenda and Hindu nationalism (*ibid*). As for marginalized groups, they continued facing discrimination (*ibid*). This review puts into perspective the first National

Disaster Management Plan of India, which was established in 2016, two years into the first mandate of Modi. As a result, it is not surprising that some NGOs were disappointed in the lack of inclusivity in the first Plan. Indeed, the International Dalit Solidarity Network and ActionAid India argued that vulnerable sections of the society, including Dalits, women, and disabled people, are excluded from the Plan, notably the recovery phase (Bhalla, 2016). Before implementing the 2016 Plan, the All-India Disaster Mitigation Institute also raised the importance of involving all community members when planning disasters, putting great emphasis on community-level disaster management (AIDMI, 2015). This review is however insufficient to put in perspective the revised version of the Plan published in 2019. Thus, it seems essential to dive into the political and social context that prevailed when Modi won his second mandate in 2019.

4.3. The 2019 election and the 2019 National Disaster Management Plan

By the end of 2018, before publishing the 2019 Plan, the GoI published a draft version of the revised plan to solicit feedback from various actors (Ursila, 2018). Some Indian NGOs had access to this draft and raised some issues to address in order to make the plan more inclusive (Ursila, 2018; TROSA, Sphere India and OXFAM India, 2018). Oxfam India held a national consultation with Sphere India, Transboundary Rivers of South Asia (TROSA), and Inter Agency Group of Kerala (TROSA, Sphere India and OXFAM India, 2018). Better social inclusion of all community members was highlighted as an essential point to address (*ibid*). Indeed, this consultation report criticizes how the 2018 draft does not mention minorities and requests a revision of the draft to better include all, especially religious, ethnic, linguistic, and locational minorities and gender minorities such as transgender people (*ibid*). It also specifies the need to incorporate and emphasize the role of civil society groups (*ibid*). Moreover, the report recommends that the plan should be based on the "principle of 5Rs of inclusion" framework, which includes "Recognition, Respect, Representation, Restitution and Reclamation" (*ibid*, p.3). Few recommendations are made explicitly regarding the recovery chapters, however. The recommendations include the need to incorporate lessons learned documents, coordinate transboundary recovery efforts, and engage all stakeholders (*ibid*).

Around the same time, others were also criticizing the outcome of the 2016 Plan until then. Eilia Jafar, the head of the disaster management unit at CARE India, argued that implementing disaster management plans in India is still a challenge (Jafar, 2018). One suggestion, she added, would be to adopt a better collaboration between all stakeholders, including communities (*ibid*). This issue was also addressed in the Oxfam India national consultation, where participants argued for better coordination of efforts among civil society organizations (Ursila, 2018). Scholars have later argued in the same vein that the fundamental paradigm shift required in disaster management in India is a bottom-up approach (Ogra and al., 2021). It is crucial to better engage with communities at the local level (*ibid*).

Not long after the 2018 recommendations, Modi was elected for his second mandate in May 2019. While his ambitions remained similar, the outcome of this election was somewhat different than in 2014. Indeed, Modi played the card of the "self-made man" and the "pro-poor" even more than he did before (Jaffrelot, 2019b, p.153). As a result, many from lower castes and Scheduled Castes (SC) voted for him (*ibid*). However, it should be noted that Modi's policies led to more inequalities (*ibid*). Therefore, this is not to say that marginalized and poor people benefited from his political decisions (*ibid*). Instead, he knew how to present himself as a populist leader and convince people of the opposite. As a result, whereas NGOs would criticize the government for not being inclusive enough in its 2016 Plan and would suggest being more such after consultations regarding the 2018 draft, the vulnerable sections of the society acclaimed Modi and voted for him for a second mandate as he played the "pro-poor" card. In this context, the second National Disaster Management Plan was published at the end of 2019.

4.4. Conclusion

In this chapter, I have explored India's political and social context under which the National Disaster Management Plans of 2016 and 2019 were created. To do so, I have started by briefly discussing the country's political landscape from its independence until the first election of Narendra Modi in 2014. This outlook was relevant to understanding his political and social aspirations for the country, mainly because Modi was the Prime

Minister under which both Plans were established. Overall, I highlighted how Modi gained people's votes by promoting a development agenda based on the model he put in place when he was the Chief Minister of Gujarat. However, I also pointed out how this model was flawed and addressed growth rather than development, leaving behind some of the most vulnerable sections of the Indian society and worsening social inequalities. Importantly, I also raised the Hindu nationalism agenda of the government. Then, I discussed the context of Modi's second election in 2019, where playing the card of the "pro-poor" was beneficial for the Prime Minister as he gained more votes from the lower castes and SC.

Throughout this chapter, I also raised some criticisms made by Indian NGOs regarding disaster management in India. First, I highlighted how, before establishing the first Plan in 2016, NGOs were stressing the need to involve communities in disaster management. Then, the 2016 Plan was criticized for failing to address the needs of the most vulnerable. As for the 2019 Plan, some NGOs consulted regarding the draft and recommended ensuring better collaboration between stakeholders, including communities, and being more inclusive. Now that post-disaster recovery management in India has been introduced and put into perspective from an institutional perspective and then from a political and social perspective, I will define the concepts I relied on to answer my research question in the next chapter.

5. CONCEPTUAL AND THEORETICAL FRAMEWORK

To answer my research question and to better understand the way the Central Government of India (GoI) frames and justifies "post-disaster recovery" in its 2016 and 2019 National Disaster Management Plans, I rely on two key concepts: "disaster" and "recovery". In this chapter, I will start by defining and exploring the debates around these two concepts. Overall, there is no consensus on one definition of "disaster", and therefore, the way we understand it may vary according to disciplines and perspectives (Oliver-Smith, 2019; Perry, 2018). As for recovery, there is some technical lingo used by UNDRR to describe what it means in terms of DRM. Although I will explore UNDRR's definition, I will also go beyond these to discuss other ways of thinking about recovery. Notably, I will raise questions regarding who decides what recovery should look like and briefly explore the relationship between post-disaster recovery and the opportunities for development.

Lastly, I will conclude by stating my position regarding these two concepts. The way I understand "disaster" and "recovery" will influence my whole research approach and how I will discuss the findings. In short, I align with the argument that disasters are not natural and are rather constructed through choices. Moreover, I understand recovery through the lens of "shealing" from scholars Ilan Kelman and Kasia Mika (2019), which refers to "slow recovery" or "later recovery".

5.1. Disasters: definitions and debates

How we define and understand disasters may encompass many different phenomena, making the concept hard to define (Oliver-Smith, 2019). Kelman (2020, p. 16) defines a "disaster" as "a situation requiring outside support for coping". While this definition might seem vague, he argues that it works "at the individual level and at the international level, matching UN glossaries, researcher's viewpoints, emergency services' interests, and dictionaries" (*ibid*, p.16). Although their focus is mainly on technicalities, definitions provided by the United Nations Office for Disaster Risk Reduction (UNDRR, formerly UNISDR) and DRM agencies are still relevant because they set administrative boundaries for DRR policies and practices (Perry, 2018). They also offer some insight into

the basic principles that frame some actions (*ibid*). Yet, these organizations are not neutral, and their definitions notably legitimize their actions (Oliver-Smith, 2019). This demonstrates how definitions may vary from the author's perspective and agenda.

UNDRR (2017, online; n.p.) defines a "disaster" as "a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts". According to the organization, disaster's impacts "can be immediate and localized, but is often widespread and could last for a long period of time" and they "may test or exceed the capacity of a community or society to cope using its own resources, and therefore may require assistance from external sources" (UNDRR, 2017, online; n.p.).

When looking into definitions from social scientists, Perry (2018, p. 5-8) classifies the evolution of the concept of disaster in three different periods, namely "the classical" period, "the hazard-disaster tradition" period, and "the disaster as a social phenomenon" period. A significant feature of the classical era was the understanding of disasters as an event, which acts as a catalyst and causing social disruptions (*ibid*). Oliver-Smith (2019, p.33) also exposes how scholars from the "non-routine" school of thought argue that disasters are disruptive and create disorder. However, he also explains how other scholars, such as Hewitt are more nuanced (*ibid*). The latter argues that the non-routine argument would imply that before disasters were societal equilibrium, which is not necessarily accurate (*ibid*).

Human ecology, which studies the relationship between human systems and nature, influenced the second period mentioned by Perry (2018). Indeed, from the hazard-disaster tradition point of view, a disaster is "an extreme event that arises when a hazard agent intersects with a human use system" (*ibid*, p.8). Various scholars (see O'Keefe and al., 1976; Wisner and al., 2012) have argued that no disaster is natural. Hazards themselves are not a threat but instead become as such as they interact with human vulnerability and social contexts (Kelman and al., 2015; Oliver-Smith, 2019; Wisner and al. 2012). Similarly,

Oliver-Smith (2019, p.33) explores the "environmental versus social location of disasters" discussion, which, he argues, is one of the most important debates among disaster scholars. "So-called-natural disasters" tend to refer to those involving natural hazards (Kelman and al, 2016, p.130; Wisner and al., 2012). On the other hand, however, other scholars such as Stallings and Quarantelli have warned not to define disasters by their causes and consequences, including vulnerability (Perry, 2018). According to them, although these are important to understand disasters, "they are not critical definitional constituents" (*ibid*, p.3). Yet, defining disasters without their relation to their social context does not show the whole picture. In 1976, O'Keefe and colleagues were already raising this issue, arguing that the growing vulnerability of societies in the world explains the increasing number of disasters.

Lastly, the third period exposed by Perry (2018), "the disaster as a social phenomenon", moves away from the strict perspective of disasters in terms of physical destruction and damages. Instead, it refers to the disruption of social systems in place. Vulnerability is perceived as socially constructed, context-sensitive, and created in the first place by humans themselves, notably through their actions and values (Kelman, 2018; Kelman and al., 2016; Perry, 2018). In that sense, are disasters "objectively identifiable" phenomena, or are they "subjective, socially constructed" processes (Oliver-Smith, 2019, p.32)? When moving away from a perspective of disasters in terms of "material characteristics and time dimensions", a broader range of events such as social phenomena can be understood as disasters (Oliver-Smith, 2019, p.32).

As mentioned, many definitions of disasters, including the one provided by UNDRR, refer to the capacity of communities to face an event that results in damages. It refers directly to vulnerability and, more implicitly, to resiliency. Resilience-building efforts aim to ensure that communities can face hazards, therefore preventing disasters (Kelman and al., 2016). On the contrary, vulnerability is considered a cause of disasters. Hence, from that perspective, while resilience gives communities the capacity to face disaster, vulnerability reduces or alters it. Overall, this thesis aligns with the definition provided by Kelman (2020) and presented at the beginning of this section. Specifically,

disasters “are defined by their societal impacts, not by the degree or scope of any influence from nature” (*ibid*, p.16). I will explore my position in this regard in the conclusion.

5.2. Recovery

“Recovery” refers to one of the phases of DRM and DRR, which starts after the response phase. Whereas the response period focuses on rapid relief activities, recovery focuses on responding to the longer-term needs of affected populations (Mika and Kelman, 2019). UNDRR defines “recovery” as:

> The restoring or improving livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and “build back better”, to avoid or reduce future disaster risk. (UNDRR, 2017, online; n.p.)

This definition underlines the need to take recovery actions in harmony with sustainable development. It also mentions building back better as a principle to follow for successful recovery. The idea of “Build Back Better” (BBB), started to be a matter of discussion after the 2004 Tsunami (Benge and Neef, 2020; Mannakkara and Wilkinson, 2014). BBB as the solution to recovery draws criticism from various scholars. Before exploring these critiques, I will present the institutional definition of BBB and its purpose.

UNDRR defines “BBB” as:

> The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment. (UNDRR, 2017, online, n.p.)

Traditionally, recovery would imply going back to the pre-disaster conditions (Mannakkara and Wilkinson, 2014). However, these conditions include vulnerability,

which was initially the cause of the disruption (Kelman and al., 2015; Mannakkara and Wilkinson, 2014). The 2004 Tsunami has shifted the understanding of recovery in the international community and instead reflected the need to prepare for future risks (Fernandez and Ahmed, 2019; Mannakkara and Wilkinson, 2014). The principle of BBB, which is at the heart of institutional recovery actions, aims to establish standards that focus on resilience-building in the aftermath of disasters (Mannakkara and Wilkinson, 2014).

But we should note that this paradigm shift also meant focusing more on other phases of disaster, such as mitigation and preparedness. In order words, scholars have argued that planning is more efficient than relief work, as it focuses on disaster causes rather than merely its symptoms (Etkin, 1999; O'Keefe and al., 1976). This argument also aligns with the principle of DRR mentioned in the SFDRR, where resilience-building is the solution to reduce future risk. However, as a result, the recovery phase is less explored than others (Joseph and al., 2021; Mannakkara and Wilkinson, 2014). Moreover, it focuses less on the needs of individuals and more on those of the "larger macro systems" (Joseph and al., 2021, p.1).

Second, studies have questioned the efficacity of these mainstream efforts, arguing that they impose expert-centric ideas on communities whose needs may differ (Joseph and al., 2021; Su and Le Dé, 2020). Indeed, recovery, like other phases of disasters for that matter, is managed by States and agencies rather than concerned people (Joseph and al., 2021). BBB seems to focus mainly on rebuilding infrastructures at the expense of social, psychosocial, economic, and political needs (Fernandez and Ahmed, 2019; Su and De Lé, 2020). Thus, the way these communities understand recovery may differ from these imposed perspectives (Su and De Lé, 2020). As a result, it can be harmful and counterproductive (Benge and Neef, 2020; Joseph and al., 2021). For example, Su and De Lé (2020) have exposed how institutions leave people with their own interpretation of "better" from BBB, which does not necessarily mean "safer". The fact that communities do not always have the funds and adequate training to implement these BBB standards does not help either (Su and De Lé, 2020). Besides, BBB is not necessarily the priority for affected communities (*ibid*). Instead, some would prefer going back as soon as possible to

conditions that evoke a semblance of routine rather than being dependent on NGOs during the long process of BBB (*ibid*). Tradition and culture, which are no less important, can also influence this preference for returning to disasters risks (Benge and Neef, 2020). In that sense, attempts at BBB actions should "ensure that people are able to decide for themselves which risks they are willing to live with" (*ibid*, p. 21)

This is not to say that recovery planners, who can act as facilitators, are not beneficial (Kim and Olshansky, 2014). Notably, they can decrease the tension between the sense of urgency of communities and the deliberation needed to achieve BBB standards (*ibid*). However, there is a need to better involve communities in their recovery process (Benge and Neef, 2020; Kim and Olshansky, 2014; Mannakkara and Wilkinson, 2014; Su and Le Dé, 2020).

Lastly, this bureaucratic top-down perspective of recovery has also been criticized for being just another way of legitimizing development (Benge and Neef, 2020; Joseph and al., 2021). BBB starts from the premise that post-disaster is an opportunity to do better, change, and improve (Fernandez and Ahmed, 2019). The UNDRR definition openly addresses the need to be in harmony with sustainable development principles. Considering that the vulnerable pre-disaster conditions that have created disasters include poor development, this idea is not necessarily negative. But development itself, including sustainable development, also has its share of critics. Gilbert Rist (2013) is known for his development critiques, arguing that it is an ideal imposed by Westerners. He argues that development exists through institutions that legitimize their actions in the name of better living conditions for everyone (*ibid*). Development is then merely another "buzzword" (Rist, 2007). Buzzwords "tell us about priorities and structure action" (Schnable and al., 2021, p.27). Regarding sustainable development more specifically, Rist (2006) argues that it is an oxymoron that combines two opposite ideas, namely development and growth with respect to the environment. Thus, the problem with the idea of post-disaster recovery and BBB, is that, just like some development practices, it is implemented through a top-down approach that fails to address the needs of those affected (Joseph and al., 2021). From this perspective, underdeveloped pre-conditions justify BBB, and vulnerable people become

just another object "to be managed and directed towards progress" post-disaster (Benge and Neef, 2020, p.12).

Mika and Kelman (2019) suggest the concept of "shealing" to define slow recovery. They argue that recovery takes time and advocate for an understanding of recovery that considers its ongoing and continual process, which does not necessarily start at the same time for everyone (*ibid*). Shealing goes beyond the idea of physical recovery and considers the slow psychological healing that needs to be addressed post-disaster (*ibid*). They argue that resilience and vulnerability can exist simultaneously and advocate for a non-exploitive reconnection between societies and their environment as a means of recovery (*ibid*). Although important, post-disaster vulnerabilities need to be addressed the same way pre-disaster vulnerabilities are. This argument also echoes the fact that some people affected by disasters consider recovery as a period of surviving these exacerbated or new vulnerabilities (Su and Le Dé, 2020). Shealing is also very much related to dealing with injustice (Mika and Kelman, 2019). Joseph and colleagues (2021) also advocate for focusing on structural inequality in disaster recovery. For example, poor governance, corruption, and conflicts can be reasons for failed recovery actions (Fernandez and Ahmed, 2019; Wisner, 2017).

5.3.Conclusion

For this thesis, I align with the argument that disasters are not natural, not objective, and not politically neutral. Instead, I understand disasters as socially constructed. From this point of view, I agree that the cornerstone of disasters is not hazards but rather human vulnerability. However, I emphasize that vulnerability is rooted in politics and structural inequalities (Wisner, 2017). Oliver-Smith (2019, p.43) argued that disasters are not so much a failure to adapt to hazards but more "the outcome of exposure and the unequal distribution of risk in society." Therefore, I align with the definition of Kelman and colleagues (2016, p.130), according to which vulnerability "encompasses human decisions, values, governance, attitudes, and behaviors forming situations in which hazards could potentially cause harm". Moreover, although natural, I recognize that hazards can also be anthropogenic (Kelman, 2018). Human actions and decisions have created and fostered

human vulnerability and have increased the frequency and intensity of natural hazards, which results in disasters.

On the other hand, I agree with the perspective of disasters being non-routine and disruptive. However, I nuance this argument by questioning who decides what recovery should look like? I do not aim to advocate for a return to pre-conditions. I recognize that this would imply going back to pre-disaster vulnerabilities and likely reproducing disasters. I recognize the need for resilience building and pre-disaster planning. That said, I also highlight the importance of a better understanding and recovery planning. This thesis aligns with the argument for better incorporating community participation into the recovery process in light of the previously explored debates regarding disaster. In DRM, the implication of local authorities and communities is crucial to ensure that national efforts match local needs. However, I also nuance by arguing that the use of "community participation" as merely a "buzzword" does not serve the needs of communities either. It is also important not to expect too much from communities. DRM includes different stakeholders, all of which should have shared responsibilities.

In that sense, I agree with the critiques above regarding BBB and argue that post-disaster recovery cannot just become another way to justify development actions. Although sustainable development practices are laudable on paper, I agree with the limits raised by Rist and question whether top-down paradigms like development and, in this case, the institutional concept of BBB, address communities' needs. Moreover, I wonder who truly benefits from these actions? Finally, I align with the concept of shealing as exposed by Mika and Kelman (2019). I do not consider resilience strictly the opposite of vulnerability and the solution to the problem. Instead, I agree that both can happen simultaneously (Mika and Kelman, 2019).

Overall, in this chapter, I have defined the two concepts I rely on to answer my research question. Then, I have positioned myself in terms of the debates. In the next chapter, I will explain the research design I have used to answer my question.

6. RESEARCH DESIGN AND METHODOLOGY

To explore how the Government of India (GoI) frames and justifies the post-disaster recovery phase in its 2016 and 2019 National Plans, I used a mixed research design, namely Constructivist Grounded Theory (ConGT) and Textual Analysis. My use of this mixed-method took its inspiration from Johnson's (2014) employment of ConGT and Discourse Analysis in her research on educational practices in Australia. However, I adapted the methodology accordingly to the context of my research. As Johnson (2014, p.101) points out, opting for this creative and flexible yet complementary method is an advantage, as grounded findings from the data strengthen "the contextual nature of the work and the overall research contribution". Moreover, it allows for an adherence "to the very theoretical principles underpinning the work" and "the study's intended focus" (*ibid*, p.102).

In the next two sections of this chapter, I will discuss the research designs I used for my analysis. First, I will be start by defining ConGT. Then, I will explain why I chose the 2016 and 2019 National Plans for my sample and how I have analyzed these documents with my research design. Lastly, I will present my positionality in terms of my research and the limitations of my findings and analysis.

6.1. Constructivist Grounded Theory

Grounded Theory (GT) is a strongly inductive research design where data collection, analysis, and report redaction happen simultaneously (Gaudet and Robert, 2018, Paillé, 1994). Overall, the objective of this method is to produce theories that are grounded in the data (*ibid*). Unlike content analysis, researchers in the GT approach are in a questioning process (Paillé, 1994). In that sense, they aim to explain and describe (Glaser and Corbin, 1990). However, since Glaser and Strauss developed classical Grounded Theory (CGT) in 1967, different schools of thought have adapted the approach, and scholars have been using aspects inspired by the methodology without necessarily mobilizing all of it (*ibid*). For this research, I took on the advice of Glaser and Corbin (1990) to first get familiarized with the context of the project before it begins. I have done this while keeping in mind that the analysis should start "as soon as the first bit of data is

collected" (Glaser and Corbin, 1990, p.6). From there, each data point brought me to another one, going back and forth, as the analysis allowed for new ideas and hypotheses to emerge to explore the phenomenon at study.

While recognizing the value of CGT, my study aligns with the school of Constructivist GT (ConGT). Typically, scholars from CGT use data from interviews, although some also acknowledge the use of various documents as data (Paillé, 1994; Glaser and Corbin, 1990). However, when it comes to policy research that relies on governmental documents, Richards and Farrokhnia (2016) argue that a more structured approach is needed. They suggest a policy research framework based on ConGT, which I have chosen not to follow. As mentioned before, I instead chose a mixed-research method that better fits my research aims. Regardless, their criticisms of CGT and their penchant for ConGT for policy research helped me structure my methodology. They rely on the work of Charmaz (2006, p.131-132), who argues that CGT theorists have an objectivist view of data as "facts" that are merely discovered by researchers, which "implies that data are untouched by the competent researcher's interpretations." In contrast, ConGT theorists "assume that both data and analyses are social constructions" and warn researchers from presumptions, favoring an analysis that is "contextually situated in time, place, culture, and situation" (Charmaz, 2006, p.131). Richards and Farrokhnia (2016) value ConGT for policy studies because not only does it develop codes out of data, but it also advocates for an understanding of the context of the data. In other words, data were not waiting there to be discovered but were "constructed" in a specific context that already existed. Likewise, the analysis we make out of it is "constructed" and influenced by our involvement. As Charmaz (2006, p.149) puts it, we do not "gain an autonomous theory" but we are rather "part of our constructed theory". That is also why Charmaz (2006) recommends using ConGT as guidelines, which can be applied to other qualitative approaches rather than methodological rules.

6.2.Data Collection and Sample

At the beginning of this research, I intended to explore the way the GoI was managing disasters by diving into official documents. Before getting into the data, I

focused on understanding the organizational structure of disaster management within the government, as discussed in Chapter 3. It allowed me to better understand the context of each document to be analyzed. From there, I decided to start by focusing on three governmental documents, namely the Disaster Management Act (2005), the National Policy on Disaster Management (2009), and the National Disaster Management Plan (2019). It seemed logical to start with as the most recent Plan was built on the Policy's guidelines based on the Act. However, after scanning the Act, I realized that this legal document mainly contained definitions of the Policy's terms. Although I could see the relevance of this document for my research, I preferred to keep it as a reference that would serve the purpose of understanding the context rather than the data. As for the data itself, I decided to concentrate on the Policy (2009) and the Plan (2019). Authentic to the GT method, I started the analysis in the meantime, focusing first on the Policy, going back and forth with the Plan. The first analysis results, which I will be discussing in the next chapter, helped me direct my research a little more. Indeed, I then decided to center my study on the post-disaster recovery phase and explore other data, including the National Disaster Management Plan of 2016. In GT, early analyses serve to expand our ideas and determine which data to collect next (Charmaz and Belgrave, 2018). Importantly, the 2016 Plan was the one in use before the 2019 Plan, thereby allowing an analysis of how the approach changed over time. I collected all the documents on the National Disaster Management Authority website from the Ministry of Home Affairs of the Government of India.

Thus, the sample of this research is the Policy of 2009, Chapter 6 of the 2016 Plan, and Chapter 9 of the 2019 Plan. Because I decided to focus on the post-disaster recovery phase, only chapters "Recovery and Build Back Better" from both plans were analyzed. I studied these documents as data. As mentioned before, all kinds of documents, including governmental reports, can be used as a primary source of data in GT (Charmaz, 2006). In this case, it is referred to as "extant texts", meaning that the researcher did not influence the development of these texts produced for other purposes than the study (*ibid*, p.35). Charmaz (2006) warns that these texts are not objective facts. Instead, "they reflect shared definitions concerning each topic and the power to enforce these definitions" (Charmaz, 2006, p.37). She argues that "such text may provide useful statements about an

organization's professed images and claimed objectives – the front stage view aimed to shape its public reputation" (Charmaz, 2006, p.38). However, as the researcher, it is not to say that I had no impact on the data. Although the raw data was "constructed" in specific social and historical conditions apart from me, I chose the data as part of the sample. Plus, my perspectives may have been influencing my analysis. It does not weaken the study but merely rejects the positivist idea that analysis is objective, admitting that knowledge is co-constructed as "we are part of what we see" (Charmaz and Belgrave, 2018, p.750).

Before I started to code the documents of my sample, I read the documents to familiarize myself with them. I then used NVivo software to code the data. I started coding the 2009 Policy, which allowed me to target the other documents to analyze for my research. Once I had done this first coding, I then coded the 2016 Plan Chapter and the 2019 Plan Chapter. The first step was the initial coding that I did line by line. The idea was to remain open to what would emerge and be authentic to the data, as suggested by Charmaz's school of thought (2006). I was not trying to encode the information in existing codes. Rather, I created them as I went along, starting with a gerund verb and trying to keep it as concise as possible. For instance, I coded "Discussions at top level to align the recovery vision with the government's broader, longer term development goals and growth and poverty reduction strategies" (NDMA, 2016, p.123) under "Aligning recovery with developmental goals".

Once my initial coding was completed, I did the "focused coding". According to Charmaz (2006, p. 57) "focused coding means using the most significant and/or frequent earlier codes to sift through large amounts of data". This part required me to exercise judgment as I had to determine which codes were directly or indirectly related. It was not a linear process, and I sometimes had to adjust myself. For this step, I also used codes starting with gerund verbs and tried to keep them as concise as possible. These focused codes were still in the form of sentences rather than words. Sometimes, some initial codes had several links between them. Other times, however, I had to create a focused code in which I would code only one initial code. Table 1 is an example of my initial codes coded under the focused code "building a BBB vision".

Table 1

Example of focused coding

Initial codes	Focused code
Balancing BBB programs	Building a BBB vision
Building consensus for BBB vision	
Developing BBB vision	
Doing consultations to build BBB vision	
Strengthening existing BBB mechanisms	

This second step allowed me to create sub-categories. It brought me to the last stage of my coding, axial coding (Charmaz, 2006). In this third and final coding, I linked the sub-categories to categories. Again, this process was not linear and required me to exercise judgment to decide which sub-categories were related. It led me to codes in the form of words or a few words, therefore much more global yet specific. It was from these codes that my analysis took shape. Overall, it was very helpful in understanding how all the codes were related and the phenomenon I was studying. The table below shows an example of this axial coding.

Table 2. Example of axial coding

Focused codes	Axial code
Land planning for relocation	Relocation
Deciding relocation	
Relocation being sensitive	
Respecting relocations criteria	

With this coding completed in three steps, my goal was not to suggest a theory. Rather, I used these results to continue studying the question from a textual analysis perspective. In the next section, I will describe how I have used this research design.

6.3. Textual Analysis

I used ConGT and Texual Analysis (TA) to interpret my data simultaneously. To apply ConGT and TA concurrently, I relied on the work of Carabine (2001) as used in the study of Johnson (2014), and I adapted it to the purpose of my thesis. Carabine (2001, p. 281) suggests an 11-step guide to do a Foucauldian genealogical discourse analysis, which inspired my TA:

1. "*Select your topic* – Identify possible sources of data. If you were undertaking a social policy analysis then sources might include policy documents, discussion papers (…).
2. *Know your data:* read and re-read. Familiarity aids analysis and interpretation.
3. *Identify themes,* categories, and objects of the discourse.
4. Look for evidence of an *inter-relationship* between discourses.
5. Identify the discursive strategies and techniques that are employed.
6. Look for *absences* and *silences*.
7. Look for *resistance*s and *counter-discourses*.
8. Identify the *effects* of the discourse.
9. Context 1 – outline the background of the issue.
10. Context 2 – contextualize the material in the power/knowledge networks of the period.
11. Be aware of the *limitations* of the research, your data and sources."

I conducted the first four steps when coding my documents relying on the ConGT method. Indeed, I specified my topic after carrying out an initial analysis of the 2009 Policy. Then, I read all the documents and coded them using the ConGT method. It allowed me to familiarize myself with my data. Third, as expressed in the previous section, I used NVivo to do the three-step encodings. I identified subcategories and broad themes. Fourth, creating these three-step codes allowed me to highlight the relationships between discourses and sharpen my critical thinking. In my discussion in Chapter 7, I interpret these results and elaborate by explaining these different links.

I elaborated steps 9 and 10 of the process above in my literature review and conceptual framework. I contextualize the documents by portraying the dominant knowledge upon which these are based, namely the international community discourse reflected in the UNDRR documents. But I also do a portrait of the different schools of thought and criticisms of key concepts that underlie the documents, allowing me to offer a critical outlook on them. It allowed me to understand the semiotic context in which the texts fit and to proceed to a structural analysis of the discourse (Gaudet and Robert, 2018).

To conduct the fifth step, I relied on the interactional analysis of discourse presented by Gaudet and Robert (2018). Thus, I have attempted to answer four questions: "a) how are the facts and issues presented in the text? b) what are the identities created by the text? c) what is presented as desirable, positive, or good, or undesirable, negative or bad? d) what are the social spheres related in and through the text?" (Gaudet and Robert, 2018, p. 58, free translation from French). This fifth step, along with the sixth, seventh, and eighth, indirectly guides how I discuss my results in chapter 7. Lastly, I will present the eleventh step regarding the limitations of my research in the next section. I will also reiterate these limits when presenting the concluding remarks of my discussion chapter.

6.4. Limitations

My thesis is not without limits. First, I only studied the chapters on the recovery phase in both plans. Thus, the plans may mention this phase in other chapters. However, if this is the case, this thesis did not study it. In my opinion, this does not undermine the relevance of my research. Indeed, it seems unlikely that other chapters will address key elements of the recovery phase without mentioning these same elements in the chapter dedicated to recovery. Of course, it would have been interesting to analyze all chapters of the Plans. However, given my research question, this was not essential. Furthermore, the ConGT method analysis requires lots of time as it is an in-depth analysis with the creation of new line-by-line codes. Thus, analyzing the totality of both plans would have required several more hours, which was not possible with the time limit I had. Plus, that would have generated many other results that I might not even have been able to interpret in the word limit of the thesis.

Even if I have limited the number of pages of the documents I studied, my analysis still produced many results. Keeping in mind my research question and my time and space limitations, I did not interpret all the results. For instance, I kept only one of the results I found significant from the 2009 Policy, although I coded it in the same way I did for the plans. It may represent an additional limit to my research. It is, however, justified by the fact that each result was not relevant to answer my question. On the other hand, I remain aware that the results I have decided to interpret come from my own choice, therefore from my own judgment. As the ConGT school specifies, I must admit that my perspective may have tinted this choice and that it is not necessarily neutral.

Nevertheless, in my opinion, the most significant limitation of my research remains the fact that it is only an interpretation of National Plans. As I explained in the section of the literature review, the disaster management plans of India are decentralized. There are National Plans, State as well as District Plans. Certain remarks or criticisms that I made regarding the national plans may be answered in the state or district plans. However, keeping in mind that the central government plays a coordinating role, it can thus be expected to portray a fairly complete picture of the recovery phase. Still, other plans may further explore some details. That said, because of time and space limitations once again, it would have been hard to analyze several other plans. This thesis nevertheless presents an overview of the two national plans and shows how the second improved the first.

6.5.Positionality and ethic statement

Since I used secondary data and did not require the participation of individuals, my thesis did not need to be approved by the University of Ottawa Research Ethics Board (REB). However, I still want to raise some important points regarding my positionality. First, I would like to mention that, on the one hand, I have never personally experienced a disaster and have never worked with people who are in a period of recovery from a disaster. Therefore, my positionality towards certain concepts and the literature mentioned in the concluding remarks of Chapter 4 come from my reflections, but not from my experiences. In addition, although I did not go to India to carry out my research, I remain a white person

in a privileged situation who researches a South country on a subject that affects people in a situation of vulnerability. Thus, there is always a possibility that my perception influenced my research.

Finally, I must also remark on my profession as a social worker. The school of thought behind this profession impacts how I view and understand the world. While this thesis has nothing to do with social work *per se*, it is quite possible that this school of thought also affected how I conceive the subject of my research. Just as social work prescribes, I naturally tend to perceive people's individual and social needs first and foremost. I am not mentioning it here as a limitation, but I wish to point out the school of thought with which I position myself as an individual and, by extension, as a researcher.

6.6.Conclusion

In this chapter, I have discussed the methodology I have used to answer my research question, namely Constructivist Grounded Theory and Textual Analysis. I have explained how I proceed to analyze the documents that I have treated as my sample. Then, I have raised some issues in my research, and I have positioned myself as a researcher. In the next chapter, I will present the findings of my study.

7. RESULTS AND ANALYSIS

This chapter will present the significant results related to my research question. I will explain the findings of my analysis of the 2009 Policy. Then, I will present the findings of both the 2016 and 2019 Plans. Although the aim is not necessary to compare both Plans, it seems inevitable considering how different they sometimes are.

7.1.National Policy of Disaster Management of 2009

The first step of my research started with the analysis of the National Policy of Disaster Management of 2009. The objective of this first analysis was to explore disaster management in India without specifically focusing on one aspect. At that point, I had not established the research question yet. Rather, this exploration helped me direct my research a little bit more. Using NVivo, the initial coding led me to 704 codes. The number of codes relates to the number of times I have noted something in the documents. From there, I created 135 sub-categories and 19 categories.

Table 3

Step-by-step coding of the Policy

Initial coding – line by line	704 codes
Focused coding – sub-categories	135 parent codes
Axial coding – categories	19 parent codes

Among these categories, I paid attention more specifically to three of them, namely "mitigation, preparedness, and prevention activities", "response relief, and other emergency activities" and "recovery and reconstruction activities ". One of the reasons for this choice was the fact that the Policy categorizes DM as a continuum of pre-disaster and post-disaster activities:

> *A typical DM continuum comprises six elements; the pre-disaster phase includes prevention, mitigation and preparedness, while the post-disaster phase includes response, rehabilitation, reconstruction and recovery* (NDMA, 2009, p.7)

Figure 6

Disaster management continuum **(NDMA, 2009, p.7)**

Note. From the "National Policy on Disaster Management", NDMA, 2009, p.7 https://nidm.gov.in/PDF/policies/ndm_policy2009.pdf

When looking into these three categories, I noticed a significant difference between the importance given to the first category compared to the other two. As seen in table 4, pre-disaster activities considerably prevail compared to post-disaster activities, with 155 initial codes out of 704 codes.

Table 4

Policy coding by category

C-1	Mitigation, preparedness, and prevention activities	155 codes
C-2	Response, relief, and other emergency activities	66 codes
C-3	Recovery and reconstruction activities	42 codes

From the very first pages, the Policy clearly emphasizes its vision and the importance of pre-disaster activities, going as far as promoting a culture of preparedness:

> *[The vision is] To build a safe and disaster resilient India by developing a holistic, proactive, multi-disaster oriented and technology driven strategy through a culture of prevention, mitigation, preparedness and response.* (NDMA, 2009, p.7)

This predominance continues throughout the Policy. For example, when exploring the need for capacity development, the Policy encourages a culture of preparedness through education:

Disaster education will aim at developing a culture of preparedness and safety, besides implementing school DM plans. (NDMA, 2009, p. 34)

As a result, however, C-3 is much less explored. Indeed, the Policy refers to recovery and reconstruction approximately three times less than C-1 with only 42 codes. This result exposes the Policy's focus but also coincides with the paradigm shift that the Policy intends to promote:

The new institutional framework is expected to usher in a paradigm shift in DM from relief-centric approach to a proactive regime that lays greater emphasis on preparedness, prevention and mitigation (NDMA, 2009, p. 9).

7.2. National Disaster Management Plans of 2016 and 2019

The second step was to analyze Chapter 6 of the National Disaster Management Plan of 2016 and Chapter 9 of the 2019 Plan. While looking at the whole National Disaster Management Plans of 2016 and 2019, I could see that the tendency of focusing on pre-disaster phases was perpetuating. Table 5 shows the number of pages per plan in totality, including pages reserved for acknowledgments, preface, and messages from ministers. I then included the number of pages for Chapters on Preparedness and Response. It is important to note that these chapters include 13 pages in 2016 and 18 pages in 2019 in landscape format detailing the responsibilities of Centre and State Governments. In the table, I also present the Chapters about Recovery and Building better, which do not have such detailed sections in 2016 or 2019. I include Chapter 3 of the 2016 Plan and Chapters 6 and 7 of the 2019 Plan because they present various hazards such as cyclones, floods, and landslides and elaborate risks reduction activities for each. Lastly, I included the percentage of pages for each chapter compared to the totality of pages. As it shows, the

Recovery Chapters represent a small amount of the whole Plans, while also not having detailed sections of responsibilities for each activity.

Table 5

Percentage by chapters, 2016 whole Plan

	Pages	%
2016 whole Plan	192	-
Chapter 3 – Reducing Risk, Enhancing Resilience	61	31,8%
Chapter 4 – Preparedness and Response	19	9,9%
Chapter 6 – Recovery and Building Back Better	8	4,2%

Table 6

Percentage by chapters, 2019 whole Plan

	Pages	%
2019 whole Plan	384	-
Chapter 6 and 7: Building Disaster Resilience – Responsibility Framework, Part-A and Part-B	164	42,7%
Chapter 8, Preparedness and Response	26	6,8%
Chapter 9 – Recovery and Building Back Better	12	3,1%

While it reflects the paradigm shift that the Policy promotes, it is not unique to India as discussed in the conceptual framework. The international community's understanding of disaster management significantly changed after the 2004 Tsunami. The need for reducing disaster risks with pre-disaster activities was greatly stressed (Fernandez and Ahmed, 2019; Mannakkara and Wilkinson, 2014). This also recalls the context in which the Policy, and the resulting Plans, were established. Indeed, the Policy was created in 2009, but it relies on the Act of 2005 released on December 23, 2005, almost exactly one year after the 2004 Tsunami. While the pre-disaster phase is undoubtedly necessary, the recovery phase is now generally less explored (Joseph and al., 2021; Mannakkara and Wilkinson, 2014), and this result shows that India is no exception.

For the rest of this thesis, I will hereafter refer to the recovery chapters as the "Plans", keeping in mind that I am only referring to these two chapters unless stated otherwise, as I have not analyzed the other chapters in depth. The table below presents the results of my step-by-step coding. Overall, the 2019 Plan has more codes because it has 13 pages, while the 2016 Plan has only 9 pages.

Table 7

Step-by-step coding of the Plans

	Number of codes per plan	
	2016 Plan, 8 pages	2019 Plan, 12 pages
Initial coding – line by line	298 codes	390 codes
Focused coding - subcategories	113 parent codes	107 parent codes
Axial coding – categories	22 parent codes	23 parents codes

I classified the initial codes by categories. These categories were similar across both Plans, except for the newly added category in the 2019 Plan, namely "Cultural and Heritage Sites Recovery". Overall, I coded some categories more often in the 2019 Plan than in the previous one. While this does not come as a surprise, bearing in mind that the 2019 Plan has more pages than the previous one, some categories have increased significantly, as shown in Tables 5 and 6. For example, "Funds, Donations and Resources" jumped from 15 to 43 codes. While I could not explore in-depth all these results, I have decided to focus on those that seemed more significant and helpful to answer my research question. These included "Decentralization", "Recovery Purpose and Objectives", "Community Needs", "Relocation and Temporary Shelters", Build Back Better and Development " and " Funds, Donations, and Resources ". These categories were more often coded or had significant differences across both Plans. Table 8 presents the results for each of these categories.

Table 8

Plans coding by chosen category

	Number of initial codes per plan	
	2016 Plan, 8 pages	2019 Plan, 12 pages
Decentralization	58	65
Community needs	35	46
Recovery purpose and objectives	27	31
Funds, donations, and resources	15	43
Build Back Better and development	21	34
Relocation and temporary shelters	15	18

a) Decentralization

Across both Plans, decentralization remained the most coded thematic, with 58 codes in 2016 and 65 in 2019. The analysis shows that the Plans discuss recovery in terms of the various responsibilities of each stakeholder. In both Plans, these have remained similar with no significant difference. Recovery responsibilities are distributed and therefore require the participation of all, rather than being executed by only one authority:

Coordination: There is considerable interdependence between stakeholders – government, international agencies, private sector, civil society organizations – in realizing the objectives of recovery and inter-agency coordination is extremely important. (NDMA, 2016, p. 124 and NDMA, 2019, p. 295)

Recovery efforts require the coordination at several levels of government and the stakeholder institutions having specific responsibilities for central, state, private sector, voluntary organizations, and international aid agencies. (NDMA, 2016, p. 125 and NDMA, 2019, p. 296)

The Central Government's responsibilities in terms of recovery are concentrated around three main activities: coordinating recovery efforts with other stakeholders, providing funds and resources for all activities, and imposing taxes for recovery of reconstruction costs. But the results also show that States and UT governments have the

main responsibility. They are responsible for all phases of recovery and are leading damage assessments. To do so, they coordinate with other stakeholders. Moreover, they support public information and education programs and are responsible for financing projects, mobilizing and disbursal funds, and implementing cost recovery measures.

The damage assessment and all the phases of recovery and reconstruction (short to long-term) are the responsibility of the State/UT government. (NDMA, 2016, p. 125 and NDMA, 2019, p. 296)

The role of local authorities is less explored. In fact, both Plans only refer to their role in collaboration with the population and States regarding relocation activities:

The local authorities, in consultation with the affected population and under the guidance of the State Government shall determine relocation needs taking into account criteria relevant to the nature of the calamity and the extent of damage. (NDMA, 2016, p. 126 and NDMA, 2019, p. 298*)*

Voluntary groups and international aid organizations also have a role in recovery. According to the plans, they process damage assessments, offer technical support, support the government in reconstruction activities and public information dissemination, and participate in enhancing the capacity development of communities. As for the private sector, it is responsible for integrating DRR measures into its businesses and offering financial and technical support for recovery efforts.

Lastly, the Plans also refer to the engagement of affected communities in the recovery process. However, while the Plans clearly and explicitly identify other stakeholders and their responsibilities, communities' responsibilities are vague. For example, both Plans mention the need for community participation in recovery program formulation and implementation and refer to communities' initiatives and actions when defining rehabilitation. However, the ways communities can engage and participate in these processes are unclear.

Community Participation: Ensuring the pro-active involvement of communities, proper community outreach, empowerment, and gender equity in programme formulation and implementation (NDMA, 2016, p. 124 and NDMA, 2019, p. 296).

Rehabilitation, an integral part of disaster recovery; (…) aimed towards support to the initiatives and actions of the affected populations in the political, economic and social domains (…). (NDMA, 2016, p.126 and NDMA, 2019, p. 297).

There are some activities listed in social rehabilitation that might imply communities engagement. However, it is not clearly stated, and it remains quite vague. It is, therefore, only a hypothesis of mine:

Try to inculcate conducive attitudes to enable the students to play a positive role in self-development (NDMA, 2019, p. 299, under "revival of educational activities")

Promote self-help groups (NDMA, 2019, p.299, under "Rehabilitation of the Eldery, Women, Children and PWD".

While there are no huge differences between both Plans concerning this theme, it is fair to mention that the 2019 Plan refers to Philanthropies and civil society as contributors to recovery financing, while the 2016 Plan does not.

b) Recovery purpose and objectives

The analysis also shows that the purpose of the Plans is to define recovery and its objectives. I suggest that these can be summarized into two main themes: recovery stages and recovery strategies. The first theme encompasses all the Plans' references to the recovery process steps. It recognizes that recovery is a long and complex process, which does not consist of orderly actions:

Disaster recovery tends to be very difficult and long-drawn out. (NDMA, 2016, p.121 and NDMA, 2019, p. 291)

Disaster recovery process is not a set of orderly actions triggered by the impact of a disaster upon a community. It will consist of several related activities (…) (NDMA, 2016, p.122 and NDMA, 2019, p. 122)

The UNISDR consultative document on building back better (UNISDR 2017) in support of the Sendai Framework, states the following: Recovery is the most complex of the disaster management functions, involving the greatest number and variety of stakeholders and affecting the greatest long-term impact on a community's social and economic success. (NDMA, 2019, p. 293)

The Plans also define "recovery" as a three-step process, namely early, mid-term and long-term recovery. From one Plan to another, the definition of these steps is the same. Early recovery should take place within 18 months and include restoration of some economic activities and social services as well as the establishment of temporary shelters. Mid-term recovery should last up to five years and include reconstruction of infrastructures as well as recovery of economic assets and livelihoods. Lastly, long-term recovery refers to implementing development Plans and should last up to 10 years.

Figure 7

Recovery Stages

Recovery Stage	Duration	Brief Description
Early	Within 18 Months	Cash for work, resumption of markets, commerce and trade, restoration of social services, transitional and temporary shelters
Mid-Term	Within 5 Years (concurrent with early recovery)	Recovery plans for assets and livelihoods, reconstruction plans for housing, infrastructure, public buildings and cultural heritage buildings
Long-Term	Within 10 Years	Implemented along with developmental plans: infrastructure strengthening, environmental, urban and regional planning

Note. From "*National Disaster Management Plan",* by NDMA, 2019, p. 293, https://ndma.gov.in/sites/default/files/PDF/ndmp-2019.pdf

As for recovery strategies, they include rehabilitation and reconstruction activities:

Rehabilitation, an integral part of disaster recovery; other being reconstruction, could be defined as an overall dynamic and intermediate strategy of institutional reform and reinforcement, reconstruction and improvement of infrastructure and services (NDMA, 2016, p.126 and NDMA, 2019, p. 297).

These reconstruction efforts include: Reconstruction of public infrastructures and social services damaged by the disaster, which can be completed over the long-term, Re-establishment of adequate housing to replace that has been destroyed, Restoration of jobs/ livelihood that was lost, Restoration of the economic base of the disaster areas (NDMA, 2016, p. 124 and NDMA, 2019, p. 296).

The Plans present four types of strategies for rehabilitation, namely economic, physical, psychological, and social. When I coded each type line-by-line, very different codes emerged. Thus, while I paid attention to the sections' titles and their context, I also focused on each line's content. As a result, while it was not possible to compare the predominance of each type by merely looking into my coding, I have decided to quantify each section in the percentage of the total pages of the chapters using NVivo tools. I also

included the number of words per rehabilitation type. For social rehabilitation, the number of words has remained the same. The percentages have decreased from 2016 to 2019 because the number of pages has increased. A non-significant sentence was deleted in the 2016 plan to add a few words regarding people with disabilities (PWD). The physical part has increased in absolute counts because of some additions made in regards to relocation. There are fewer words in 2019 regarding economic rehabilitation because of an insignificant change in one sentence. They changed "the State governments will have to lay emphasis" for "the state governments must give due importance" (NDMA, 2016, p. 128 and NDMA, 2019, p. 300). As for psychological rehabilitation, the sections have remained the same. These show that social rehabilitation was the most elaborated section, followed by physical and economic rehabilitation, and psychological rehabilitation came last.

Table 9

Distribution by rehabilitation type

	2016 Plan, 8 pages		2019 Plan, 12 pages	
	Relative %	Absolute counts	Relative %	Absolute counts
Social	5,03%	335 words	3,38%	335 words
Physical	4,03%	242 words	3,30%	302 words
Economic	2,59%	163 words	1,74%	162 words
Psychological	1,57%	101 words	1,06%	101 words

c) Communities needs

The third most coded category through my analysis was the one of the communities' needs. This category encompasses the references to affected communities and their needs and the more personal recovery of individuals. Thus, it did not consider all activities that affect communities. For example, although I understand that livelihood restoration aims to fulfill communities' economic needs, I instead coded this activity as part of a type of activity, in this case, economic rehabilitation, unless the Plans would specifically link this

activity to communities' needs. In other words, I wanted to stay authentic to the Plans rather than making implications.

Table 10

Subcategories of communities needs

	2016 Plan, 8 pages		2019 Plan, 12 pages	
	Number of codes	% of the Plan	Number of codes	% of the Plan
Addressing general communities' needs	3 codes	0.73%	3 codes	0.50%
Addressing children's educational needs	9 codes	1.43%	9 codes	0.98%
Addressing vulnerable group needs	8 codes	2.55%	10 codes	1.56%
Addressing psychological needs	9 codes	1.75%	12 codes	1.71%
Supporting communities through their resocialization needs	1 code	0,44%	1 code	0.30%
Respecting communities' cultural needs, traditions, and values	1 code	0.17%	7 codes	1.45%
Causing no harm	1 code	0.62%	1 code	0.42%
Total	32 codes	7.69%	43 codes	6.92%

I present the sub-categories of this category in the following table above. In the upcoming sections, I will present the four most coded categories. Some of the sub-categories were more coded in 2019 but showed a decreased percentage because the 2019 Plan has more pages.

Addressing vulnerable group needs

Both Plans refer to the Policy and state that " women-headed households, artisans, farmers and people belonging to marginalized and vulnerable sections " need special attention post-disaster (NDMA, 2016, p.128 and NDMA, 2019, p. 300). This is, however, the only mention of artisans and farmers as more vulnerable. Moreover, there is no description of who "people belonging to marginalized and vulnerable sections" are. Much

of the Plans, instead, focus on recovery activities that address the needs of the elderly, women, and children:

The elderly, women, and children are more vulnerable after a major disaster. (NDMA, 2016, p. 127 and NDMA, 2019, p. 299)

Identify familiar environs to rehabilitate elderly, women and children - Make efforts to attach destitute, widows and orphans with their extended family, if that is not possible then identify foster families - Initiate various training programmes to make the women economically self-sufficient (NDMA, 2016, p. 127 and NDMA, 2019, p. 299).

Both Plans list measures to address the recovery needs of the most vulnerable. In the 2019 Plan, however, a new category of measures is added, which is the one for persons with disabilities (PWD). The recovery section of the 2016 Plan did not mention PWD. Moreover, although the 2019 Plan does, only one measure is suggested and the only mention of it in the recovery chapter, which equals approximately a slim 0.11% of the Plan. Interestingly, when looking at the glossary of the whole 2016 Plan, PWD is mentioned, but referring to "Public Works Departments". Then, in the 2019 glossary, PWD refers to "Persons With Disabilities".

Another interesting difference is related to the relocation section. In this section, the Plans list all the activities related to the relocation efforts. The 2019 Plan adds some activities, including the need to socially include marginalized communities:

Ensure that relocation when it is unavoidable is undertaken in a socially inclusive manner taking the marginalised communities belonging to SC and ST into confidence (NDMA, 2019, p.298)

SC and ST refer to Scheduled Castes and Scheduled Tribes. Again, this is the only mention of SC/ST in the 2019 Plan, while the 2016 Plan did not address their needs at all.

Addressing children's educational needs

Both Plans consider children as a vulnerable group and add a whole section reserved for their educational needs. The Plans start from the premise that educational institutions may suffer as a result of disasters, stressing children:

Educational facilities may suffer greatly in a major disaster placing considerable stress on children (NDMA, 2016, p. 127 and NDMA, 2019, p. 299).

To help children cope and recover, the Plans suggest various measures, including:

Encourage children to attend the schools regularly - Provide writing material, and work books to children - Make children participate in all activities pertaining to resurrection of normalcy in the school - Try to inculcate conducive attitudes to enable the students to play a positive role in self-development (NDMA, 2016, p. 127 and NDMA, 2019, p. 299).

Addressing psychological needs

I coded this sub-category more times in the 2019 Plan than in 2016. The 2019 Plan being longer, it included new references to the psychological needs, which the previous one did not have. Yet, as seen in table 10, it represents a very small amount in the percentage of the Plan. When merely looking at the psychological rehabilitation section, both Plans are similar. However, in 2019, when describing the recovery process, the Plan includes an acknowledgment of psychological needs, which the 2016 plan does not:

Social recovery, i.e. social and psychological aspects of personal, family and community functioning and wellbeing (NDMA, 2019, p. 292)

Moreover, in the 2016 Plan, it is mentioned that rehabilitation packages should include "reconstruction of damaged physical and psychological infrastructure" (NDMA, 2016, p.126). The 2019 Plan is more specific and adds:

(...) reconstruction of damaged physical infrastructure and measures to address disaster -induced psychological problems (NDMA, 2019, p.297).

Besides these differences, both Plans suggest that psychological rehabilitation is important and list various activities such as therapy, stress counseling, and trauma care. They also acknowledge how sensitive this issue is:

Dealing with victim's psychology is a very sensitive issue and must be dealt with caution and concern. The psychological trauma of losing relatives and friends, and the scars of the shock of disaster event can take much longer to heal than the stakeholders in disaster management often realize. Thus, counselling for stress management should form a continuous part of a disaster rehabilitation plan. (NDMA, 2016, p. 128 and NDMA, 2019, p. 300)

When explaining the recovery approach, both the 2016 and 2019 Plans refer to the 2009 Policy and state the need to include "systems for providing psycho-social support and trauma counselling" (NDMA, 2016, p. 121 and NDMA, 2019, p. 292). The 2019 Plan then refers to the UNDRR definition to define "recovery", which says nothing regarding psychological needs. Both Plans also include a table of the "major steps of the recovery process and the key processes involved" which does not include one specific reference to the psychological needs of individuals but details post-disaster assessments and building back better. It merely mentions to "show sensitivity to the needs of the affected population with regards to public expectations from recovery ", to "address the recovery of lives and livelihoods of disaster-affected communities", to do consultations and studies on "social recovery" and to include "social protection" as a prioritized sector of recovery (NDMA, 2016, p. 123 and NDMA, 2019, p.294).

Respecting cultural needs, traditions, and values

There is a significant difference between both Plans on culture, traditions and values. In the psychological rehabilitation section, both Plans name the need for respecting these:

Tradition, values, norms, beliefs, and practices of disaster-affected people (NDMA, 2016, p. 128 and NDMA, 2019, p. 299)

However, in the 2019 Plan, a whole new section was added, which is the one of "Restoration of Damaged Cultural Heritage Sites, their Precincts and Museums". I coded most lines of this section in another coding category, that is "Cultural and heritage sites recovery". This category includes coding related to the need to restore cultural heritage sites, historic sites, and institutions and the risk of losing cultural heritage. However, some also referred to the need of respecting traditions, culture, and values, which is related to communities' needs and psychological rehabilitation:

Many cultural heritage sites and precincts hold strong cultural/ socio -economic associations with the local population and restoring them instils a sense of normalcy after a disaster. (NDMA, 2019, p. 300).

Human Recovery Needs Assessment (HRNA)

This sub-category comes from another category but was included here for the analysis. Indeed, I initially coded this sub-category in the "Assessments" category rather than "Communities Needs". However, it seemed important to discuss it briefly in this section. Both Plans have many references to damages and need assessments. In 2019, however, assessment activities were more detailed and were categorized under three categories, including the Human Recovery Needs Assessment (HRNA). HRNA is related to community needs as it focuses on social impacts:

Analysing how disasters affect local patterns of life, social structures and institutions (NDMA, 2019, p. 293).

A HRNA includes analysis of primary data from household or other units of analysis and provides insight into the recovery and reconstruction from the viewpoint of the affected community. (NDMA), 2019, p. 293)

d) Relocation

In both Plans, there is an entire section dedicated to relocation. Overall, I did not code this category more often than others. However, it was more detailed in 2019 than in 2016, which is why I have decided to include it in the significant results. The Plans consider recovery as a " very sensitive part of the physical rehabilitation process " which should be driven by needs rather than extraneous factors (NDMA, 2016, p. 126-127). Relocations activities listed include:

- *Avoid secondary displacement as far as possible*
- *Gain consent of the affected communities*
- *Clearly define land acquisition process*
- *Take into consideration urban/ rural land use planning before moving ahead*
- *Provide customized relocation packages*
- *Decentralize powers for undertaking the relocation process*
- *As far as possible, ensure relocation site is near to their agricultural lands and/or sources of livelihood, as applicable*
- *Ensure provision of livelihood rehabilitation measures for relocated communities, wherever necessary, to the extent possible* (NDMA, 2016, p. 126-127)

However, the 2019 section is slightly more detailed. Indeed, as seen in the previous section, the 2019 Plan considers the needs of the SC/ST and most marginalized communities in the relocation process, which the 2016 Plan did not. Other differences are the gender sensitivity and transparency of relocation:

Making the processes as gender-sensitive and giving due consideration to the needs of sexual and gender minorities - Clearly define land acquisition and allocation process ensuring transparency and providing adequate grievance redressal as well as negotiation mechanisms. (NDMA, 2019, p. 298)

The 2016 or 2019 Plan did not significantly explore temporary shelters. They mention it as part of early recovery activities and in the recovery process. However, the activity itself is not detailed more than merely naming it as an activity.

e) Build Back Better and development

Overall, while this is not the most coded category, I have decided to explore the category of "Build Back Better and development" to have the development perspective. However, I noticed a small increase in the number of codes in 2019 compared to 2016 as new references to BBB and development were added in the revised Plan. Thus, approximately 6,64% of the 2016 Plan covered this theme, while this percentage increased to 7,93% in 2019. Interestingly, Build Back Better (BBB) and development are not specific sections in either Plan, but rather thematic across all sections. Overall, there is an understanding of recovery as an opportunity for BBB:

Globally, the approach towards post-disaster restoration and rehabilitation has shifted to one of betterment reconstruction (in the 2019 Plan, "building back better" replaces "betterment reconstruction"). *While disasters result in considerable disruption of normal life, enormous suffering, loss of lives and property, global efforts consider the recovery, rehabilitation and reconstruction phase as an opportunity to "Build Back Better" (BBB) integrating disaster risk reduction into development measures, and making communities resilient to disasters* (NDMA, 2016, p. 121 and NDMA, 2019, p. 300)

When describing the major steps of recovery, building a BBB vision comes twice in both Plans:

Developing a vision for Build-Back Better (BBB) and Incorporating resilience and BBB in recovery vision (NDMA, 2016, p.122-123 and NDMA, 2019, p. 294)

BBB and development seem to have more codes in 2019 because of the increased number of pages and sections. As mentioned before, it is cross-section thematic, meaning there is a mention of BBB or development in almost every section. It is the case, for

example, of the added section of the 2019 Plan regarding the restoration of cultural sites. In this example, however, BBB is mentioned not as much as an ideal to reach, but instead as a warning:

> *The notion of 'build back better' applied to cultural heritage must not undermine the archeological and/ or cultural aspects, which means that retrofiting measures for improving the structural stability of cultural heritage sites, should be undertaken cautiously paying due attention to restoration of the original.* (NDMA, 2019, p.300)

Another example is regarding "Funds, Donations, and Resources". This section is overall much more detailed in the 2019 Plan. As a result, it mentions BBB more as well. In that sense, "developing a vision and specific time-bound goals for BBB" refer to one of the "important aspects of mobilizing and managing the funds of a large recovery programme" (NDMA, 2019, p. 302). I observed the same tendency regarding development more specifically. For example, when discussing the recovery process, both Plans mention that "integrating DRR into various development initiatives " is part of the recovery process activities (NDMA, 2019, p.293 and NDMA, 2016, p. 122). However, the 2019 Plan adds that it should also "focus on sustainable development and climate change adaptation" (NDMA, 2019, p.293).

Many other examples also come from the section regarding the scope of recovery. The 2019 Plan adds references to development, such as :

> *The focus of recovery is on restoring livelihoods, shifting to a path of sustainable development that reduces disaster risk. Recovery should be conceived as an integral part of ongoing developmental process at appropriate levels: national, regional, and local*. (…) *Recovery processes are aimed at restoring the capacity of the governement and communities to recover from the disaster, strenghten the capabilities to cope with disasters and refuce future disaster risk. Building Back Better evisages seizing the opportunity to rebuild to reduce development deficits of the affected areas going beyond restoration to the pre-disaster "normal". Recovery programmes, coupled with the*

heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the the "Build Back Better" principle. (NDMA, 2019, p. 291).

Other than that, both Plans are coherent regarding the importance of integrating BBB with development goals:

Ensure coherence of BBB with the development programs and goals: Discussions at top level to align the recovery vision with the government's broader, longer term development goals and growth and poverty reduction strategies (NDMA, 2016, p.123 and NDMA, 2019, p. 294)

f) Funds, donations, and resources

The most significant difference between the two Plans is the "Funds, Donations, and Resources" category. Whereas this category was coded 15 times in 2016, it was coded 43 times in 2019 for a difference of 28 codes. Overall, 3,97% of the 2016 Plan was reserved for funds mobilization, whereas it covered 7,83% of the 2019 Plan. This difference is because the 2019 Plan offers more details regarding the fund mobilization section. Both Plans explore the need for funds disbursement, funds monitoring, and recovery of reconstruction costs. In that sense, they both suggest recovery reconstruction costs activities and recognize that:

Reconstruction and rehabilitation projects, after a major disaster, are usually highly resource intensive. (NDMA, 2016, p. 128 and NDMA, 2019, p. 301).

However, the 2019 Plan explores the mobilization of funds more. Concretely, the 2019 Plan lists sources of domestic or internal non-budget government funds and external resources, which the 2016 one did not. External resources included "multilateral development banks, regional development banks, bilateral development partners, international NGOs, private philanthropies and charities, and remittance" (NDMA, 2019,

p. 301). Lastly, it also added a list of important aspects in mobilizing and managing funds, including :

Review of the Damage & Loss Assessment, Estimate financial requirements of the recovery programme, Identify likely sources of funds and examine various options, Defining and enforcing robust financial norms for the financial management (NDMA, 2019, p. 302)

7.3.Conclusion

There are, of course, other findings that I could have named here and taken the time to analyze. However, they were not all relevant to my question. In addition, I have chosen to analyze some of these results in more depth according to my research question, objectives, and conceptual and theoretical framework. My key results include how the chapters on post-disaster recovery are less detailed than pre-disaster activities. This result is apparent in the Policy and both Plans. Another significant result is how the Plans discuss post-disaster recovery in decentralization. Both Plans establish the role and responsibilities of each stakeholder with the aim of decentralized efforts. That, however, excludes communities. The Plans refer to the participation and engagement of affected communities, but their responsibilities remain vague. Plus, the Plans do not specifically refer to communities as stakeholders. Also, the role of local authorities is less explored than, for instance, the role of the Central and State Governments.

The analysis also shows how much the Plans' purpose is to define recovery and its objectives. They define it as a three-step process that includes rehabilitation and reconstruction activities. Overall, it reflects a standardized and linear process. The Plans explore four types of rehabilitation, namely economic, physical, psychological, and social rehabilitation. The least discussed type of rehabilitation is the psychological one. When exploring communities' needs, which is among the most coded categories, psychological needs were coded more often in 2019 than in 2016. However, it remained a small amount in the percentage of the Plan. Other communities' needs explored are the ones of vulnerable groups. It remains unclear whom the Plans consider as most vulnerable because there are

some inconstancies. Also, in 2019, there is a new but brief mention of two other vulnerable groups, which are SC/ST when talking about relocation and PWD. In contrast, the 2019 Plan adds a whole new section regarding restoring of damaged cultural and heritage sites. Also, the section on funds, donations, and resources significantly increased. Lastly, the use of concepts such as "BBB" and "development" are omnipresent throughout both Plans as a cross-thematic section. In 2019, the principle of BBB is more detailed, especially when discussing the scope of recovery. However, it does not really reflect concrete ways to achieve it. In the next chapter, I will discuss these results in relation to the key concepts of my thesis as well as my position on them.

8. DISCUSSION

The 2019 Plan is the revised version of the 2016 Plan, and it aims to be more inclusive, being aware that "the impacts of disasters are felt more by some sections of the community" (NDMA, 2019, preface). It has more sections, such as the “Restoration of Damaged Cultural Heritage Sites, their Precincts and Museums”. It also details some of the already existing parts of the 2016 Plan slightly more, such as “relocation” or "funds mobilization". But the purpose of my research was not to compare both Plans. Rather, it aimed to analyze how the Government of India (GoI) frames and justifies the recovery process in these documents. Keeping that in mind, these notable differences are not fully helping me with my thesis as, ultimately, both Plans similarly answer my question. My discussion and interpretation of these findings will concentrate on what both Plans emphasize and what they fail to address. I will deepen my analysis of some results with my conceptual framework and literature review. Thus, it seems necessary to recall that my understanding of disasters focuses on their underlying causes, which come from human actions and choices (Kelman, 2020), far more than the event or hazard itself.

The Plans do not overall emphasize the nature of disasters and their causes in their chapters on recovery. Yet, analysis of these documents still provides some insight into how the GoI interprets these events. I argue that the Plan's recovery phase focuses on the shock and its consequences rather than the causes of disasters. It may seem logical given that this phase starts after the disaster and focuses on its visible effects, such as destroyed houses and livelihoods. Therefore, if the ambition is to deal with the causes of disasters, it seems more intuitive to act on pre-disaster phases. But just like Chhotray and Few (2012), exposed regarding post-super cyclone Odisha in 1999, some of the vulnerabilities that led to the hazard becoming a disaster still exist after the shock. Even more, these post-disaster vulnerabilities keep the disaster going and lead to security issues (Chhotray and Few, 2012; Peters, Holloway, and Peters, 2019). Overall, I argue that by focusing on the hazard and its consequences and failing to address the ongoing vulnerabilities, the GoI also fails to recognize the causes of disasters.

First, I will discuss how the Plans neglect the complexity of the recovery phase. Then, I will discuss the role of communities and the fact that they are merely beneficiaries rather than stakeholders in the Plans. Next, I will compare the recovery process as discussed by the GoI in its Plans with the concept of shealing. Finally, I will conclude by exploring the role of development and the Build Back Better (BBB) concept.

8.1.Recovery process: more complex but less important?

The analysis shows how both Plans discuss the recovery phase mainly in terms of the responsibilities of each stakeholder. At first glance, this result seems coherent with the literature review on disaster risk management (DRM), disaster risk reduction (DRR), and the Sendai Framework (SFDRR). To ensure the efficacy of DRM, Ishiwatari (2013) suggested the need for a focal agency coordinating efforts, although ultimately, its success requires the participation of all stakeholders. In the recovery phase, the Central Government of India has a coordinating role, while the States have the main responsibility. However, the Plans refer to the other stakeholders' responsibilities as well.

This result also seems to be in harmony with the fourth priority of the SFDRR, “enhancing disaster preparedness for effective response and to Build Back Better in recovery, rehabilitation and reconstruction”, through the cooperation of all stakeholders (UNDRR, 2015, p.14). Coordination between stakeholders is crucial to ensure that disaster management efforts are successful (Nath, 2019). Regarding disaster management in India specifically, it is coherent with the vision of its 2005 Act, which specifies that national Plans should lay down stakeholders’ roles and responsibilities (Government of India, 2005).

But this result also needs to be nuanced. First, as mentioned before, the recovery chapters of both Plans have fewer pages than those on preparedness and response (see Table 5 and 6 on page 45). One main difference is how preparedness and response chapters included many pages in landscapes format regarding detailed responsibilities of Centre and State Governments while recovery chapters did not. Thus, while decentralized effort is a recurrent thematic of the recovery phase in both Plans, it does not seem to be approached

with the same attentiveness as preparedness. It corroborates the fact that the recovery phase is, overall, less explored than pre-disaster activities (Joseph and al., 2021; Mannakkara and Wilkinson, 2014), but it also raises questions regarding the importance given to recovery by the government. Although their disaster management paradigm shift, going from reactive to proactive, is justified, should it be applied to the detriment of recovery activities? Also, can recovery be as successful as other phases if all responsibilities are not as clearly established?

Interestingly, the 2019 Plan refers to a UNDRR document and stipulates that "recovery is the most complex of disaster management functions, involving the greatest number and variety of stakeholders and affecting the greatest long-term impact on a community's social and economic success" (NDMA, 2019, p.293). Yet, even when referring to recovery as the most complex phase, the Plans do not give it the same attention as other parts.

8.2.Recovery process: involving all but its beneficiaries

Another nuance to the results explained in the previous section regards the participation of communities and local authorities. Both Plans barely skimmed over the role of local authorities. Recovery chapters do not explicitly state communities as stakeholders, while they do for the private sector, voluntary organizations, and international aid agencies. Yet, community engagement is necessary to ensure DRR effectiveness and promote the agency of communities (Oktari and al., 2020; Tozier de la Poterie and Baudoin, 2015). Communities are the most affected by disasters and the first responders (Nath, 2019). Not involving them may, as a result, create a gap between the institutional arrangement and their lived realities (Ishiwatari, 2013). The example of the post-disaster recovery of the 2004 tsunami showed how people had more trust in their local government than the national one and how their recovery was more successful when they had a great attachment to their community leaders (Joshi and Aoki, 2014). Thus, while Central and State governments, the private sector, voluntary organizations, and international aid agencies may all have an important role, it seems counterproductive not to state communities and local authorities as key stakeholders. Furthermore, although

focusing on a state-centric approach to DRR is coherent with the SFDRR, it may also lead to some important issues, such as a lack of will from the state to equally protect its citizens (Peters, Holloway, and Peters, 2019). This issue is especially real in the contexts of conflicts, the Plans do not address when discussing recovery, although we know that post-disasters in India have led in the past to some violence in the past, such as riots (*ibid*). These cases justify the need better to involve communities and civil society (*ibid*).

Overall, the Plans also mention engagement and participation of communities briefly and unclearly. This recalls one of the criticisms of the SFDRR raised by Tozier de la Poterie and Baudoin (2015). The authors argued that community participation is imprecise and that the SFDRR does not include significant ways of ensuring community engagement, evoking the idea of "buzzwords" (*ibid*). India's National Disaster Management Plans ineffectively reflect the SFDRR discourse (Shakeri, Vizvari, and Nazerian, 2021). It does not seem surprising, thus, that they also reflect its lack of clarification regarding community engagement. But is merely mentioning "community participation" or "engagement", without clearly identifying ways to achieve it sufficient to ensure its application? And if it is not, does merely mentioning it gives the impression that the actions of the governments are justified and legitimate? In other words, do the Plans use it as yet another "buzzword"? Once again, I argue that this lack of clarification most importantly shows where the focus and priority of the central government are, which does not seem to involve communities as a stakeholder fully taking part in their recovery process.

Of course, this does not mean that the Plans do not consider communities, quite the opposite. The needs of the most vulnerable are mentioned, including those of children, women, and the elderly, but they focus on categories of people rather than social relations. Also included is a complete section reserved for the educational needs of children. The Plans also address psychological and cultural needs. In short, the needs of the communities are clearly present in the documents, and my coding even shows that they seem to be at the heart of the recovery phase. But the Plans list the activities and measures to put in place to meet these needs without actually offering ways to engage the communities in their

recovery processes. After the criticisms of the outcomes of the 2016 Plan regarding the fact that communities need to be better involved in disaster management (see Jafar, 2018), we could have expected a change of course in the 2019 Plan. However, it is clear from these findings that neither the 2016 nor the 2019 Plan succeed in doing so. As a result, just like Tozier de la Poterie and Baudoin (2015) argued regarding SFDRR discourse, the Plans do not discuss communities so much in terms of partners but rather beneficiaries.

8.3.Recovery process: who is vulnerable?

On the other hand, I argue that the Plans do not regard all groups and sections of the community with the same priority. Both Plans claim to focus on the needs of those most vulnerable to disasters. They refer to the Policy and state that special attention should be given to certain groups concerning livelihood rehabilitation. These include artisans and farmers. Keeping in mind that farmers are indeed very affected by disasters in India as they are dependent on the environment (UNDRR, 2020), this makes sense. Plus, as illustrated with the example of Cyclone Odisha in 1999, farmers with their destroyed livelihoods may be forced to migrate to other states for economic reasons if they do not have access to other alternatives (Chhotray and Few, 2012). Including them as more vulnerable to the consequences of disasters demonstrates a willingness of the GoI to meet their economic needs. However, the rest of the documents do not really offer solutions to their other needs. In the section on social rehabilitation, the Plans ignore artisans and farmers and name that the most vulnerable people after a major disaster are women, children, and the elderly.

Now, recall that the 2019 Plan has more pages than its previous version and that there are, therefore, some major differences between these two plans, especially with the needs of the communities. I could elaborate more on these differences, notably by exploring the 2019 Plan new section called “Restoration of Damaged Cultural Heritage Sites, their Precincts and Museums”. Or I could explore how some sections, such as "funds mobilization" are much more detailed. But what appears necessary to raise here is not so much these differences between both Plans as the small observable changes in the 2019 Plan. Indeed, there are a few new words added to already existing sections. The whole 2019 Plan aimed to be more inclusive. As a result, the recovery phase in 2019 adds the mention

of two new groups, namely People with Disabilities (PWD) and Scheduled Tribes and Scheduled Castes (ST/SC).

The 2019 Plan mentions PWD when discussing the social rehabilitation of the most vulnerable. It suggests putting in place measures to support these people, most specifically their health-related needs. No further details are, however, given. The second addition relates to ST/SC. Once again, when both Plans refer to economic rehabilitation and the Policy, there is a reference to marginalized people. However, there is no explanation regarding whom the GoI includes in this group of people. I suggest that these might be, among others, ST/SC, but in the absence of explanations, this can only remain a hypothesis. But in 2019, there is a very explicit mention of this group. It is not, however, related to their particular post-disaster needs, nor to the fact that the vulnerability of these people can perpetuate well after the event, meaning that the disaster continues for them. Rather, the mention of ST/SC is related to relocation and the need to ensure that this physical rehabilitation measure is done in an inclusive way to put these people in confidence.

The problem here seems obvious. The Plans mention PWD and ST/SC, but nothing more. At most, it acknowledges their needs. It is, overall, questionable whether the addition of words such as "PWD" and "ST/SC" is enough to be "more inclusive". After the 2016 Plan, many NGOs were disappointed by the lack of inclusiveness of the Plan and the fact that it failed to address the needs of the most vulnerable sections of the society, including PWD and ST/SC (Bhalla, 2016). We also know that prior to publishing the 2019 Plan, other NGOs recommended adapting the Plan and making it more inclusive of various minorities (TROSA, Sphere India and OXFAM India, 2018). Thus, I argue that these additions serve the purpose of "seeming more inclusive" and perhaps responding to some criticisms without offering insights and suggestions to achieve this better inclusion. On the one hand, this does not come as a surprise knowing how the GoI led by Narendra Modi has a history of political decisions that increase the vulnerabilities of the most marginalized, especially Dalits (SC) and Adivasis (ST) (See Jaffrelot, 2015). On the other hand, the fact that the GoI adapted the 2019 Plan to make it "more inclusive" also seems to be coherent with the pro-people card that Modi played in its 2019 elections to win the vote of more

marginalized people, although in reality, his politics discriminate these people (See Jaffrelot, 2019b).

I also argue that this lack of recognition of the vulnerabilities of some groups is a serious flaw of the Plans. We know that ST/SC, for instance, can experience discrimination during the recovery phase, as was the case after the 2004 tsunami. If the Plans do not further address the vulnerability that this group may face after the disaster, then it is likely to perpetuate. Recall that, according to Kelman (2020, p.16), a disaster is "a situation requiring outside support for coping". If the recovery phase does not successfully address the vulnerability of ST/SC, and if they do not receive the outside support needed to cope with this situation, then it is not absurd to think that the disaster continues for them.

The concept of "shealing" by Mika and Kelman (2019) regarding recovery also illustrates how recovery does not start at the same time and does not have the same speed for everyone (Mika and Kelman, 2019). "Shealing" suggests a comprehensive understanding of recovery, including the affective needs of individuals and communities (Mika and Kelman, 2019). From this perspective, it is just as crucial to consider post-disaster recovery vulnerabilities as pre-disaster vulnerabilities (*ibid*). For example, gender-based violence that has existed pre-disaster will still exist post-disaster and can transpose onto recovery activities. When displaced in temporary shelters, women can suffer from sexual violence (Kelman, 2020; Krishna, 2021; Sikandar and Khan, 2019). It also applies to other groups suffering from discrimination and structural inequalities, such as ST/SC or PWD.

In conclusion, this interpretation notably demonstrates how, even if the GoI does not explicitly mention the nature of disasters in its chapters on recovery, it still fails to address the causes of disasters. Moreover, it shows where the GoI priority is in post-disaster recovery. It seems to give more importance to revising its 2016 Plan to specify, for instance, the need for cultural restoration than better addressing the ongoing vulnerabilities of some groups of people, including PWD and ST/SC. Overall, I argue that the Plans lack in details

and consistency concerning the groups of people who would be most vulnerable after a disaster.

8.4.Recovery process: ongoing psychological needs

My analysis also shows how the purpose of the Plans is to define recovery and its objectives. Overall, they define "recovery" as a complex process that tends to be difficult, consisting of three steps (early, mid-term and long-term recovery) and including reconstruction and rehabilitation activities. Also, rehabilitation includes economic, physical, psycho-social, and social strategies. A review of these strategies shows that social rehabilitation is more elaborated in the Plans than other strategies, followed by physical, economic, and psychological.

Just like the previous section, the first glance at this result shows that it harmonizes well with the UNDRR's recovery definition. It includes some of the keywords of the UNDRR and the SFDRR discourses, such as "reconstruction", "rehabilitation", "social", "economic", "physical" and "development". Interestingly, it does not exactly corroborate the argument of Joseph and al. (2021), suggesting that recovery in institutions framework focuses more on larger systems than on the needs of individuals. For example, the most detailed and explored rehabilitation section regards social needs. It includes communities' needs to address through recovery. However, it is indeed true that when strictly looking at psychological rehabilitation, it is not as detailed as physical rehabilitation. Does this mean that the GoI offers less consideration to psychological needs in recovery than another type of rehabilitation, or does it merely mean that psychological rehabilitation overall needs less detailing as it is less complex?

As shown in the findings and analysis, the psychological needs within the category of communities' needs are prevailing. Thus, there is clearly a recognition of psychological recovery by the Plans. It would seem improper to imply that the GoI gives less attention to psychological rehabilitation strictly because the recovery chapters of its Plans contain fewer words associated with psychological strategies than other types. Nonetheless, it

would also seem incorrect to suggest that psychological rehabilitation is less complex. The literature review of the "recovery" concept helps to have another insight on this issue.

I refer, once again, to the concept of "shealing" by Mika and Kelman (2019). The shealing perspective does not belittle the need to recover from physical wounds (*ibid*). Rather, it advocates for an understanding of recovery beyond the typical linear process and values a cycle-based and gradual approach (*ibid*). The Plans recognize this when mentioning that the "Disaster recovery process is not a set of orderly actions triggered by the impact of a disaster upon a community. It will consist of several related activities (…)" (NDMA, 2016, p.122 and NDMA, 2019, p. 122). There is also an acknowledgment of the sensitivity of recovery for communities and their need for resocialization post-disaster. However, although mentioning it, the rest of the Plans do not really reflect this idea. The three recovery stages are disconnected from one another and are expressed in a standardized way. According to this logic, the recovery stages of communities start by focusing on economic and social services, then on the reconstruction of infrastructure and livelihoods, which, finally, should be part of long-term development plans. It fails to acknowledge how recovery may be gradual for some individuals and communities through space and time. When strictly looking at the way the Plans explain the recovery process, it does not reflect the slow psychological recovery that can be ongoing through all steps, as shealing instead intends to value.

However, this argument also needs to be nuanced. Indeed, in the section reserved for psychological rehabilitation, both Plans mention that counseling to manage post-disaster stress should be an integral part of the post-disaster recovery Plan. Therefore, although indirectly, the Plans reflect how post-disaster stress is gradual and ongoing. It might not be sufficient to say that it reflects the idea of shealing as described by Mika and Kelman (2019), but it shows how it is not, on the other hand, completely the opposite.

8.5.Recovery process: opportunity to Build Back Better

While Build Back Better and Development discourse prevails throughout the Plans, it was far from the most coded category. Surprisingly, the Plans do not predominantly discuss recovery in terms of the opportunity that it raises. But as shown in my findings, there BBB and development were mentioned in almost every subsection of the Plans, including the major recovery steps. It would, therefore, be inaccurate to suggest that it was not a significant element of the Plans. However, it remained vague, presented as a principle to follow and integrate whenever possible rather than a concrete objective to reach. There was no clear explanation of how the GoI would draw on Build Back Better to ensure recovery. In a way, the Plans did, once again, reflect the fourth priority of the SFDRR: "enhancing disaster preparedness for effective response and to Build Back Better in recovery, rehabilitation and reconstruction" (UNDRR, 2015, p.14). Yet, it did so by overly using the concept of BBB but not by truly describing how it would be beneficial for the communities and their recovery or concrete ways to achieve it.

Whether BBB should be the guiding principle of recovery or not is not my argument here. But I argue that the Plans seem to be using BBB as a development buzzword. "Buzzwords" can be ambiguous and generative (Schnable and al., 2021). Their power "suggest consensus on some abstract notion but are vague enough to allow for several competing interpretations" (ibid, p. 27). I argue that mentioning BBB in the Plans without giving more details about ways to achieve it serves to align with the dominant discourse of the international community, including the UNDRR and the SFDRR. It just becomes another imposed perspective on affected communities of what their recovery should look like. With such room for interpretations of the term, it can also leave room for misunderstandings among local communities affected by disasters (Su and De Lé, 2020). As a result, using of a top-down concept can be harmful and counterproductive for these communities (Benge and Neef, 2020; Joseph and al., 2021). Overall, the use of BBB as a buzzword seems to serve the purpose of legitimizing the Plans more than being a concrete objective to follow.

Moreover, there are obvious issues to address regarding the concept of "development" in India. For instance, we know that Prime Minister Narendra Modi's politics follow a model that focuses on economic growth rather than human development or sustainable development (See Jaffrelot, 2015). We also know that his model of "development", which was his slogan during his first elections, actually deepened inequalities (*ibid*). As a result, it raises some serious questions regarding the "development" or "build back better" ambitions of the GoI in the context of post-disaster recovery. Without more details in the Plans about ways to achieve it, or what it consists of, this leaves the place for, as I argued, much interpretation, which can potentially cause more harm to the affected communities.

8.6.Conclusion

The Plans do not specifically address the nature of the disaster. However, their way of addressing recovery reflects how it focuses on the hazard and its consequences. The 2019 Plan includes a newly added section regarding the restoration of destroyed cultural sites. Overall, it describes the responsibility of each stakeholder in terms of the consequences of the hazard. It details rehabilitation as a set of activities ensuring the improving or restoring of infrastructure and services impacted by the shock. There is no recognition of the underlying causes of disasters, which may still be ongoing post-event, such as structural inequalities and political choices. Moreover, there are no measures suggested to eradicate these persistent vulnerabilities.

Disasters go beyond the number of fatalities, crushed buildings, or destroyed livelihoods. Disasters go beyond the event whose triggering element is a human or environmental factor. Disasters are not natural or neutral: they arise in parallel with the vulnerabilities of the humans who experience them (Kelman and al., 2015; Oliver-Smith, 2019; Wisner and al. 2012). Failure to act on the persistent post-disaster vulnerabilities can result in the disaster continuing for some people long after the shock (Chhotray and Few, 2012). This is especially true for some groups of people more than others, which justifies the need to indeed be more inclusive in how post-disasters recovery is dealt with.

Although not dominant in the GoI discourse in the Plans, the institutional concept of BBB and development paradigm remain nonetheless underlying at each stage presented in the Plans. The GoI seems to see the recovery phase from a resilience-building perspective, where everything becomes an opportunity to build better with the aim, it appears, of ensuring that disasters do not happen again. My argument is not that the GoI should dismiss resilience-building. Rather, based on the concept of shealing, I argue that it is counterproductive to merely view vulnerability and resilience in two opposing poles since the vulnerabilities that created the disaster can continue long after the shock. Also, keeping in mind the political ambitions of the political party and the Prime Minister in power, it seems harmful to the communities not to define the meaning of BBB and the development phase in the context of recovery. On the other hand, not including communities as stakeholders is detrimental to their recovery. It only perpetuates the idea that they are recipients rather than change agents.

9. CONCLUSION AND RECOMMENDATIONS

Through this thesis, I have attempted to answer the following question: How does the central government of India frame and justify "post-disaster recovery" in its 2016 and 2019 national plans? The starting point of my research was that hazards globally are increasing, that the population of India is vulnerable to those hazards, which create impacts beyond fatalities. Chapters 2, 3, and 4 helped put into perspective my research. In Chapter 2, I have discussed some of the most frequent hazards, the multifaced vulnerability of India to these, and some post-disaster recovery stories. In Chapter 3, I discussed disaster risk reduction and management activities, notably from the international discourse perspective. This overview led me to discuss the way disasters are dealt with in India more specifically and address the overall paradigm shift that occurred in disaster management, going from a relief-centric response to a preparedness response. Also, it put into perspective the institutional context in which the Government of India (GoI) established both Plans. In Chapter 4, I continued exploring the context of the establishment of both Plans but from the perspective of India's social and political situation. Because the Modi Government published both Plans, I have also highlighted the political ambitions of the Prime Minister. I also raised some criticisms made by local NGOs regarding both Plans.

In Chapter 5, I presented my conceptual and theoretical framework. I have defined the concepts I rely on to answer my research question, namely "disaster" and "recovery". I also explored the debates surrounding both concepts and positioned myself in the light of these debates. I aligned with the argument that disasters are not natural and instead constructed. I understand recovery from the perspective of "shealing", also highlighting the need to better involve communities in their recovery process. In Chapter 6, I explained the Constructivist Grounded Theory (ConGT) and Textual Analysis (TA) methodology approach I used to analyze the documents I treated as my sample. I also discussed the limitations of my thesis, and I positioned myself as a researcher.

In Chapter 7, I analyzed some of the most relevant findings related to my research question. I demonstrated the relevance of my thesis by the fact, notably, that the post-

disaster recovery phase is less detailed than the pre-disaster phase in the 2009 Policy. This tendency seemed to perpetuate in both plans, even though they refer to the UNDRR discourses to state that it is the most complex phase. This lack of details turned out to be one of the significant results of this research.

Then, I discussed my findings in Chapter 8, which I will now summarize in this concluding chapter. Overall, I could not interpret all the results produced during my coding using the ConGT method. However, I highlighted those that were the most significant for my research question, in relation to the different concepts underlying this subject. It led me to what I could summarize in 4 overarching results.

First, the government uses both its Plans' chapters on recovery to detail decentralized efforts. This finding is coherent with the fact that disaster management authorities in India manage disasters through decentralized efforts with shared responsibilities between stakeholders. In the meantime, although the Plans' chapters underline the participation of communities and their engagement, these descriptions remain vague. More importantly, they do not name communities as stakeholders. This shortcoming echoes critiques by Tozier de la Potier and Baudoin (2015) regarding the SFDRR, which both Plans rely on, and which treats communities as beneficiaries rather than stakeholders. As a result, this lack of recognition for communities and their agency fails to acknowledge their importance as first responders and first affected by disasters, as Nath (2019) presented. It also pushes on communities some harmful top-down and expert-centric approaches that fail to address people's needs according to their lived realities (Joseph and al., 2021; Ishiwatari, 2013). Lastly, I argue that the GoI fails to consider some of the criticisms raised by Indian NGOs, and I align with the argument of Ogra and colleagues (2021) regarding the true paradigm shift needed in disaster management, which is a bottom-up approach.

Second, the Plans succeed in putting the needs of communities at the heart of their writing. Nonetheless, there is a lack of consistency concerning the communities considered as most vulnerable. The 2019 Plan, which aims to be more inclusive, makes a few additions

in this regard, but these are merely brief mentions. On the contrary, the 2019 Plan adds major sections such as restoring cultural sites. It also expands in more detail on some other parts, such as the one on funds mobilization. This recalls the political history of the Prime Minister currently at the head of the GoI, Narendra Modi, who overall failed in the past to include the most marginalized of the communities in its politics and who rather increased their vulnerabilities, favoring economic growth to human development (Jaffrelot, 2015). It also shows a lack of recognition for the criticisms raised by NGOs in the past regarding both Plans and the need to better involve all groups of the society (See Bhalla, 2016).

Third, psychological needs are highlighted in both Plans similarly. There are, however, fewer details about this type of rehabilitation than the physical one. Furthermore, there is a mention that stress management should be present in all stages of recovery. The fact that psychological recovery, in general, can take time and must be ubiquitous in the recovery phase management is not, however, mentioned when detailing the recovery process.

Finally, although this is not the most prevailing result, the concept of BBB and development is omnipresent in every part of the Plans. They emphasize the principle of conceiving this phase as an opportunity to strengthen the resilience of the communities. However, they overly use the term BBB without giving more details, leaving the reader with the impression of wanting to stick to the rhetoric of the UNDRR and the SFDRR much more than using the BBB as a concrete objective. Moreover, this lack of details leaves room for interpretation and harm the communities. Keeping in mind the social context of the country as well as the political ambitions of Narendra Modi, it also raises questions regarding the objectives of the GoI behind justifying post-disaster recovery as an opportunity to BBB and implement “development” projects.

To answer my research question, I can sum up my interpretation of these four results in three points. First, both the 2016 and 2019 Plans frames recovery based on the hazard and fail to address other issues that may come across during this long and ongoing process, such as security and conflict issues. Thus, I argue that the GoI does not discuss recovery in

terms of what Mika and Kelman (2019) call “shealing” and fails to recognize the unnaturalness of disasters and their underlying causes. They fail to address disasters as a process rather than an event and fail to address other issues that can come across during post-disaster recovery. Pre-disaster vulnerabilities, which may persist post-disaster, as a result, are not considered. Also, mentioning certain groups experiencing structural inequalities in the 2019 Plan is not enough to make it more inclusive. Of course, the use of the term Build Back Better (BBB) exposes a certain willingness of the GoI to act so that disasters no longer reproduce. However, naming the concept of BBB is not sufficient to act on the underlying causes of disasters. Moreover, the GoI deconstructs the recovery process in steps rather than an ongoing process that does not start at the same time for everyone.

Second, I argue that the GoI justifies recovery by harmonizing with the dominant discourse of the UNDRR and the SFDRR, using institutional concepts such as BBB as a buzzword. There are also other uses of buzzwords, such as community participation. I do not imply that harmonizing with the discourse means successfully applying its concepts. Rather, using concepts like buzzwords seems to serve to legitimize actions undertaken. Moreover, using these as buzzwords leaves room for interpretation of some expert-centric concept, such as BBB, which can be harmful for the communities. Overall, without explicitly defining some concepts such as BBB and development, it raises questions regarding the post-disaster development ambitions of the GoI.

Third, the Plans reflect where lays the priority of the GoI in terms of recovery. Although it accords significance to the community’s needs, it does not seem to give the same importance to all groups within the community. As a result, they also fail to overall answer the criticisms of Indian NGOs who asked for a more inclusive Plan. Moreover, although the 2019 Plan is the revised version of the previous one, it is mostly the same Plan with added sections without truly revitalizing significant already existing parts to be more inclusive. Instead, it prefers to develop funds mobilization or add multiple pages on cultural sites restoration.

As for recommendations, I believe the GoI should revise their sections on recovery in their Plans. In that sense, they could detail them in more, just as they do for the pre-disaster stages. In particular, the decentralization of efforts in disaster management seems to be a point that the GoI is pushing forward. If this is the case, they should not overlook the recovery phase in this regard. It is pointless to mention that the recovery phase is the most complex if the Plans do not reflect this idea. Also, the Plans would benefit from being more inclusive, which goes way beyond a few keyword additions here and there. They should better include the critiques by NGOs and better recognize the vulnerabilities of some sections of the society, including PWD and ST/SC, but also other minorities such as religious minorities and gender and sexual minorities.

To do so, they could rely on the framework of the "principle of 5Rs of inclusion" (Recognition, Respect, Representation, Restitution, and Reclamation) as suggested by the Oxfam India national consultation report on the 2018 draft Plan (TROSA, Sphere India and OXFAM India, 2018, p.3). The GoI could also refer to certain aspects of the concept of shealing. It could refer to its principles without, however, using it as yet another buzzword. For instance, shealing discourages forcing a top-down approach on affected communities and "a presumed or expected state as an end point" (Mika and Kelman, 2019, p. 650). It is counterproductive to treat communities as beneficiaries but not as stakeholders in this process. Thus, the GoI should specifically recognize affected communities, including the most vulnerable sections of communities, as stakeholders taking part in their recovery process to ensure their agency. They could also rely on the four focal points elaborated by the All India Disaster Mitigation Institute charitable trust to ensure local involvement in disaster management (AIDMI, 2015, p. 5):

1. "People know what to do when the disaster happens (preparedness and response);
2. People know the dos and don'ts in order to reduce the disaster risks (prevention and mitigation);
3. People know the importance of doing so (awareness);
4. People encourage their fellow citizens' engagement (cooperation)."

Then, it seems fundamental that the recovery phase reflects the underlying causes of the disasters, which can perpetuate beyond the moment of the shock. Using the concept of BBB does not seem sufficient here to address post-disaster vulnerabilities and ensure that they do not perpetuate in the future. It is especially true when using BBB as a buzzword rather than a concrete objective. When discussing and planning the recovery process, the GoI should also address the political and societal ideologies and the structural inequalities that create and perpetuate disasters. As the concept of shealing prescribes, it is important to understand disasters and recovery beyond the linear process (*ibid*). It might seem logical that the GoI plans post-disaster recovery as a series of steps and activities to ensure a framework to follow and harmonize practices. However, it should also recognize the lived realities of communities and the complexity of the disasters and the recovery phase, which does not always follow a linear timeline.

In 2016, India was the first country to launch a disaster management plan following the guidelines of the Sendai Framework (AIDMI, 2016). Is it sufficient for India to be called a world leader in disaster management? Probably not. But it certainly shows the will of a vulnerable and prone to disaster country to do better. Yet, many aspects of the Plans' framing of recovery need to be improved, especially how the GoI understands and plans it. These recommendations should also apply to the broader international community, including other countries planning their disaster management and donors. Overall, there is no one-size-fits-all way of planning recovery in the aftermath of disasters (Mika and Kelman, 2019). There is a need for an equilibrium between communities to be fully involved and governments to take on their responsibilities and tackle root causes of disasters.

It would be interesting to compare post-disaster recovery to other phases by analyzing both Plans in totality for future research on the subject. Furthermore, it might be interesting to analyze these same aspects in the state or district Plans. However, this thesis has so far raised several questions. One of these, arguably, concerns the effectiveness of this Plan on the ground. Is it sufficient? A comparative study between the discourse raised in this thesis and the reality of the affected communities would be a judicious starting point

for exploring this subject in greater depth. Thus, what are the concrete consequences of these Plans on the recovery of communities affected by disasters?

10. APPENDIX 1 : Documents analyzed

NDMA. (2009). National Policy on Disaster Management. https://nidm.gov.in/PDF/policies/ndm_policy2009.pdf, 42 pages

NDMA. (2016). Chapter 6: Recovery and Building Back Better. in *National Disaster Management Plan*. https://www.mha.gov.in/sites/default/files/National%20Disaster%20Management%20Plan%20May%202016.pdf, p. 121-130

NDMA. (2019). Chapter 9: Recovery and Building Back Better. *in National Disaster Management Plan*. https://ndma.gov.in/sites/default/files/PDF/ndmp-2019.pdf, p. 291-303

11. BIBLIOGRAPHY

AIDMI. (July, 2016). First SFDRR Aligned national disaster management plan. *Southasiadisaster.net,* (148). https://reliefweb.int/report/india/first-sfdrr-aligned-national-disaster-management-plan-southasiadisastersnet-issue-no

AIDMI. (November, 2015). Child Centred Disaster Management Planning. *Southasiadisaster.net,* (138). http://www.aidmi.org/sub-images/publication/138%20Snet%20Child%20Centred%20Disaster%20Management%20Plan.pdf

AIDMI. (n.d.). *About us*. http://www.aidmi.org/innovation.aspx?pagetype=activity0

Albris, K., Lauta, K. C., & Raju, E. (2020). Disaster knowledge gaps: Exploring the interface between science and policy for disaster risk reduction in Europe. *International Journal of Disaster Risk Science*, *11*(1), 1-12. https://doi.org/10.1007/s13753-020-00250-5

Amaratunga, D., Haigh, R. & Hettige, S. (2016). The role of accountability within disaster risk governance. In Domingo, N. & Wilkinson, S. (eds), *Proceedings of the 6th International Conference on Building Resilience* (p.688-698). http://eprints.hud.ac.uk/id/eprint/30329/

Begum, R. A., Sarkar, M. S. K., Jaafar, A. H., & Pereira, J. J. (2014). Toward conceptual frameworks for linking disaster risk reduction and climate change adaptation. *International Journal of Disaster Risk Reduction*, *10*, 362–373. https://doi.org/10.1016/j.ijdrr.2014.10.011

Benge, L., & Neef, A. (2020). Linking disaster risk reduction to development: The evolution of 'Building Back Better' in international disaster management frameworks. In A. Neef & N. Pauli (eds.), *Climate-Induced Disasters in the Asia-Pacific Region: Response, Recovery, Adaptation* (vol. 22, p.11-24). Emerald Publishing Limited. https://doi.org/10.1108/S2040-726220200000022002

Bhalla, N. (2016, June 8). India's plan to tackle disasters neglects women, disabled and lower castes: aid workers. *Thomson Reuters Foundation*. https://www.reuters.com/article/india-national-disaster-plan-idINKCN0YU1BR

Bhat, S., & Shah, Q. (2017). Disaster profile of India: A theoretical understanding of regional and seasonal perspective. *IRA-International Journal of Management & Social Sciences* (ISSN 2455-2267), *6*(1), 52-59. http://dx.doi.org/10.21013/jmss.v6.n1.p8

Chakraborty, A. & Joshi, P. (2016). Mapping disaster vulnerability in India using analytical hierarchy process. *Geomatics, Natural Hazards and Risk*, *7*(1), 308–325. https://doi.org/10.1080/19475705.2014.897656

Charmaz, K. (2006). *Constructing grounded theory*. Sage Publications.

Charmaz, K., & Belgrave, L. L. (2019). Thinking about data with grounded theory. *Qualitative inquiry*, *25*(8), 743–753. https://doi.org/10.1177/1077800418809455

Chhotray, V. & Few, R. (2012). Post-disaster recovery and ongoing vulnerability: Ten years after the super-cyclone of 1999 in Orissa, India. *Global Environmental Change*, *22*(3), 695–702. https://doi.org/10.1016/j.gloenvcha.2012.05.001

Chowdhury, J. R., Parida, Y., & Kumar Sahoo, P. (2021). India's cyclones: hasten mitigation measures. *Nature*, *596*(7870), 35–35. https://doi.org/10.1038/d41586-021-02131-3

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21. https://doi.org/10.1007/BF00988593

Cornwall, A. (2007). Buzzwords and fuzzwords: Deconstructing development discourse. *Development in Practice*, *17*(4/5), 471-484.

CRED and UNDRR. (2020). *The human cost of disasters - An overview of the last 20 years 2000-2019.* https://reliefweb.int/report/world/human-cost-disasters-overview-last-20-years-2000-2019

Crosweller, M., & Tschakert, P. (2021). Disaster management and the need for a reinstated social contract of shared responsibility. *International Journal of Disaster Risk Reduction*, *63*, 102440. https://doi.org/10.1016/j.ijdrr.2021.102440

Drèze, J. (2014, April 10). The Gujarat muddle. *The Hindu*. https://www.thehindu.com/opinion/op-ed/the-gujarat-muddle/article5896998.ece

Eckstein, D., Künzel, V. & Schäfer, L. (2021). *Global Climate Risk Index 2021: Who suffers most from extreme weather events? Weather-related loss events in 2019 and 2000-2019*. https://germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_1.pdf

Encyclopedia Britannica. (2021). *India*. https://www.britannica.com/place/India

Etkin, D. (1999). Risk transference and related trends: Driving forces towards more mega-disasters. *Global Environmental Change Part B: Environmental Hazards*, *1*(2), 69-75. https://doi.org/10.3763/ehaz.1999.0109

Fernandez, G., & Ahmed, I. (2019). “Build back better” approach to disaster recovery: Research trends since 2006. *Progress in Disaster Science*, *1*, 100003. https://doi.org/10.1016/j.pdisas.2019.100003

Gaudet, S., & Robert, D. (2018). *L’aventure de la recherche qualitative : du questionnement à la rédaction scientifique*. Presses de l’Université d’Ottawa.

Government of India. (2015). *The disaster management Act 2005*. http://www.ifrc.org/Docs/idrl/512EN.pdf

Holden, E., Linnerud, K., Banister, D., Schwanitz, V. J., & Wierling, A. (2017a). The moral imperatives of sustainable development. In *The Imperatives of Sustainable Development*. Routledge.

IMC. (2021). *India*. https://www.internal-displacement.org/countries/india

Ishiwatari, M. (2013). Disaster risk management at the national level. *ADBI Working Paper,* (443). https://dx.doi.org/10.2139/ssrn.2360365

Jafar, E. (2018, September 3). Disaster management: India is not completely ready. *Hindustan Times.* https://www.hindustantimes.com/analysis/disaster-management-india-is-not-completely-ready/story-WQ7TEVdfWibfohDQXSCnzO.html

Jaffrelot, C. (2019a). *L’Inde de Modi : National-populisme et démocratie ethnique* (First edition). Fayard.

Jaffrelot, C. (2019b). Class and caste in the 2019 Indian election–Why have so many poor started voting for Modi? *Studies in Indian Politics*, *7*(2), 49–160. https://doi.org/10.1177/2321023019874890

Jaffrelot, C. (2017). India in 2016: Assessing Modi mid-term. *Asian Survey*, *57*(1), 21–32. https://www.jstor.org/stable/26367720

Jaffrelot, C. (2015). What “Gujarat Model”?-Growth without development-and with socio-political polarisation. *South Asia*, *38*(4), 820–838. https://doi.org/10.1080/00856401.2015.1087456

Jha, A., Basu, R., & Basu, A. (2016). Studying policy changes in disaster management in India: A tale of two cyclones. *Disaster Medicine and Public Health Preparedness*, *10*(1), 42–46. https://doi.org/10.1017/dmp.2015.116

Johnson, L. (2014). Adapting and combining constructivist grounded theory and discourse analysis: A practical guide for research. *International Journal of Multiple Research Approaches*, *8*(1), 100-116.

Joseph, J., Irshad, S. M., & Alex, A. M. (2021). Disaster recovery and structural inequalities: A case study of community assertion for justice. *International Journal of Disaster Risk Reduction*, *66*, 102555–. https://doi.org/10.1016/j.ijdrr.2021.102555

Joshi, A. & Aoki, M. (2014). The role of social capital and public policy in disaster recovery: A case study of Tamil Nadu State, India. *International Journal of Disaster Risk Reduction*, *7*, 100–108. https://doi.org/10.1016/j.ijdrr.2013.09.004

Kelman, I. (2018). Lost for words amongst disaster risk science vocabulary? *International Journal of Disaster Risk Science*, *9*(3), 281-292. https://doi.org/10.1007/s13753-018-0188-3

Kelman, I., Gaillard, J. C., & Mercer, J. (2015). Climate change's role in disaster risk reduction's future: beyond vulnerability and resilience. *International Journal of Disaster Risk Science*, *6*(1), 21-27.

Kelman, I., Gaillard, J. C., Lewis, J., & Mercer, J. (2016). Learning from the history of disaster vulnerability and resilience research and practice for climate change. *Natural Hazards*, *82*(1), 129-143. https://doi.org/10.1007/s11069-016-2294-0

Kelman, I. (2017). Linking disaster risk reduction, climate change, and the sustainable development goals. *Disaster Prevention and Management*, *26*(3), 254–258. https://doi.org/10.1108/DPM-02-2017-0043

Kelman, I. (2020). *Disaster by choice: how our actions turn natural hazards into catastrophes* (First edition). Oxford University Press.

Khanna, B. (2009). Culture of preparedness for management of disasters in India - an initiative by national disaster management authority. *Management & Avenir*, *27*, 174-181. https://doi.org/10.3917/mav.027.0174

Kim, K., & Olshansky, R. B. (2014). The theory and practice of building back better. *Journal of the American Planning Association*, *80*(4), 289-292. https://doi.org/10.1080/01944363.2014.988597

Krishna, R., Ronan, K., Spencer, C., & Alisic, E. (2021). The lived experience of disadvantaged communities affected by the 2015 South Indian floods: Implications for disaster risk

reduction dialogue. *International Journal of Disaster Risk Reduction*, *54*, 102046–. https://doi.org/10.1016/j.ijdrr.2021.102046

Krishnan, R., Gnanaseelan, C., Sanjay, J., Swapna, P., Dhara, C., Sabin, T. P., Jadhav, J., Sandeep, N., Choudhury, A. D., Singh, M., Mujumdar, M., Parekh, A., Tewari, A., Mehajan, R., Chopra, R., Joshi, A., Nagarajan, A., Nivsarkar, M., Rajeevan, M., … Niyogi, D. (2020). Introduction to Climate Change Over the Indian Region. In R. Krishnan, J. Sanjay, C. Gnanaseelan, M. Mujumdar, A. Kulkarni, & S. Chakraborty (Éds.), *Assessment of climate change over the Indian Region: A report of the Ministry of Earth Sciences (MoES), Government of India* (p. 1-20). Springer Singapore. https://doi.org/10.1007/978-981-15-4327-2_1

Kumar, B. (2019). Structural inequality and disaster risk reduction: An Indian Experience. In Zutshi B., Ahmad A., Srungarapati A. (eds), *Disaster Risk Reduction Community Resilience and Reponses* (p.205-214). Palgrave Macmillan. https://doi-org.proxy.bib.uottawa.ca/10.1007/978-981-10-8845-2_13

Madan, A. & Routray, J. K. (2015). Institutional framework for preparedness and response of disaster management institutions from national to local level in India with focus on Delhi. *International Journal of Disaster Risk Reduction, 14*, 545–555. https://doi.org/10.1016/j.ijdrr.2015.10.004

Mannakkara, S., & Wilkinson, S. (2014). Re-conceptualising « Building Back Better » to improve post-disaster recovery. *International Journal of Managing Projects in Business*, *7*(3), 327-341. http://dx.doi.org/10.1108/IJMPB-10-2013-0054

Manyena, S. B. (2012). Disaster and development paradigms: Too close for comfort? *Development Policy Review*, *30*(3), 327-345. http://dx.doi.org/10.1111/j.1467-7679.2012.00579.x

Mika, K. & Kelman, I. (2020). Shealing: Post-disaster slow healing and later recovery. *Area*, *52*(3), 646–653. https://doi.org/10.1111/area.12605

Nath, S. (2019). A sociological perspective on “Institutional Coordination” for disaster risk reduction in India. In Zutshi B., Ahmad A., Srungarapati A. (eds), *Disaster Risk Reduction Community Resilience and Reponses* (p.157-172). Palgrave Macmillan. https://doi-org.proxy.bib.uottawa.ca/10.1007/978-981-10-8845-2_10

NDMA. (2019). Preface. *in National Disaster Management Plan*. https://ndma.gov.in/sites/default/files/PDF/ndmp-2019.pdf

NDMA. (2021). *Covid-19*. https://ndma.gov.in/Resources/awareness/covid

NDMA. (n.d.). *National Disaster Management Authority*. https://ndma.gov.in

New York Times. (December 16th, 2021). *Tracking Coronavirus in India: Latest Map and Case Count*. https://www.nytimes.com/interactive/2021/world/india-covid-cases.html

NIDM. (2014). *India*. https://nidm.gov.in/easindia2014/err/pdf/country_profile/India.pdf

O'Keefe, Westgate, K., & Wisner, B. (1976). Taking the naturalness out of natural disasters. Nature, *260*(5552), 566–567. https://doi.org/10.1038/260566a0

Ogra, A., Donovan, A., Adamson, G., Viswanathan, K., & Budimir, M. (2021). Exploring the gap between policy and action in Disaster Risk Reduction: A case study from India. *International Journal of Disaster Risk Reduction, 63*, 102428–. https://doi.org/10.1016/j.ijdrr.2021.102428

Oktari, R. S., Munadi, K., Idroes, R., & Sofyan, H. (2020). Knowledge management practices in disaster management: Systematic review. *International Journal of Disaster Risk Reduction*, *51*, 101881, 1-15. https://doi.org/10.1016/j.ijdrr.2020.101881

Oliver-Smith, A. (2019). "What is a disaster?": Anthropological perspectives on a persistent question. In *The Angry Earth* (Second edition). Routledge.

Paillé, P. (2011). L'analyse par théorisation ancrée. *Cahiers de recherche sociologique*, *23*, 147-181. https://doi.org/10.7202/1002253ar

Perry, R. W. (2018). Defining disaster: An evolving concept. In H. Rodríguez, W. Donner, & J. E. Trainor (eds.), *Handbook of Disaster Research* (Second edition, p. 3-22). Springer International Publishing. https://doi.org/10.1007/978-3-319-63254-4_1

Peters, K., Holloway, K., Peters, E.R.L., (2019). Disaster risk reduction in conflict contexts: The state of evidence. *ODI Working paper 556*.https://cdn.odi.org/media/documents/12691.pdf

Régnier, P., Neri, B., Scuteri, S., & Miniati, S. (2008). From emergency relief to livelihood recovery: Lessons learned from post-tsunami experiences in Indonesia and India. *Disaster Prevention and Management, 17*(3), 410-429. http://dx.doi.org/10.1108/09653560810887329

Reliefweb. (2005). *India: Tsunami - A report to the nation*. https://reliefweb.int/report/india/india-tsunami-report-nation

Richards, C., & Farrokhnia, F. (2016). Optimizing grounded theory for policy research: A knowledge-building approach to analyzing WTO E-Commerce policies. *International Journal of Qualitative Methods, 15*(1), 160940691562138–. https://doi.org/10.1177/1609406915621380

Rist, G. (2006). La supercherie du développement durable? *L'Encyclopédie du Développement Durable*, (21). http://www.encyclopedie-dd.org/IMG/pdf_N-_21_Rist.pdf

Rist, G. (2007). Development as a buzzword. *Development in Practice*, *17*(4/5), 485–491. http://www.jstor.org/stable/25548245

Rist, G. (2013). Chapitre 1 : Définition. In Rist, G. (ed), *Le développement (*Fourth edition, p. 33-60). Presses de Sciences Po. https://www.cairn.info/le-developpement--9782724612790-p-33.htm

Saharia, M. Jain, A., Baishya, R. R., Haobam, S., Sreejith, O. P., Pai, D. S., & Rafieeinasab, A. (2021). India flood inventory: creation of a multi-source national geospatial database to facilitate comprehensive flood research. *Natural Hazards*, *108*(1), 619–633. https://doi.org/10.1007/s11069-021-04698-6

Schnable, A., DeMattee, A., Sullivan Robinson, R., & Brass, J. N. (2021). International development buzzwords: Understanding their use among donors, NGOs, and academics. *The Journal of Development Studies*, *57*(1), 26-44. https://doi.org/10.1080/00220388.2020.1790532

Shakeri, E., Vizvari, B., & Nazerian, R. (2021). Comparative analysis of disaster management between India and Nigeria. *International Journal of Disaster Risk Reduction*, *63*, 102448. https://doi.org/10.1016/j.ijdrr.2021.102448

Sharma, C. (2019). Citizenship Amendment Bill 2016: continuities and contestations with special reference to politics in Assam, India. *Asian Ethnicity*, *20*(4), 522–540. https://doi.org/10.1080/14631369.2019.1601993

Save the Children. (2002, December 20). *Gujarat earthquake emergency update Dec 2002.* https://reliefweb.int/report/india/gujarat-earthquake-emergency-update-dec-2002

Shaw, R. (2020). Thirty years of science, technology, and academia in disaster risk reduction and Emerging Responsibilities. *International Journal of Disaster Risk Science*, *11*(4), 414-425. https://doi.org/10.1007/s13753-020-00264-z

Sikandar R., & Khan A. (2019). Linking gender vulnerability and disasters. In Zutshi B., Ahmad A., Srungarapati A. (eds) *Disaster Risk Reduction*. Palgrave Macmillan. https://doi-org.proxy.bib.uottawa.ca/10.1007/978-981-10-8845-2_14

Singh, S, Mall, R. K., & Singh, N. (2021). Changing spatio-temporal trends of heat wave and severe heat wave events over India: An emerging health hazard. *International Journal of Climatology*, *41*(S1), E1831–E1845. https://doi.org/10.1002/joc.6814

Smith, J. (2018). The political biography of an earthquake - aftermath and Amnesia in Gujarat, India. *Medicine, Conflict, and Survival, 34*(1), 46–48. https://doi.org/10.1080/13623699.2017.1420411

Su, Y., & Le Dé, L. (2020). Whose views matter in post-disaster recovery? A case study of "build back better" in Tacloban City after Typhoon Haiyan. *International Journal of Disaster Risk Reduction*, *51*, 101786. https://doi.org/10.1016/j.ijdrr.2020.101786

Sud, N. (2022). The Actual Gujarat Model: Authoritarianism, Capitalism, Hindu Nationalism and Populism in the Time of Modi. *Journal of Contemporary Asia, 52*(1), 102–126. https://doi.org/10.1080/00472336.2020.1846205

Tozier de la Poterie, A., & Baudoin, M.-A. (2015). From Yokohama to Sendai: Approaches to participation in international disaster risk reduction frameworks. *International Journal of Disaster Risk Science*, *6*(2), 128-139. https://doi.org/10.1007/s13753-015-0053-6

TROSA, Sphere India and OXFAM India. (2018). *Making India's National Disaster Management Plan 2018 inclusive: A report based on multi-layered consultations on the draft ndmp 2018*. https://sphereindiablog.files.wordpress.com/2018/12/a-report-on-making-indias-national-dm-plans-inclusive.pdf

UNDRRa. (2016, June 1st). *UN welcomes India's first National Disaster Management Plan*. https://www.undrr.org/news/un-welcomes-indias-first-national-disaster-management-plan

UNDRRb. (2016, June 6th). *Disaster risk reduction champion to inspire Asia*. https://www.undrr.org/news/disaster-risk-reduction-champion-inspire-asia

UNDRR. (2017). *Terminology.* https://www.undrr.org/terminology#D

UNDRR. (2020). *Disaster risk reduction in India: Status report 2020*. https://www.preventionweb.net/publication/disaster-risk-reduction-india-status-report-2020-0

UNDRR. (2021). *Voluntary commitments Sendai Framework for Disaster Risk Reduction 2015-2030: Shaping Disaster Resilient India: An initiative to build the capacities of YYPs in DRM and CCA through University Networks.* https://sendaicommitments.undrr.org/commitments/20191226_002

UNISDR. (2015). *Sendai Framework for Disaster Risk Reduction 2015—2030*. https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

Ursila. (2018). *Oxfam India organizes national consultation on "making india's national disaster management plan inclusive"*. https://www.preventionweb.net/news/oxfam-india-organizes-national-consultation-making-indias-national-disaster-management-plan

WCED. (1987). *Our common future*. Oxford: Oxford University Press. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

WHO. (n.d.). *Heat waves*. https://www.who.int/india/heat-waves

Wisner, B. (2017). "Build back better"? The challenge of Goma and beyond. *International Journal of Disaster Risk Reduction*, *26*, 101-105. https://doi.org/10.1016/j.ijdrr.2017.09.027

Wisner, B., Kelman, I. & Gaillard, J. C. (2012). Framing disaster: Theories and stories seeking to understand hazards, vulnerability, and risk. In Wisner, B., Gaillard JC., and Kelman, I. (eds). *Handbook of Hazards and Disaster Risk Reduction (First edition, p.18-33)*. Routledge.

World Bank. (2020). *Population, total – India.* https://data.worldbank.org/indicator/SP.POP.TOTL?locations

Zutshi, B., Borah, H. & Bhakat, P. (2019). Mapping vulnerable earthquake disaster class-I cities for disaster risk-reduction and community resilience in India. In Zutshi B., Ahmad A., Srungarapati A. (eds), *Disaster Risk Reduction Community Resilience and Reponses*. Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-10-8845-2_13.