Exploring the gap between policy and action in Disaster Risk Reduction: A case study from India

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A B S T R A C T

The transition from a response-based paradigm to an anticipative, prevention-based approach remains a stubborn challenge in Disaster Risk Reduction (DRR). Whilst the United Nations Office for Disaster Risk Reduction (UNDRR) has advocated the latter since the International Decade for Natural Disaster Reduction in the 1990s, many countries have been slow to move from a response-focused approach to a preventative one. International policy guidelines have successfully informed the national DRR policies in various countries; however, their further translation down to the regional and local level is full of complex political challenges, exacerbated in many areas by an increased frequency of disasters. In this paper we explore the case of India, using the example of landslide risk management. Through an analysis of the evolution of landslide risk governance during the last two decades in two hilly regions – Darjeeling in the Himalayas and the Nilgiris in the Western Ghats – we demonstrate that while the national government appears to have made considerable efforts to move in line with the UNDRR approaches, the eventual outcome of these efforts at the regional and local level is largely an incremental improvement on the existing DRR approach and not a paradigm shift in understanding and addressing disaster risk. We argue that overcoming these issues requires attentiveness to a situated understanding of disasters and institutions at the local level, and not treating apparent gaps between policy and action as functional challenges to be overcome with new science from national level.

1. Introduction

A conceptual shift towards anticipatory management of disasters began in the mid-1970s, as the culmination of a change in comprehension of disasters from 'acts of God' to social phenomena [1,2]. Before this point, the international effort was largely reactive, institutionalised through bodies such as the United Nations Disaster Relief Office, created in 1971 to promote the 'study, prevention, control, and prediction of *natural* disasters' [3]; emphasis added). This conceptualization of disasters as 'natural' underwent a slow transition through the International Decade for Natural Disaster Reduction (IDNDR) during the 1990s – notably within the Yokohoma Strategy for a Safer World (1994) [4] – and subsequently the UN International Strategy for Disaster Reduction (UNISDR) in 2000, renamed in 2019 as the UNDRR. A shift in focus towards viewing disasters as social and the increasing emphasis placed on disaster preparedness (as opposed to responsiveness) was further

institutionalised with the introduction of the Hyogo Framework for Action in 2005, and in 2015 with the Sendai Framework for Disaster Risk Reduction with its four action priorities related to understanding and strengthening disaster governance to manage disaster risk, and 'Building Back Better' in recovery, rehabilitation and reconstruction [5]. The current UN terminology regards Disaster Risk Reduction (DRR) as 'the policy objective of disaster risk management', with disaster risk management being the application of DRR strategies to prevent, reduce and manage disaster risk [6].

Echoing these shifts within the UN, India underwent a major shift in its approach towards disasters in 2005 with the introduction of the Disaster Management Act (referred as 'the Act' from here on) [7,8][9], like many countries in the mid-2000s [10–12]. Nationally, major disasters such as the earthquakes of Uttarkashi (1991), Latur (1993) and Chamoli (1999), the Assam floods (1998), and the Orrisa Super Cyclone (1999), pressed home the need to rethink the state of disaster

management in the country [8,13–15]. A High-Powered Committee on disaster management was constituted by the Central Government in 1999 to develop India's holistic approach towards 'natural' disasters, later extended to accommodate 'man-made disasters'. The report of the committee was submitted in 2001, the year of the Gujarat Bhuj earthquake, and the Bill made into an Act in 2005 following the Indian Ocean Tsunami (2004) [13,14]. The Act was followed by the National Policy on Disaster Management (2009) [16] (hereafter called 'the Policy') – guided by the Hyogo Framework (2005–2015) – and the National Disaster Management Plan ('the Plan'), introduced in 2016 and revised in 2019 [17,18], based on the Sendai Framework [19].

Research exploring the extent to which the Hyogo and Sendai Frameworks are being implemented in developing countries has argued that, beyond the formal commitment to the declarations and high-level meetings, compliance with the commitments remain problematic [20–23]. Similar arguments have been made in Indian media regarding the efficacy of the Act, Policy and Plan, following several devastating floods between 2013 and 2020 [24,[25]. In this paper we explore this apparent lack of 'compliance' with the Act, through interviews with officials, Non-Government Organisations (NGOs) and first-responders involved in landslide risk management in two mountainous districts in India[1]: the Nilgiris and Darjeeling. We argue that, whilst the 2004 tsunami may have precipitated the publication of the Act, it cannot be viewed as a 'critical juncture' in DRR in India [26]. Rather, shifts in policy approaches at the national level have made few meaningful changes to DRR 'on the ground', due to institutional inertia and a failure to understand the situated context within which disaster management institutions operate at the local level. A change in focus towards integrating national-level management with a bottom-up, situated approach to disaster management in India is instead the paradigm shift that is required.

1.1. Appraising the act

In the following section we review existing literature on disaster governance in India since the Act. Much of this literature tends to assess the Act's effectiveness in terms of new institutions that have been created since its introduction. Studies have identified the operational struggles faced by these new institutions such as lack of funds available to them, and duplication of efforts and hierarchical conflicts between different agencies. Gupta [14], for instance, traces the journey of disaster management governance in India and argues that 'the Indian disaster management policy is geared to make a paradigm change from response and calamity relief to disaster prevention, preparation and mitigation' (pp.58-59). However, he goes on to argue the need for 'a major audit of institutional setups, laws and policy implementation tools in the backdrop of success-failure yardsticks of the major disasters in the recent past', indicating the need to address issues of 'overlapping authority, lack of adequate staffing and clarity around fund distribution' [14] (p.43). Pande and Pande [27] argue that states are claiming funds, under disaster headings, for activities which they should be funding on their own, thus not following central government's guidelines properly. This paper was published immediately after the introduction of the Act (2005) and mentions the institutions established by it as a promising aspect of disaster management in India. More recent works such as Pal and Tarun [28] applaud the Act for 'heralding paradigm shift in disaster management from post-event to one of pre-event prevention, mitigation and preparedness' (p.75) but focus only on disaster response mechanisms, without addressing how changes in institutional function might have brought about this 'paradigm shift'.

The key trend shown by much of this literature is to appreciate the Act, Policy and Plan for their intentions, and present issues identified in their implementation as functional challenges which need to be fixed; that is, issues in implementation that can be overcome with time and with some minor changes to disaster governance at the local level (see also [29–31]). The continued presence of institutions created at the national, state and district level is used to argue that a 'paradigm shift' has been achieved for disaster management in India, without a critical analysis of their (dis)functionality and the exact nature of any changes since the Act. This framing tends to underplay the cultural, political, bureaucratic, and epistemic context within which the Act was introduced. Here, some reviews of the Act in the legal studies literature are stronger because they question the real strength of this legislation in the Indian bureaucratic context [8,32,33]. Thattai et al. [34]; for example, argue that a lack of proper interagency co-ordination prevents implementation of the changes introduced by the Act. Similarly, Carter and Pozarny [35] – comparing the National Disaster Management Authorities in three countries (India, Pakistan, and Bangladesh) – argue that there is a need to link national-level agencies with local NGOs, not only for response but also during the preparatory and mitigation phase (that is, before a disaster).

This paper takes these points further, to argue that the institutional structure introduced by the Act cannot be assessed independently of the political, bureaucratic, and, importantly, epistemic context in which it is expected to operate. This paper utilises frameworks from geography, Science and Technology Studies (STS) and the DRR literature to explore this gap between policy and action. Using the example of landslide management in two districts – Darjeeling in the northeast Himalayas (West Bengal) and the Nilgiris in the Western Ghats (Tamil Nadu) – we explore recent shifts in DRR in India at the local level. The field work in these two study districts was carried out over a period of 3 months spread across January 2018 and February 2020, and 35 interviews were conducted during this period. These interviews were analysed using thematic analysis along with a desk-based review of the Policy and Plan documents. Through this we argue that India has not undergone a 'paradigm shift' in its approach towards disasters; rather, it has seen a patchy and incremental improvement in its existing response-based approach and has not yet made a transition towards prevention and anticipation. The language of substantial change is used at national level, but the local institutional reality is deeply rooted in the institutional context informed by the response-oriented 'natural' conceptualization of disasters. This argument has important implications for managing expectations from the Act, Policy and Plan, which remain very high despite the well-documented shortcomings. It also shows, more widely, the challenges of enforcing change purely from a national level in DRR: policy changes cannot necessarily overcome the institutional inertia of local government, which requires a deeper cultural and epistemic shift in managing disaster risk at the local level.

Section 2 provides the theoretical framework of the study; section 3 shares in detail the methodological approaches used; and section 4 provides a review of the Policy, Plan, and the Act to highlight tensions in the institutional structure for disaster management at the national level post the introduction of the Act. These arguments are supported by interviews carried out for this study with disaster management officials and NGOs operating at the national level. Section 5 focuses specifically on the disaster governance in the two study areas (Darjeeling and the Nilgiris), providing details about the institutional structure of disaster management at the local level. This section derives from interviews and participant observation gathered during three months of fieldwork in the two study areas, and documentary analysis of State and District Disaster Management Plans. In section 6 we analyse the observations from the national level (shared in section 4) and local level (shared in section 5) to tie it together with the theoretical framework of the study. Lastly, in section 7 we share the concluding remarks.

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[1] Here we follow the UNDRR definition of landslides as 'a variety of processes that result in the downward and outward movement of slope-forming materials, including rock, soil, artificial fill, or a combination of these. The materials may move by falling, toppling, sliding, spreading, or flowing.'

2. Theoretical framework

This paper explores why India continues to struggle with disasters despite the shift in institutional focus at the national level. At heart, the issue is the struggle in translating the intent of international policy discourse into action on the ground – a widely recognised problem in DRR [36,37]. The knowledges that feed into the production of international policy and United Nations frameworks can be integrated into national-level policy, but actioning these ideas in local contexts remains a key challenge; these knowledges are generic and not specific – and they often do not speak into local realities, cultures and communities [38]. This issue is not unique to DRR – it is also being strongly felt in the related fields of sustainable development and climate change research. In these fields this gap is often referred to as *scale discordance*.

Scale discordance is defined as the mismatch occurring when available scientific information, or other formal knowledges, does not reflect the unique context of the environmental conditions and/or the geographic scale for decision-making [39]. This concept has been used to understand the struggles in introducing internationally/globally constituted knowledges into locally situated contexts [40]. For example, commenting on the difference in global and local perspectives and the attempts at using one (global) to guide the other (local) in climate change context, STS scholar Sheila Jasanoff [41] argues that a homogenising global understanding 'detaches global fact from local value, projecting a new, totalising image of the world as it is, without regard for the layered investments that societies have made in the worlds as they wish them to be. It therefore destabilises knowledge at the same time that it seeks to stabilise it' (p.236). Building on this, Mike Hulme [42] argues that having detached/decontextualized facts (a global perspective) without the corresponding meaning (local perspective) fails to do justice to the challenges faced in lived everyday life at a local level, and may even be of less use in problem solving/policy making in comparison to the local tools. Tim Ingold [43] argues that the distinction between the global and local perspective is not one of hierarchical degree but one of kind. The local perspective is one of engagement with the world in which we live, whereas the global stems from a detached, disinterested and decontextualized observation of the world [43].

Comprehending and capturing the 'local perspective' as being different in kind – and not just a narrowly- focused interpretation of the 'global' – requires a theoretical framework that provides the scope to conceptualise perspectives outside of the 'global'/'local' divide, viewing these as context-specific. Here we utilise STS scholar Donna Haraway's [44] concept of situated knowledges as a fruitful lens through which to understand scale discordance in DRR policy and practice. Haraway uses this concept to question the authority of science as a body of knowledge. Science, according to Haraway, with its decontextualized worldview, claims authority by being placeless (not situated in any specific context). She instead calls for situating science by recontextualising it alongside other bodies of knowledge to let a real interconnected view of the world emerge.

In this study we use situated knowledges to understand how the political, institutional, and bureaucratic context of a particular region – as well as the worldviews, values and knowledges of the populations who live there – guide the way that disasters are managed in the region, and hence shape the interpretation of national and international policy guidelines (which themselves reflect their places of origin, whether capital city or Geneva for example). As such, the paper makes a larger argument about the problematic inherent in introducing internationally recommended policy guidelines into locally situated specific contexts. We argue that translating the paradigm shifts recommended by these guidelines into action on the ground requires unpacking the positional perspectives of the existing paradigms. Attempts at implementing globally informed policy goals without the acknowledgement of the situated positional perspective, and the corresponding epistemic values, lead to gaps in policy and actions.

3. Methodology: about this study

This study builds on the institutional mapping of disaster management in India carried out for the LANDSLIP (Landslide multi-hazard risk assessment, preparedness, and early warning in South Asia: integrating meteorology, landscape, and society) project. LANDSLIP is a UK Natural Environment Research Council (NERC) and Foreign, Commonwealth and Development Office (FCDO) funded project which aims to produce a Landslide Early Warning System for two study sites in India: the Nilgiris District in the Tamil Nadu State of South India and Darjeeling District (with East Sikkim, not included here) in West Bengal State of Eastern India. Fig. 1 shows the two study sites on the map of India. Both study districts are highly susceptible to landslide risk, causing major disruption during monsoon seasons through damage to infrastructure and property and occasionally lost lives. Multiple demand-oriented studies on landslides have already been carried out in both the study areas [45–49]. However, these works focus on landslide as a hazard and do not engage with the institutional structure available to address landslide risk in the two regions.

Both the study sites are hill districts in states with primarily plain areas, with heavy economic reliance on tourism and tea plantations. Darjeeling District – and the adjoining Kalimpong District that separated from Darjeeling in 2017 – are unique within West Bengal due to their geography and culture, being Himalayan districts in a state dominated by plains, and populated by communities of Nepali heritage. Communities here have been demanding a separate state of Gorkhaland for over three decades, due to their cultural differences from the majority Bengali population of West Bengal. This demand has resulted in violent protests on several occasions (1986–1988, 2017). Over time these protests have facilitated a tripartite agreement between central government, state government and local political parties, resulting in the formation of the Gorkhaland Territorial Administration (GTA), a semi-autonomous body responsible for the development initiatives of the hill communities [50–53]. The GTA is a relatively unique form of local governance which does not report to the district administration but works alongside it, reporting directly to state authorities.

The Nilgiris District is one of only a handful of hilly districts in Tamil Nadu. Much of the population identifies with one of several tribal groups in the region, yet most of the population speaks Tamil. In contrast with Darjeeling, therefore, the Nilgiris are relatively politically stable. More importantly, unlike Darjeeling district the Nilgiris district is not a border region, and the region does not have the same history of in-migration. The granulitic Nilgiris Hills are also considerably older than the Himalayas, with slopes that are generally shallower and landslides that are less intense. However, the Nilgiris receives rainfall in both the southwest and north-east monsoon, so the landslide season runs almost
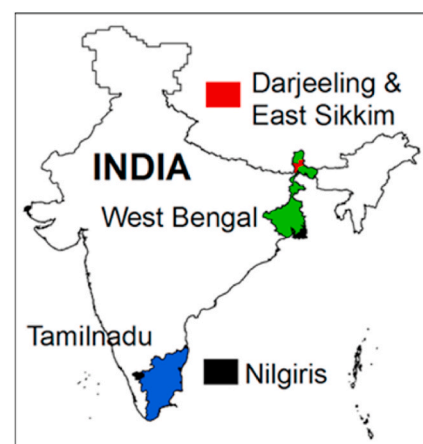

Fig. 1. LANDSLIP study sites in India. Figure produced by the LANDSLIP consortium and reproduced with permission.

continuously from June to December. The different political, cultural, and geographical contexts of the two study sites therefore provide an interesting backdrop for comparing the implementation of the Act, Policy and Plan. For this study field work was carried out mostly at the district level, and to a limited extent at the state and national level. Approximately three months were spent in the field between January 2018 and February 2020 and 35 interviews conducted. Table 1 provides a broad overview of interviewee distribution in the two study areas.

In addition to those mentioned in Table 1, three people with experience of working with disaster management at the national level were interviewed in Delhi. Four additional people belonging to government organisations not directly involved in disaster management but producing research studies on land and land use were interviewed in the Nilgiris. Interviewees were selected from a desk-based review of disaster management plan documents, which identified key actors in the area. The interviews were conducted under the ethical approval (LRS-16/17–487) received from King's College London for the research, and either written or verbal consent was gathered from each interviewee. The interviews were semi-structured by design; however, to ensure that all the interviews have common purpose they were given a broad structural outline with commonality in question themes. Most of the interviews were conducted in English with some Hindi, the first languages of the lead author. Some interviews in the Nilgiris were conducted in Tamil; interviews here were facilitated by our local research partner, the local NGO Keystone Foundation, and translated into English.

Additional observational fieldwork was carried out in both research areas, which included being a participant observer in meetings between the district and block level officers on Disaster Management Plans. Interviews and policy documents were analysed using thematic analysis, focusing on the themes of how early warnings are generated, disseminated and used in the study areas, the established protocols for disaster management, and how these protocols are interpreted or translated on the ground.

4. Disaster governance at the national level

Prior to the Act, the institutional structure for disasters in India was entirely response-driven, focussed on relief, rescue, and financial assistance. Relief and rescue operations were coordinated primarily at the district level by the District Collector/District Magistrate (different names for the same position: the most senior official in the district administration) and at the state level by the State Relief Commissioner (SRC), reporting directly to the Chief Secretary. At the national level, disasters were handled by the Ministry of Home Affairs (MHA).[2] During large-scale disasters, financial assistance for the affected state were administered from the National Calamity Contingency Funds (NCCF) and Calamity Relief Fund (CRF), following a visit to the affected area by a specially commissioned Inter-Ministerial Group and answered by a Central Relief Commissioner within the MHA, answering to a National Crises Management Committee (NCMC) [29]. Whilst the basic responsibility for undertaking rescue, relief, and rehabilitation remained

that of the concerned state governments – with the central government primarily providing financial assistance[3] – the Act introduced various new institutions at the national, state and district levels respectively to drive this shift. Significantly the Act replaced the temporary committees formed during a disaster with the following permanent institutions:

a) At the national level: National Disaster Management Authority (NDMA), National Executive Committee (NEC), National Institute for Disaster Management, National Disaster Response Force.
b) At the state level: State Disaster Management Authority (SDMA) and State Executive Committee along with State Disaster Response Force (SDRF).
c) At the district level: District Disaster Management Authority (DDMA).

The Policy (2009) and Plan (2016, 2019) were introduced to operationalise the Act. Whilst the Policy was oriented more towards mitigation than preparedness, response, or recovery, the language within the Plan – first introduced in 2016 and then revised in 2019 – suggests an approach that is primarily preparedness- and response-driven.[4] The legislation designed to facilitate the implementation of the Act therefore already provide an indication that the paradigm shift envisaged by the Act has not occurred. Furthermore, whilst the Act asked central government to set up a National Disaster Response Fund and a National Disaster Mitigation Fund, only the Response Fund has been created, by drawing upon the already existing NCCF and the CRF. The government has not constituted the National Disaster Mitigation Fund, arguing that ongoing schemes take care of mitigation measures, negating the need for a separate fund for it [54].

4.1. Institutional friction and the amendment to the act

The weakening of the intended aims of the Act relates partly to conflicts within central government created by the institutions that it mandated. Bose [55]; Mathur and Bhattacharya [56]; Bhattacharya (1974), Mathur [57]; and Cohen and Raghavulu [58] have argued that the Indian democratic political system – much like other countries – is always alert to the opportunities a disaster context offers in terms of political mobilization, and this is true of disaster funding as well. In particular, the distribution of the NCCF is open to political influence, with Kumar [59] arguing that resources are directed towards *floating parties*: political parties that are likely to make or change affiliations based on benefits. Das and Jha [60]highlight one such notable incidence, related to provisions of additional central assistance to Orissa (now Odisha) in the wake of the super-cyclone of 1999. At this time the Eleventh Finance Commission explicitly noted that the centre's reluctance to declare the Orissa super-cyclone as a national calamity and provide adequate assistance may have had a political motivation with the centre and state controlled by different political parties. The Act was therefore introduced in a context where relief funds were apparently open to political manipulation.

The new institutional structure proposed by the Act was introduced partly to circumvent these issues, through the establishment of a

Table 1
List of interviewees with disaster management officials and experts in the two study areas.

Respondents	Darjeeling	Nilgiris
Government officials (state/district/sub-district)	7	11
NGO members	2	1
Community members/first responders	6	2

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[2] Before this by the Union Ministry of Agriculture.

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[3] These were based on the recommendation of the Finance Commission of India, a constitutionally mandated body at the central level, responsible for evaluating the state of finances of the union and state governments along with laying down the principles determining the distribution of financial assistance from the centre to the states.

[4] The Policy has in total nine objectives of which five are mitigation focused, two aimed at improving preparedness and one each for response and recovery. However, as we move on to the Plan, which was designed to translate these objectives into actionable strategies on the ground, we find the term 'mitigation' used only four times as opposed to the term 'response' which figures 339 times throughout the Plan.

permanent NDMA, chaired by the Prime Minister and administered by a nine-member board of nominated experts from the field of disaster management.[5] As per the Act, one of these nine members was to become the Vice-Chair, who would have the status of a Cabinet Minister, and the other eight members were to have the Minister-of-State status (Act 2005). This new status for the NDMA created a hierarchical struggle between elected Cabinet Ministers and the nominated Board members of the NDMA.[6] A national-level DRR advisor shared that there was clear bureaucratic and political inertia resisting the change introduced by the Act in the institutional hierarchy for disaster management. For him this was evident in the struggles they faced to get the basic administrative work done through MHA, which was the sole authority for addressing disasters prior to the Act. These everyday struggles were, according to him, characteristic of the existing system's reluctance to let a strong NDMA emerge.[7]

Additionally, under the previous system, the Cabinet Secretary that headed the NCMC would report directly to Cabinet Ministers. In the new order, the Cabinet Secretary also headed the NEC, which was to assist the NDMA in its actions, effectively meaning that the Cabinet Secretary would be reporting to two bodies: the Ministry of Home Affairs and the NDMA. This created the potential for substantial bureaucratic and political stalemate.[8] A special task force was constituted by the MHA in 2013 to address these hierarchical mismatches, reporting that the 'functioning of institutional entities created under the Act at all levels were being reportedly constrained by a lack of clarity on the roles as well as by structural anomalies, dearth of human resources and inadequate infrastructure' [29] (p.ix). The response to this was to portion out the roles between the Ministry of Home Affairs and the NDMA, with the NDMA responsible for the formation and implementation of policies relating to prevention, mitigation and preparedness, and coordination of a disaster response with the states conducted by Ministry of Home Affairs. This therefore institutionalised the separation of mitigation and prevention measures from preparedness and response.

Based on the recommendations of this special task force, the Act was amended in 2013. The amendment was followed by downgrading the status of the Vice-Chair of the NDMA from Cabinet Minister to Cabinet Secretary and the status of other members from Minister-of-State to Secretary. The total number of members were reduced from nine to four/five. With this amendment, the Vice-Chair became subordinate to the Cabinet Ministers. This downgrading received considerable media coverage and was seen as a systematic weakening of an established institution [61–65]. Online research revealed no further Vice-Chair appointments since the amendment, possibly indicating an attempt to avoid any further power conflicts between the Cabinet Secretary and the Vice-Chair of the NDMA.

4.2. Summary

In summary of the above, Fig. 2 shows the current operational hierarchy for disaster management in India at the national level. This diagram has been developed on the back of communication pathways diagram given in the Plan (2019). It should be noted that the pathways (arrows) we present here are not identical to that presented in the Plan; rather it has been modified based on information gathered from the interviews. The diagram provided in the Plan represents an ideal institutional pathway for coordination, decision making and communication; it does not highlight any chain of command. Conversely, Fig. 2 highlights the chain of command (with orange-coloured arrows) and some of the additional pathways of communication (grey coloured lines). It shows the disaster management institutional structure to be

top-down in its approach, as has been argued previously in the literature [66,67]. The NDMA, looking after mitigation, is subordinate to the MHA, which manages disaster response. This is indicative of the preference given to response over mitigation within the new institutional structure at the national level. Additionally, we see that the crises committee – which had been representative of response-oriented approach towards disasters before the introduction of the Act – has continued to command the DM institutional structure even after the introduction of the Act, especially during a disaster event.

5. Disaster governance at the local and regional level

This section outlines changes to disaster management in the Nilgiris and Darjeeling districts since the introduction of the Act, Policy and Plan. The section focusses specifically on a) the institutional structure for DRR in these two study areas, including financial resources available for DRR; and b) the state and disaster management plans.

5.1. Nilgiris District

5.1.1. Institutional structure for DRR

5.1.1.1. At the state level. In Tamil Nadu, disaster management comes under the Commissionerate of Revenue Administration, Disaster Management and Mitigation, within the Revenue Department. The commissioner of this Commissionerate is also the State Relief Commissioner (SRC). The chain of command remains largely unchanged since before the introduction of the Act, with the SRC overseeing relief operations throughout the state, and incidence information and relief requirement provided by District Collectors, who also head the disaster management operations at the district level.[9] The institutional structure for disaster management outlined in the Tamil Nadu State Disaster Management Plan [68] is as follows: the government has constituted Tamil Nadu State Disaster Management Authority (TN-SDMA), recently renamed as Tamil Nadu Disaster Risk Reduction Agency (TN-DRRA). The TN-SDMA/TN-DRRA works under the chairmanship of the Chief Minister. A State Emergency Operation Centre (SEOC) functions under the command of the SRC to disseminate early warnings and alerts received from the Indian Meteorological Department, Central Water Commission, Indian National Centre for Ocean Information Services, and other agencies to district administration. However, the TN-SDMA was officially constituted in November 2013 almost eight years after the introduction of the Act [69].

The Act mandates state governments to create a State Disaster Response Fund (SDRF), District Disaster Response Fund (DDRF), State Disaster Mitigation Fund (SDMF) and District Disaster Mitigation Fund (DDMF) (Act, 2005), mirroring the creation of the same financial structure at the national level. The purpose of the SDRF is for state governments to meet the expenditure of providing immediate relief to the victims (NDMA website). This is constituted jointly by Government of India and the State Government, in the ratio of 75:25 [68]. Based on the recommendations of the Thirteenth Finance Commission, central government transferred CRF funds to SDRF and the CRF ceased to exist as on March 31, 2010 [70]. This indicates that the CRF has merely been renamed, and the same funds are being used for response measures under a different name. The TN-SDMP further states that the remaining three funds (SDMF, DDRF and DDMF) have not yet been constituted, with no clear timeline for when they will be constituted. The TN-SDMP instead suggests that certain flexible funds available under other centrally sponsored schemes can be potentially directed towards mitigation and DRR activities. This demonstrates both the persistence of the institutional structure that existed prior to the Act and continued focus

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[5] Interview with national-level disaster response expert 1, January 2018

[6] Interview with national-level DRR advisor expert 2, January 2018.

[7] Interview with national-level DRR advisor expert 2, January 2018.

[8] Interview with national-level disaster response expert 3, January 2018

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[9] Interview with state-level senior DRR official, Tamil Nadu September 2018
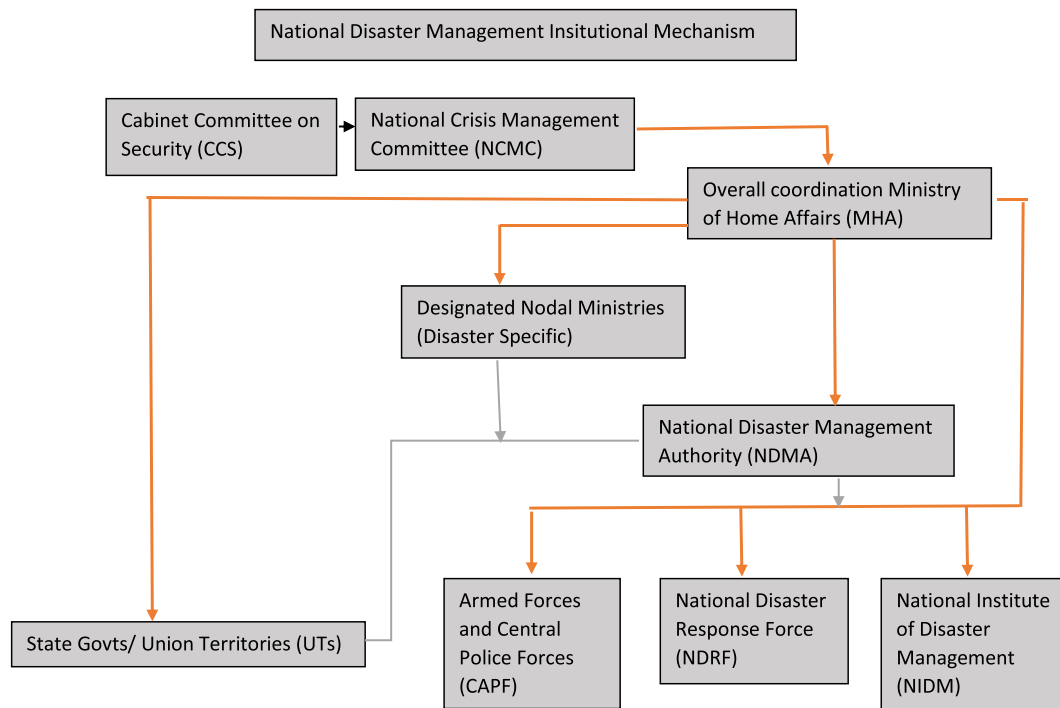
Fig. 2. National level disaster management institutional network with the chain of command highlighted. Orange arrows represent the chain of command and grey arrows additional pathways of communication.

primarily on disaster response.

5.1.1.2. At the district level. The Plan identifies the DDMA, constituted under the Chairmanship of the District Collectors, as the planning, coordinating, and implementing body at the district level. The DDMA in the Nilgiris operates through the Revenue Administration, which includes three Revenue Divisions and six Revenue Taluks[10]. The District Collector is a kingpin for all administrative matters at the district level, assisted by the District Revenue Officer and the Personal Assistant (General) who are also members of DDMA. Each Revenue Division is headed by a Revenue Divisional Officer and each *taluk* is headed by a Tehsildar. Fig. 3 diagrammatically represents three Revenue Divisions and the corresponding Revenue Taluks in the Nilgiris.

Interviewees at the state and district-level identified following significant changes in disaster management since the Act:

- regular meetings with the first responders' team;
- the introduction of an emergency helpline number for people to call;
- greater interdepartmental co-ordination;
- awareness programmes; and
- prepared evacuation centres and information dissemination through the SEOC.

A senior official in the district administration spoke to us about an effective coordination mechanism introduced up to the local community level. The interviewee emphasised the importance of interdepartmental zonal teams formed under the leadership of the Revenue Authority, with team members drawn from police, fire services, rural development, forest, agricultural and other departments. Each team monitors five to seven vulnerable areas, aided by first responders at the ground level.[11] The TN-SDMP identifies these first responders as community members at the grassroot level, who are enrolled as able-bodied volunteers with

skills of swimming and climbing. First responders are reported to play a key role in raising awareness, providing incidence information to the authorities and first aid to the victims before official help arrives (TN-SDMP, 2019). A sub-district official discussed the chain of information from the District Revenue Officer to first responders:

We select ten volunteers from each of the vulnerable areas between the age of 25–35 years. These are young people and can help in rescue operations. Before south-west and north-east monsoon, we conduct meetings with them. We ask them to share any incidence report on the number 1077. We already have 22 such groups in our taluk. We also work with other line departments BDOs, Highways, Public Water Works and JCB owners. We also do training and awareness programmes with school students and our staff. We share the emergency number widely so anyone can call. We have also prepared one hundred and three schools which can be turned into shelters for evacuation. When we receive any weather warning from district office, we pass it onto zonal officers.[12]

Our fieldwork, however, highlighted a lack of communication between government authorities and first responders. Contacting first responders directly proved difficult, as shown by the relatively low numbers of interviews were able to arrange. In some cases, we found that first responders were either not aware of their status or were merely told about it without much briefing. One of the common characteristics of the few first responders we could reach was that they were local daily wage workers. This meant that many responders had not attended training, as one first responder mentioned:

I did once receive the training. It included activities like swimming and helping clear an area. However, not everyone can afford to go for these trainings because we are daily wage workers. To attend these training, we have to miss our day's work. Only those who are keen to learn these skills would volunteer.[13]

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[10] Taluk is sub-district level administrative unit.
[11] Interview with district-level senior official, the Nilgiris, September 2018.
[12] Interview with block-level senior official, the Nilgiris, September 2018.
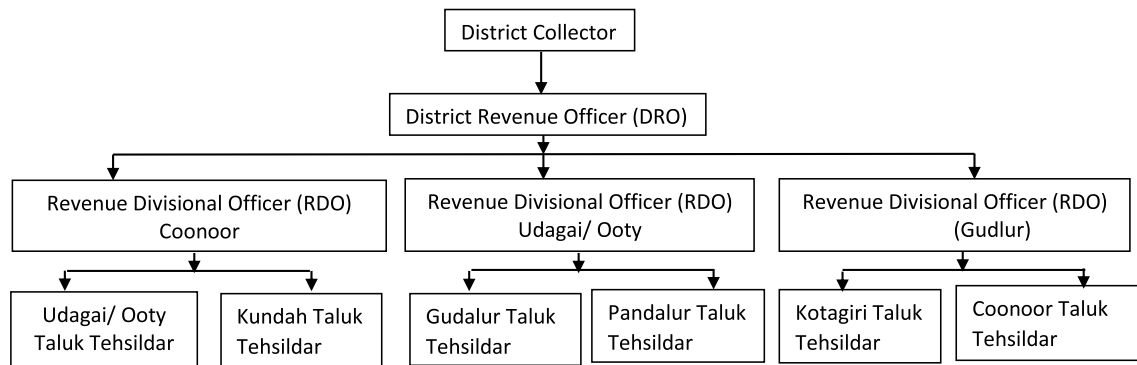[13] Interview with first responder, the Nilgiris, September 2018.

Fig. 3. The administrative hierarchy at sub-district level in the Nilgiris.

The functioning of the response-based system thus depends on the willingness of community members to forego pay, and it appears to represent an outdated allocation system that does not consider current circumstances. The importance of interdepartmental co-ordination was, however, apparently better understood. A sub-district official from the department of District Rural Development Authority (DRDA) – which supports the Revenue Department in relief work – mentioned that all his Deputy Officers are part of the interdepartmental zonal teams, and all the teams have WhatsApp groups. The alerts received from the district are shared immediately through these groups. Before monsoons, these teams inspect their respective areas and identify any trees likely to fall due to monsoon winds. Block offices are in a more supportive role to the Revenue Administration for disaster management.[14]

5.1.2. State and district disaster management plan

The disconnect between international policy and local-level disaster management in the Nilgiris is apparent within TN-SDMP and the Nilgiris District Disaster Management Plan (NDDMP). Both of these were a requirement of the Act, yet both follow exactly the same format as the national-level Plan, demonstrative of the perfunctory nature of the plans. In particular, the disjunct with international discourse is represented in the way that the plans use the terms 'hazard', 'vulnerability' and 'risk assessment'. These terms have specific meanings within the UNDRR and specific relationships (risk as a function of hazard, exposure, and vulnerability). This conceptualization closely informs academic research work on disasters and vulnerability [71–73]. If the international discourse is percolating downwards, as is intended, this nomenclature should therefore be reflected in the plans.

Section 2 of the TN-SDMP deals specifically with hazard, vulnerability, and risk assessment. Whilst the use of the term hazard reflects its use by the UNDRR – being used exclusively in relation to the physical trigger event like a cyclonic storm and landslide – there is a lack of conceptual clarity about the difference between vulnerability and risk. For instance, the TN-SDMP mentions that 'the identification, assessment, and mapping of the [disaster] risks are undertaken using the legacy data and geomorphological characters of the state' [68](p.22). The NDDMP also utilises legacy data about disaster events to identify the vulnerable areas, conflating vulnerability with hazard. In both plans, vulnerability is understood through the source and cause of the hazard, details of the relief measure available if the hazard is triggered, and maintenance actions taken during the previous year to reduce the impact. Vulnerability assessment in the NDDMP, and risk assessment in TN-SDMP, are essentially demarcating the areas where disasters (landslides) have previously been reported. Analysis of 'vulnerability' therefore includes broad details about the hazard and status of relief measures available, and not the differentiated capacities of the individuals and the communities in an area in the face of the disaster,

contrary to UNDRR definitions. Hence, although the terms vulnerability, hazard and risk have percolated into the State Disaster Management Plans (SDMP) and District Disaster Management Plans (DDMP), these are used in a way that reflects a response-oriented approach that does not consider the social determinants of vulnerability.

5.1.3. Summary

Since the introduction of the Act, the existing structure for disaster management in the Nilgiris at the district and sub-district level has been re-assembled in ways that improve the government authorities' response efficiency. Interzonal teams, WhatsApp groups and interdepartmental meetings before and during monsoons are valued. Similarly, the district government has also carried out awareness activities under the guidance of specific central government agencies. However, a gap in communication with first responders indicates that the nature of interaction with citizens – in the context of disaster management – has largely remained the same. This observation is significant in the Nilgiris, as the district has done some exemplary work with citizens in banning single use plastic in the region and has a history of effective participatory practices [74–77]. However, in the case of disaster management, the focus on interdepartmental coordination – producing disaster management plans, establishing emergency communication centres such as the SEOC and DEOC – while lacking government-citizen coordination, highlights that the implementation of the Act is heavily top-down. Disaster management overall in the district is focused on achieving the agendas set by the centre and the state, without being attentive to the specific capacities of the district or allowing the district to use its individual strengths in innovative ways.

5.2. Darjeeling District

5.2.1. Institutional structure

5.2.1.1. State level. Unlike Tamil Nadu, West Bengal has a separate department for disaster management, the West Bengal Disaster Management and Civil Defence Department. The department carries out all the work assigned to the SDMA in the state, without subscribing to the name. The department has been in existence since 1992 and was rechristened from 'Department for Relief and Rehabilitation' to 'Disaster Management and Civil Defence Department' in 2006 after the introduction of the Act (West Bengal State Website), with the operation of the department remaining largely the same. For financial resources, West Bengal also depends on NCCF and CRF grants from the centre, which have now been renamed as National Disaster Response Fund and State Disaster Response Fund respectively.

5.2.1.2. District level. The department appoints disaster management officers to assist administrators at each level of administration (see Fig. 4). A district-level disaster management official described Sub-

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[14] Interview with block level senior official, the Nilgiris, September 2018.

District
District Magistrate (DM)
Additional District Magistrate (ADM)
Officer-in-Change Disaster Management (O/C DM)
District Disaster Management Officer (DDMO)
Disaster Management Professional (DMP)

Sub-Division
Sub-Division Officer (SDO)
Sub-Division Disaster Management Officer (SDDMO)

Block
Block Development Officer (BDO)
Block Disaster Management Officer (BDMO)
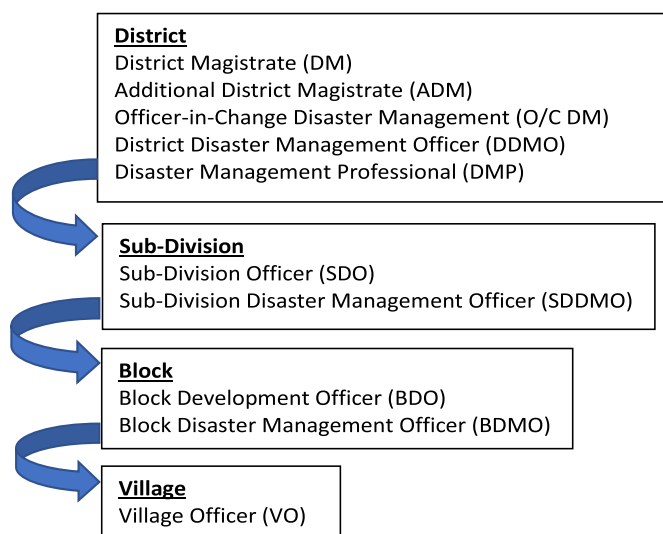
Village
Village Officer (VO)

Fig. 4. Administration at sub-district level in Darjeeling along with corresponding disaster management officers.

Divisional Officers and Block Development Officers (BDOs) as significant administrative positions reporting to the District Magistrate.[15] However, our fieldwork observations revealed that District Disaster Management Officer, Sub-Divisional Disaster Management Officer and Block Disaster Management Officer to be primarily clerical jobs, focused on compiling Calamity Assessment Reports,[16] the Darjeeling-District Disaster Management Plan and distribution of relief material. Furthermore, an acute shortage in the workforce was expressed by our respondents.[17] For example, a block-level official commented on the shortage of workforce in the block disaster management department:

> I am a one-man army. Officially, am assigned two support staff and peon, but no one is recruited in their position. So, I end up doing everything. At block level we create Calamity Assessment Reports. This is an official record of loss suffered during the disasters. Apart from all this I also get requests from colleagues at GTA to look at some of compensation claims for house damage which they cannot verify because they don't have qualified engineers.[18]

As in the Nilgiris, in Darjeeling as well, the DDRF and DDMF are yet to be created [78] (pp.74–75). This is despite recent calls by the Fifteenth Finance Commission for the creation of these funds at the state and district level [79] (pp.235–238) Also, much like the Nilgiris, Darjeeling district depends on ongoing projects for indirect mitigation benefits, rather than having a clear institutional focus on disaster mitigation [78].

5.2.1.3. The Gorkhaland Territorial Administration (GTA). The GTA constitute a small part of disaster management, limited to approval of House Building Grants for rehabilitation [78](p.75). They do not have an active role in relief and rescue operations. Commenting on the GTA's role in disaster management, an official in the Disaster Management Division at the GTA mentioned:

State government has allocated a House Building Grant to GTA for those families who have either lost their house or suffered damage to their house due to a disaster. They put in claim request to us. We then inspect these requests to gauge their authenticity and decide whether we want to recommend them to the state government or not. Once we decide that a claim is appropriate, we forward it to the state department in Kolkata. The state department then release the grant money which is transferred to the claimant.[19]

This unique format of local administration adds another level of complexity to disaster management in Darjeeling, as distribution of funds for rehabilitation is handled by the GTA who do not otherwise participate in preparedness and response. Thus, once again we see in the top-down approach followed by national and then state government for disaster management; there is no space for the context-specific challenges faced by local administration to emerge.

5.2.2. State and District Disaster Management Plans
The latest version of the West Bengal SDMP [80] – available on the West Bengal state administration website – follows largely the same format as TN-SDMP, providing a hazard, risk, and vulnerability profile of West Bengal and then sections on mitigation, preparedness, and response. Unlike the TN-SDMP, the WB-SDMP provides a clear definition of all the three concepts, following the UNDRR. However, beyond this, the usage of the terms is similar to the TN-SDMP, again indicating an absence of a shift in conceptualising disasters towards the social components of vulnerability. For example, the section 'History of Vulnerability' outlines a list of past disaster events in the state, described in terms of hazard rather than social capacity [80] (pp.33–35). While the latest Darjeeling DDMP [78] does try to correlate settlement distribution with hazard, it is still nominal and confined to a two-page description (pp.14–15).

Our fieldwork in Darjeeling included an opportunity to travel with district disaster management officials to various blocks and be part of conversations about the drafting of latest DDMP. From this we determined that the list of historical disasters in the D-DDMP is compiled from Calamity Assessment Reports: official records of the loss and damage compiled since before the introduction of the Act to identify and legitimate compensation claims. The West Bengal SDMP is compiled from these reports[20]. The D-DDMP further consists of a list of line departments involved in disaster management/response, the infrastructure available to handle a disaster situation and name and contact details of officers/individuals in-charge in each block. However, a member of a local NGO commented that the DDMP was 'a glorified telephone directory'[21]; a list of who to call in response to a hazard and essentially response focussed. A block-level official confirmed this:

> At block level landslides are all about distribution of tarpaulins. During monsoon season when landslips start occurring our first challenge is to ensure an even distribution of tarpaulins. It is not easy. People tend to take more than what they require. Technically they should return it after the monsoon, but nobody does, and we don't have time to go around collecting them.[22]

The SDMPs and DDMPs in both the states and study districts thus reflect the unique characters of the respective areas to a very limited extent and are instead largely a bureaucratic exercise directed by the centre and aimed at depicting a uniformity in disaster management

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[15] Interview with district-level disaster management official, Darjeeling, January 2018.
[16] Calamity Assessment Report is detailed account of loss of life and property compiled by the village and block offices and then sent to district office.
[17] From the interviews with the block level officials within the district
[18] Interview with block-level disaster management official, Darjeeling, January 2018.

[19] Interview with Disaster Management Official at GTA Darjeeling, October 2018.
[20] Interview with official at district disaster management department, January 2018.
[21] Interview with Disaster NGO member, Darjeeling, January 2018.
[22] Interview with block-level disaster management official in Darjeeling district, January 2018.

approach across the country. The plans closely follow the format prescribed by the national government. The plans represent no conceptual shift in comprehending disasters. Rather, it can be argued that the terms vulnerability, hazard, and risk have been appropriated into the existing paradigm, which has been made more efficient, but without undergoing any conceptual shift.

5.2.3. Summary

The case of Darjeeling shows:

- Government's continued focus on improving efficiency of response through preparedness along with better relief distribution mechanisms.
- The interchangeable use of risk and vulnerability in the planning process, indicating a lack of conceptual clarity which is a primary requirement for bringing in the paradigm shift envisioned by the Act.
- Continued financial support for relief, response, rescue, and rehabilitation, but no such framework for mitigation.

All these factors indicate that in Darjeeling, disasters are considered as natural events that should be addressed retrospectively. This is also evidenced in the local communities' demands from the government *vis a vis* disaster management. For instance, in 2016 a 12-hour-long strike was called in Mirik to protest government's delayed rehabilitation response to the 2015 landslide. This protest was focussed not on preventing future landslides, but on administration's failure to give the victims of the landslide land to rebuild their homes [81].

Much like the Nilgiris, therefore, disaster management in Darjeeling is focused on compiling Calamity Assessment Reports and disaster management plans along with conducting mock drills aimed at evacuating affected areas, rescuing injured people and ensuring that they get medical assistance as soon as possible. There is little evidence of a conceptual shift in comprehension of disasters from a natural event to one created by social and economic factors.

6. Analysis

The following points summarises the changes that have been introduced in disaster management at the state and district level since the introduction of the Act, Policy and Plan:

a) Renaming the departments: Previously existing Relief and Rehabilitation Departments in both the study districts have been renamed as Disaster Management Departments, although their roles and responsibilities have remained largely the same.

b) Disaster Management Plans: As mandated in the Act, Disaster Management Plans have been created at all the three levels of administration (national, state and district). At the district level, these plans constitute a comprehensive compilation of available response resources but have a limited focus on preparedness or mitigation. Both the meaning of particular terms (for example, vulnerability) and the conceptual understanding of their assessment process, are different to that intended by international policy guidelines.

c) Co-ordination networks: Both districts place an emphasis on having an efficient coordination network for response to share early warnings down to the community and report incidences back to the authorities in time.

d) Taking stock: In the Nilgiris District, pre-monsoon meetings are conducted in both districts to evaluate preparedness measures and take stock of resources for response.[23]

e) Conducting mock drills: Mock drills are conducted to assess the efficiency of response measures, under the orders of State Disaster Management Department. A mock drill we observed in Darjeeling was found to be in the spirit of following orders to complete an assigned task; we are not aware of any assessment report prepared to reflect on district's response capabilities on the back of this drill.[24] Similarly, in the Nilgiris many first-responders do not attend training due to the loss of daily wages.

f) Awareness campaigns: Awareness campaigns are regularly conducted in schools in the Nilgiris, although the district disaster management office in Darjeeling needed more financial resources as well as trained human resource to conduct such awareness campaigns.[25]

A considerable number of features have, however, remained the same even after the introduction of the Act, Policy and Plan. These are:

a) Workforce: In addition to the compilations of Calamity Assessment Reports, these changes have given Disaster Management Departments the additional charge of compiling SDMPs and DDMPs, disseminating early warnings received from the central government agencies, conducting mock drills, and carrying out other administrative works. However, the workforce within Disaster Management Departments remains largely the same.

b) Hierarchical structure: Importantly in relation to the above, key decision makers and the chain of command for disaster management at the centre, state and district levels are the same elected and administrative officials. The bureaucratic system remains central to disaster management, with the District Collector/Magistrate coordinating all components of disaster management (except for distribution of House Building Grant in Darjeeling), as had been the case before the Act.

c) Engagement with the community: The nature of the district administrations' engagement with the community has remained largely the same: that is, primarily top-down. Relatedly, communities' expectations from the administration continues to be relief-, rescue-, and rehabilitation-oriented. Successful citizen-government initiatives seen in other areas of administration in the Nilgiris have not occurred within disaster management, due to the top-down nature of policy implementation. Citizens are seen either as a source of first-hand incidence information or as a group able to reach the affected area immediately to provide first aid while the government help/rescue arrives. Reshaping this relation would require thinking of DRR beyond the individual incidences and more broadly in terms of vulnerability and risk.

d) Resources: Whilst the National, State and District Disaster Response Funds mandated by the Act have been created by drawing upon the already existing NCCF and CRF, mitigation funds have not been constituted at any level. It is also worth noting that a recent order from the Government of India on financial assistance for disasters speaks of SDMF/SDRF together, suggesting that no additional financial resources have been allocated for mitigation work separate from response [82].

Others have argued that this funding landscape is not conducive to the promotion of a mitigation-oriented vision of the future [19,29], and constrains local administrators from taking visionary actions for disaster mitigation ([59,60]. Whilst we agree that further funding for mitigation would be helpful in shifting towards UNDRR's vision of disaster risk management, this alone would be unlikely to bring about a significant change. This lack of funding for mitigation needs to be viewed as a characteristic of the existing disaster management paradigm. Put

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[23] Interview with district-level senior official, the Nilgiris, September 2018.

[24] This disaster management mock drill was conducted in Darjeeling on 10 October 2018. While on the field we got a chance to witness the exercise first-hand.

[25] Interview with official at district disaster management department, October 2018

differently, instead of seeing the factors which have worked as success stories – separated from the ones which have not and which in turn need to be 'fixed' – we argue that the two should be viewed as part of a single epistemic understanding of disasters and their local contexts.

This paper thus argues that both the factors that have changed (that is, where the institutional and policy changes at the national level have been successful) and those that have not changed (where they have not been successful), should be viewed as characteristics of the existing disaster management paradigm within the country. To be more specific, taking stock of resources before the monsoon, conducting mock drills, and formalising coordination networks, are all essentially an exercise in reassembling and formalising the pre-existing setup to improve response efficiency. Because the focus is on reassembling, retaining, and incrementally improving response, we do not see any significant change in the workforce, hierarchical structure, or the nature of engagement with the community. This argument challenges the assumptions made by several authors reviewed at the start of this paper [14,29–31] that the Act can be properly implemented merely by fixing functional challenges related to hierarchy, staffing and funds. We argue that this approach overlooks the components of the existing paradigm; understanding this paradigm and the context within which it operates is essential for introducing any kind of conceptual change in understanding and dealing with disasters.

Our findings suggest that the existing paradigm is response-focused, viewing disasters as primarily natural events that disrupt normal life and result in loss of life and property (houses, agricultural land, and cattle), to be addressed retrospectively. This is evidenced by the lack of effort to bring community-focused governance into disasters in the Nilgiris, as has been adopted for other issues (environmental sustainability, for example) [83,84]. It is also exemplified in the way that 'vulnerability' is used within the local-level plans. Within a preventive paradigm, vulnerability is defined as the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a hazard [6]. In the response-based paradigm witnessed here, vulnerability is used interchangeably with hazard exposure: an area that has previously experienced a hazard is 'vulnerable'. Moreover, at the time of writing, the NDMA website still classifies disasters as 'natural' and 'man-made'; natural being identified as floods, landslides, storms, and cyclones and man-made as nuclear, biological and chemical – while mainstream disaster studies have long recognised that disasters are socially driven [85,86]. Local and state government narratives around disasters seem to be firmly entrenched and are reflected in the response-driven approach that persists at the local level.

The ongoing political situation in Darjeeling further exacerbates the situation in that district. The parsing of response and mitigation funds between the district and GTA reflects an absence of long-term thinking in relation to disasters. Here, despite regular and often deadly landslides, disasters are not considered priorities in the light of the ongoing political situation, as manifest in our difficulties in gaining interviews with the District Magistrate. The risk of landslides has therefore apparently been naturalised, as was shown in our observations in the district: houses and roads built on marginal land showed evidence of repeated stresses from landslides, yet people brushed this off as an inevitability, with no expectation that the situation could change through, for example, better building codes. The lack of specific mitigation funding therefore both reflects and further entrenches the existing paradigm [19] – and is made worse in Darjeeling because of the fragmentation of responsibility.

One important area that existing framings overlook is the role of institutional inertia within the existing power structures in maintaining the existing paradigm. In many cases, proposed changes to the institutional landscape has merely resulted in name changes for existing departments and the continuation of the existing hierarchy. Proposed new agencies or funds that did not fit the existing structure were either not created, merged with existing departments, or staffed with the same people holding multiple roles, sometimes leading to complicated and circular chains of command. The fact that these hierarchies are not uniform between states in India, or between districts within states, contributed to a decontextualization, allowing the Act, Policy and Plan to be interpreted in different ways rather than in accordance with its aims, and enabling the institutional inertia that is witnessed here. This has led to what Stables and Scott [87] refer to as policy 'sloganization', where the new disaster policies have not brought about the changes that they promise on paper due to institutional inertia, even at the national level.

The importance of this decontextualization is shown in the components of disaster risk management that have seen improvements, such as cyclone risk management. These are components of DRR that are in sync with the previous institutional structure. For example, we have seen how new methods have been introduced to efficiently disseminate information and ensure quick delivery of response, such as the setting up of interdepartmental teams in the Nilgiris and increasing emphasis on compiling of the District and State Disaster Management Plans in both the study districts. The struggle, however, is in translating specifically those parts of the Policy and Plan into action which did not have precedence in the institutional landscape prior to the introduction of the Act: most importantly mitigation measures. In the new institutional structure, institutions responsible for guiding and monitoring mitigation are secondary and subordinate to the ones responsible for preparedness and response. Our results allow us only to speculate on why the institutional structure shows such inertia, although it is notable that the position of the District Collector/Magistrate as the most senior local (unelected) official was a colonial innovation, suggesting a degree of path dependency [88].

Stevenson [89] argues that decontextualization in the policy making process tends to 'reify the discourse'. Reification can imply unquestioning faith in centralised authorities like international bodies and intergovernmental agreements. This is clearly visible in the Indian DRR policy scenario; we see a deliberate attempt to portray a break from the old system and the dawning of the new, for example through repeated reference to paradigm shift. However, in practise the old system has not been entirely dismantled. Here our findings contribute to other literature on the difficulties of applying the western perspective of the Sendai framework into the global South, where worldviews can be very different [90–92]. The change of approach from response to anticipation requires more than an institutional renaming exercise or a single policy – it also requires multiscalar shifts in institutional cultures and adequate resourcing. Ultimately, there needs to be financial assistance and awareness of the situated nature of risk [93].

The process of decontextualization can also be seen as a deliberate attempt at showcasing a uniformity across scale. We would add to the literature above, then, by drawing attention to Ingold's [43] conceptualization of scale discordance. Ingold argues that the distinction between global and local perspective is not one of hierarchical degree but one of kind. The local is not merely a focused interpretation of the global; rather it is based on an altogether different way of perceiving and engaging with the world. In the case of DRR, while global policy prescriptions are based on a long-drawn theoretical conceptualization of disasters, the local is embedded in experience of living in and engaging with the everyday world. This positional perspective of the local is both informed by, and manifested through, institutions and the community. A top-down policy change which does not engage with or acknowledge the situated perspective of disasters is, as evident from this study, therefore able to introduce only selective changes which do not disrupt the status quo.

7. Concluding remarks

In the opening section of this paper, we showed how the shift from disaster management to DRR in the international policy guidelines was a slow one, based on a transition in considering disasters as 'acts of God' beyond human control to social phenomena stemming from the

interaction of two main components: hazards and vulnerability. This transition had, however, not taken place in India when the new policy guidelines were introduced, either nationally or locally. Rather, the policy transition was itself expected to introduce this conceptual change in the understanding of disasters. The need to introduce policies without having relevant conceptual grounding in the existing institutions resulted in an abstract and decontextualized policy discourse.

The paper has therefore shown that examining the gap between policy and action for DRR in India in terms of a few functional challenges is an incomplete and ineffective conceptualization of the challenges being faced in improving India's approach towards DRR. Our findings have instead shown that India's DRR policy framework struggles in implementing its intentions because the policy discourse is decontextualized, and shifts in understanding disasters as being driven by social factors have not occurred. Meeting these intensions would instead require a focus on a) understanding the way disasters are understood and experienced at the local level and b) being attentive to institutional inertia faced in introducing a conceptual shift in DRR. Our findings suggest that effective implementation of international ideas and protocols in DRR on the ground is not simply an issue of scale discordance. Such an understanding implies functional challenges as the roadblock in accomplishing the national policy intent. Rather, the failure to bring about a paradigm shift in DRR in India is an issue of differently assembled realities at each level of decision making. Not acknowledging these differences and instead enforcing a rigidly top-down approach creates a significant institutional inertia, which is both already present and enabled by a decontextualized approach. Interventions instead require engagement with the way that disasters are understood, experienced, and addressed in the local context.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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