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Re-examining critiques of resilience policy: evidence from Barpak after the 2015 earthquake in Nepal

Simon Rushton, Julie Balen, Olivia Crane, Bhimsen Devkota, and Sudha Ghimire¹

This paper examines three common critiques of 'resilience': (i) that it is a 'top-down' policy discourse that pays too little regard to local specificities; (ii) that resilience policy represents a neo-liberal shift towards the responsabilisation of communities and a retreat of the state from its role in providing protection; and (iii) that the focus on resilience tends to divert attention from the underlying causes of vulnerability. Using data collected after the 2015 earthquake in Nepal, the paper argues that these critiques have mixed salience in this context, but that (i) and (iii) in particular point to important problems in how the central government and its international partners have approached enhancing the resilience of communities. While there are benefits to considering resilience at the local level, it is important to recognise the inequalities within communities, how these might be reflected in differential degrees of vulnerability, and how they might be reinforced through resilience-building programmes.

Keywords: earthquake, Nepal, resilience, responsabilisation, vulnerability

Introduction

In recent years, 'resilience' has become a major preoccupation of policymakers in the fields of disaster management and international development more broadly. It is a theme that runs throughout the Sustainable Development Goals (SDGs), appearing 14 times (Labonté, 2016, p. 679), most prominently in Target 1.5, which pledges to 'build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters' (UN, 2015, p. 15). Multilateral and bilateral donors have adopted frameworks for working with developing country governments on resilience-building (see, for example, DFID, 2011; World Bank, 2013; United Nations Office for Disaster Risk Reduction, 2016; Center for Resilience, United States Agency for International Development, 2016).

Nevertheless, resilience remains a notoriously slippery concept that has been utilised in a variety of ways across academic disciplines and policy spheres (Alexander, 2013). From the individual psychological level (such as resilience in the face of traumatic experiences) right up to the global population level (such as worldwide resilience to climate change), the term has been applied with different meanings at different scales (Matyas and Pelling, 2014, pp. 1–2). Aside from its conceptual imprecision,

resilience as a policy discourse has faced widespread criticism on a number of other grounds. In this paper, we engage with three of the most common critiques: (i) that resilience is a ‘top-down’ policy discourse that pays too little regard to local socio-economic and cultural specificities; (ii) that, in practice, resilience policy represents a neoliberal shift towards the responsabilisation of communities and a retreat of the state from its role in providing protection; and (iii) that the focus on resilience tends to divert attention away from the underlying social, political, and economic causes of vulnerability, taking instead the community’s vulnerability as given, and in so doing, thwarting debate on the underlying structural drivers of inequitable exposure to risk.

Our aim here is first to assess whether these critiques have purchase in the context of Nepal (that is, to ‘test’ them against our findings on local and national resilience policymaking and implementation), and second, where they are found not to apply, to try to understand why they do not ‘fit’ in this particular setting. Thus, we are pursuing both theory testing and (albeit tentatively, given the single empirical case we are evaluating) suggesting avenues for further theory development.

The particular local setting on which we focus is Barpak in Gorkha District, the village closest to the epicentre of the magnitude 7.8 earthquake that struck Nepal on 25 April 2015. Drawing on field research conducted exactly one year after the event, when the country was transitioning from the short-term relief effort to more forward-looking policy discussions on enhancing disaster resilience in the future, the paper explores perceptions of resilience, and how to promote it, at the community level as well as at the district and national government level. Using the three critiques outlined above as lenses to investigate the operation of resilience policy discourse in this specific geographical, sociocultural, and political-economic environment, the paper considers whether the resilience policy process in Nepal was a top-down one in practice, whether there is any evidence that resilience thinking was leading to the responsabilisation of communities, and whether the structural causes of vulnerability were indeed being obscured in the policy discourse.

The paper begins by delving into the existing literature to lay out the three critiques of resilience policy on which it concentrates. This is followed by a discussion of the history of resilience policymaking in Nepal and the methodology underpinning the study. Next, the three critiques are examined in turn, drawing on data collected from the village of Barpak and from policymakers and implementers in Gorkha Bazaar (the district headquarters) and in Kathmandu (the national capital). In the conclusion, we contend that the three critiques are applicable to the data we collected to some extent, but in ways that are more nuanced than the existing literature often suggests. In particular, we assert that while there are benefits to considering resilience at the local level, it is important also to recognise the inequalities within communities, how these might be reflected in differential degrees of vulnerability, and how they might be reinforced through programmes that are designed to build resilience.

Resilience and its discontents

The United Nations Office for Disaster Risk Reduction (UNDRR) defines resilience as:

*The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.*²

Although the definition has been debated³ as resilience has broadened from its original roots in ecosystems (Holling, 1973), the basic thrust of the UNDRR's definition and its emphasis on 'perturbation and recovery' (Tiernan et al., 2019, p. 55) certainly constitute a consistent theme. Owing to its applicability to 'hazards' of various forms, resilience thinking has been praised for allowing the linking together of global challenges, becoming an important bridge between global policy processes pertaining to disasters, climate change, and development (Roberts et al., 2015). While it remains underdeveloped (Haase, 2010), international resilience policy has progressed significantly in the past decade—for a useful review of these developments in both the policy world and the academic literature, see Tiernan et al. (2019).

The Sendai Framework for Disaster Risk Reduction 2015–2030 represents perhaps the most prominent international application of resilience ideas to disasters.⁴ It sets out a series of actions that governments should prioritise to prevent and mitigate disasters and to increase resilience to them, and it includes seven targets against which progress is monitored. Although the Sendai Framework talks about various 'levels of analysis'—'The ability of a *system, community or society* exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner' (footnote 2, p. 8; emphasis added)—our focus in this paper, as in much of the humanitarian and disasters discourse, is on the resilience of communities, which here refers to the village unit.

Resilience policies have been subjected to critiques in literature from a range of disciplines, including development studies, livelihood studies, and international relations. Drawing on these observations, we sketch out below three of the most prominent and consistent of these critiques: (i) that resilience is an overly 'top-down' policy discourse; (ii) that in practice it results in the responsabilisation of communities; and (iii) that it naturalises vulnerability.

Resilience as a top-down policy discourse

In examining the power dynamics behind the promotion of resilience as a policy goal, critics have argued that there has been a 'top-down' movement of this discourse from the global to the national to (ultimately) the community level. Joseph (2018, Chapter 4; see also Joseph, 2016), for instance, shows how resilience thinking was promoted by international actors including the European Union (EU), the World Bank, the United

Nations (UN), and the United Kingdom's Department for International Development (DFID), which sought to persuade (or even require) governments of the Global South to make efforts to increase the resilience of their communities. Joseph (2018, p. 121) sees this as an example of international actors 'governing from a distance' through 'responsibilising national governments and shaping their conduct'. According to this critique, those governments in turn intervened in communities to promote the same ideas (in doing so, as we will see in the second critique, passing responsibility further along the chain). As such, this critique suggests that resilience as a policy goal has been promoted from 'above' in ways that build upon (Joseph, 2013), and perhaps move beyond (Chandler, 2014), longer-standing modes of Western intervention in the Global South. The kinds of 'facilitation and monitoring' encapsulated in the Sendai Framework are, for Joseph (2018, p. 154), prime examples of this 'governance from a distance'. The same might be said of the SDGs, under which countries have committed to deliver and report on progress with respect to a number of explicitly resilience-related targets and indicators.

One of the ironies here is that the resilience policy discourse has highlighted 'governance through complexity and self-organizing adaptivity' (Pugh, 2014, p. 315), which would seem to imply a deep embeddedness in local contexts and a bottom-up orientation. Chandler (2015, p. 95) indeed argues that resilience emerged out of a realisation of the failure of top-down liberal internationalist interventions and a new recognition of "'the local" as holding the key to the resolution of problems of peace and underdevelopment'. Yet, as he goes on to assert, 'the division between Western actors and local actors is never fully overcome. In discourses of global responsibility, the division between external actors and the objects of governance is entirely erased' (Chandler, 2015, p. 140). This helps to show how, despite its appeals to local capacities, development from below, and the importance of 'the everyday', resilience, for some critics, has been pursued through the promotion (or even imposition) of international policy templates and norms that have paid scant attention to the local and cultural specificities of what actually makes particular communities resilient (or not) in practice (Cannon and Müller-Mahn, 2010).

Even within countries, critics have contended that the direction of travel is notably top-down and that international actors remain important at the domestic level in influencing and implementing resilience policies. For the majority of countries (especially those that are aid recipients), international instruments such as the Sendai Framework mean that resilience-building has become an agenda that they cannot ignore. At the very least, the agreement necessitates the development of national action plans and local strategies, even if real-world implementation lags far behind.⁵ Tozier de la Poterie and Baudoin (2015, p. 135), for instance, argue that the Sendai Framework yielded a 'pronounced shift toward top-down advocacy of a DRR [disaster risk reduction] agenda rather than a shift toward more meaningful partnerships with local actors' and that the promotion of technological approaches to resilience-building became far more prominent than local-level partnerships.

Previous studies in Nepal bear this out. Rusczyk (2019, p. 826) has examined how the international aid community's resilience discourse influenced the Government of Nepal, arguing that 'not only did [the international aid community] introduce DRR and disaster resilience discourse in Nepal, but also it defined debate on these matters'. She shows how international donors were central to supporting 'the development of disaster management plans on a national, district, municipal and village . . . level' and how they worked with the Nepal Risk Reduction Consortium to develop disaster-resilient communities. Similarly, Jones et al. (2014), writing before the major earthquake on 25 April 2015, noted that the lack of government strategies to address disaster risk reduction (DRR) issues meant that international organisations and donors frequently took the lead in strategy development and implementation—and that national non-governmental organisations (NGOs) often complained that the DRR agenda 'was being taken over by international organisations and foreign experts' (Jones et al., 2014, p. 85).

Most obviously, it could be claimed that the tendency to promote policy approaches that are insufficiently rooted in local realities undermines their chances of actually supporting communities to cope better with and bounce back from a disaster. But, moving on to the second critique, it is also possible to read this dynamic (as authors such as Joseph do) as a form of neoliberal governmentality that shifts responsibility for addressing vulnerability from the rich and powerful to those who are themselves most vulnerable.

Resilience, governmentality, and responsabilisation

The second of the critiques to be assessed here has been widely discussed in literature that has used the Foucauldian concept of 'governmentality' to investigate what resilience policy *does*, politically. Governmentality is understood as utilising power to regulate the conduct of individuals or groups. The argument that resilience policy represents a form of governmentality, therefore, points to the demands it places on individuals and communities to be self-reliant. For Joseph (2013, p. 40), the Anglo-Saxon approach to resilience in particular operates in a way that moves 'swiftly from thinking about the dynamics of systems to emphasising individual responsibility, adaptability and preparedness'. Indeed, according to him, this is the ideological programme that lies partially hidden behind resilience policy rhetoric: far from having any deep philosophical underpinnings, the concept of resilience 'has been plucked from the ecology literature and used in a fairly instrumental way to justify particular forms of governance which emphasise responsible conduct' (Joseph, 2013, p. 40), such as taking actions to prepare for disasters and to mitigate their effects, meaning that individuals and communities need to rely less on the state (or international aid) to protect them or to come to their rescue in times of crisis.

The idea that resilience policies tend to 'responsibilise' communities and move the emphasis away from international aid agencies and national government action and on to communities themselves, is not as incompatible with the first critique's 'top-down'

claim as it might appear initially. This responsabilisation of individuals and communities can be pursued in a top-down way. As Joseph (2013, p. 42) asserts, this is in line with trends in neoliberal governmentality more broadly: the retreat of the state is, somewhat paradoxically, brought about by new institutions and interventions that produce a downward shifting of responsibility.

Although this critique of resilience has been widespread, it is by no means uncontroversial. Bourbeau (2015, p. 379) has argued against Joseph's claims, accusing him (and others) of 'appear[ing] to make the mistake of equating a particular government's use of resilience with the concept of resilience'. For Bourbeau (2015, p. 375), to claim that resilience is merely a form of neoliberal governmentality is an oversimplification that obscures the positive potential of a wider range of meanings of resilience. Rose and Lentzos (2017), meanwhile, have contended that presenting responsabilisation as necessarily a bad thing is too simplistic: rather, there is a need to interrogate who is being responsabilised and by whom. It is possible, they maintain, for responsabilisation to flow upwards instead of downwards, and thus that it can serve a progressive purpose—for example, resilience policy could increase the responsibility of governments to their citizens rather than representing an abdication of that responsibility (see also King, Crossley, and Smith, 2021).

Apropos of Nepal, Gladfelter (2018) has taken up the responsabilisation critique in looking at community-based early warning systems for river flooding. These projects, she argues, are often motivated by laudable aims: to reduce disaster risks while at the same time promoting local participation and empowering community members. However, the unintended consequence can be burdening communities with ensuring their own security. Countries like Nepal where protection mechanisms have historically been weak represent very different contexts to Western industrialised nations such as the UK, which have been the focus of much of the critical work on neoliberal responsabilisation. In Nepal, the dynamic may be less about the rolling back of the state as avoiding rolling it out in the first place. As Gladfelter (2018, p. 125) puts it:

While many people in places like Nepal have never experienced robust forms of social protection . . . the possibility of state responsibility can be foreclosed by a call for resilience that frames state assistance as not only unnecessary, but capable of creating a 'dangerous' sense of dependency

Resilience and the naturalisation of crisis

The third of the common critiques that we explore here is that resilience thinking serves to 'naturalize crisis' (MacKinnon and Driscoll Derickson, 2012, p. 259), obscuring the deeper structural factors that produce vulnerability in the first place. Examining the operation of refugee camps, for instance, Ilcan and Rygiel (2015, p. 348) have argued that camp management focused on creating 'neoliberal camp "residents" and resilient, entrepreneurial subjects', that it naturalised poor living conditions, and that it fostered 'depoliticization and complacency in accepting abject

living conditions in camps'. Addressing the ways in which the resilience discourse is playing out in discussions concerning the strengthening of health systems, van de Pas (2017, p. 483) states that 'the normative thinking behind much of the current resilience discourse is that crises are permanent and that individuals, thus, have to be permanently prepared for the worst'. With regard to climate change, meanwhile, Cannon and Müller-Mahn (2010, p. 632) express concerns about the shift in discourse from vulnerability to resilience, which moves the emphasis to 'natural systems rather than socio-economic systems', when in fact it is 'socio-economic systems themselves that expose people to different levels of risk'. According to this critique, therefore, resilience discourse can close down investigation into the more complex (often structural) sources of human vulnerability—and the search for remedies for those vulnerabilities (see also Thiede, 2016). As Keating et al. (2017, p. 66) underline, '[r]esilience is at risk of becoming a new buzzword for business-as-usual'.

Proponents of resilience policy would contend that it is not true in principle that resilience thinking merely abandons the vulnerable to their fate: on the contrary, it seeks to mitigate risks and put individuals and communities in the position of being able to 'bounce back' from a crisis. In part this responds to humanitarian ideas about protection. But even so, it can be read as self-interested on the part of the relatively secure, because 'it is precisely the securitization of the most at risk which politically threatens the security and comforts of those who are sufficiently protected' (Evan and Reid, 2014, p. 32).

Gladfelter (2018, p. 124) again shows how in Nepal, community-based early warning systems for river flooding have played into these dynamics, arguing that 'by shifting attention away from the reasons *why* certain people are more vulnerable than others before a flood even strikes, the current discourse of climate change followed by a call for resilience elides the ways in which disasters are not only climate-induced, but socially and politically *produced* through development, infrastructure, and policies that serve certain people over others'. Oven et al.'s (2019) analysis of Nepalese resilience-building initiatives to mitigate the risks of flooding similarly found that projects 'rarely address the root causes of vulnerability which give rise to household vulnerability in the first place'. And Rigg et al. (2016) show that vulnerability and precarity in Nepal are not only produced by the combination of inherited exclusion and exposure to shocks, but can also be created through processes of economic development (such as outmigration)—again pointing to the fact that the risks to which individuals and communities are increasingly being expected to be resilient are not (at least not all) natural, but in many cases are generated politically and economically, a key claim also made by Keating et al. (2017).

Background to DRR policy and resilience discourse in Nepal

Given the geography and geology of Nepal, and its previous experiences of seismic activity, the vulnerability of the country to earthquakes was well known long before the Gorkha earthquake on 25 April 2015. In 1982, the Natural Calamity Relief Act

set the first national framework for emergency response (Ministry of Home Affairs, 1982; Jones et al., 2014, p. 82). It was not until the early 1990s, however, that the emphasis began to shift from disaster response to risk reduction—a move that Dixit et al. (2018, p. 16) attribute to experiences associated with the Udayapur earthquake in 1988 and the floods in 1993, which directly prompted the First National Conference on Disaster Management and Risk Reduction and the development of a new National Building Code.

It is from this point onwards that Jones et al. (2014, pp. 82–83) identify a particularly strong international influence on policymaking in Nepal, with the National Action Plan on Disaster Management being adopted in 1996 in the context of the International Decade for Natural Disaster Reduction, and the creation of a new Disaster Risk Reduction and Management Policy and Act and an accompanying National Strategy for Disaster Risk Management being instigated in 2006, following the adoption of the UN's Hyogo Framework for Action 2005–2015. As Jones et al. set out (2014, p. 83), the new Policy and Act was drafted through a process funded by Oxfam (although it stalled during the legislative process and was never adopted). The development of the National Strategy, meanwhile, was supported by the EU and the United Nations Development Programme (UNDP), working with the National Society for Earthquake Technology (NSET). UNDP subsequently supported the establishment of the Nepal Risk Reduction Consortium in 2009, which sought to implement more fully the Hyogo Framework within Nepal (Jones et al., 2014, p. 83). The importance of direct international support, and the priority given to implementing international DRR policy norms domestically, is clear, therefore, in the pre-earthquake period.

The same has been true in the post-earthquake period with the adoption of the Nepal Disaster Risk Reduction and Management Act in 2017 and the Post Disaster Recovery Framework in 2018, both of which sought to implement key elements of the Sendai Framework for Disaster Risk Reduction 2015–2030, including the necessity of building community resilience (Panday et al., 2021, p. 1). As Jones, Owen, and Wisner (2016) and Ruszczyk (2019) have documented, the international aid community played a central role in advancing the DRR agenda in general, and the concept of resilience in particular, with the Government of Nepal. The 'nine minimum characteristics of a disaster-resilient community' adopted by Nepal (Nepal Risk Reduction Consortium, 2013, cited in Ruszczyk, 2019, p. 828) have taken on a particular salience in defining what resilience is understood to mean in the country's DRR policy. They are:

- organisational base at the Village Development Committee (VDC)/ward and community level;
- access to DRR information;
- multi-hazard risk and capacity assessments;
- community preparedness/response teams;
- DRR/management plan at the VDC/municipality level;

- DRR funds;
- access to community-managed DRR resources;
- local-level risk/vulnerability reduction measures; and
- community-based early warning systems (Ruszczuk, 2019, p. 828)

On the basis that these characteristics have become the accepted working definition in Nepal of what a ‘resilient community’ looks like, this is the yardstick of resilience against which we compare our findings in the empirical sections that follow.

Methods

The fieldwork reported in this paper was carried out between March and April 2016—one year after the earthquake, and one year before the adoption of the Disaster Risk Reduction and Management Act. It was undertaken by all five authors at the village level (in Barpak), at the district headquarters (Gorkha Bazaar), and in Kathmandu, the capital city. We conducted 24 in-depth interviews (IDIs), three focus-group discussions (FGDs), and one high-level workshop.

The first IDIs were held at the village level with representatives of local government, NGOs, and other influential individuals, such as schoolteachers and health post staff. In addition, we conducted a small number of IDIs with Dalits specifically to gather their views in a more private context given the difficulties they sometimes face in ‘speaking up’ in more public settings such as FGDs. At the district level we interviewed representatives of the district government whose remit included DRR or disaster response and representatives of international NGOs (INGOs) present in Gorkha district; and at the national level we interviewed representatives of INGOs, government, international organisations, and donors.

The three Barpak FGDs involved separate groups for men, women, and young women (aged between 18 and 25 years). For these FGDs, we used convenience sampling in public areas of the village to recruit ‘ordinary’ residents who had no formal role in local administration or politics, nor held key social positions; such individuals were instead invited to take part in the IDIs. We took care to ensure that the selected participants broadly represented the different castes and ethnic groups in the village. For the Kathmandu ‘high-level workshop’, we recruited individuals based on their involvement in making and implementing DRR/resilience policy. Participants included 17 senior members of INGOs, government, international organisations, and donors.

All FGDs and IDIs were audio recorded (except in those few cases where consent was not given, in which case contemporaneous notes were taken and a written summary was prepared shortly after the interview). Interviews were conducted in Nepali or English, as preferred by the interviewee, and all audio recordings were transcribed, with the Nepali transcripts then translated into English by Sudha Ghimire and checked by Bhimsen Devkota. The workshop in Kathmandu was held in English

under the Chatham House Rule, and researcher notes were taken and reflections later recorded. Ethical approval for the study was obtained from the University of Sheffield in the UK (reference: 007631).

A ‘bottom-up’ approach was adopted for the fieldwork, which sought to focus primarily on the voices of individuals with personal experience of the earthquake and its aftermath at the village level, before comparing those perspectives with the views of those representing government and non-government actors at the district and national level. This was done to allow for a comparison between the reported experiences of those most directly affected and the ‘official views’ of district and central government, national and international humanitarian aid providers, and others involved in the response. An iterative thematic analysis was undertaken and quotations from the data were selected to illustrate the key findings.

Experience of the earthquake and its aftermath in Barpak

Nepal was struck by a series of major earthquakes in 2015. The first and largest of these, on 25 April, centred on the village of Barpak in Gorkha District and measured 7.8 on the Richter scale. As well as causing severe damage to buildings across much of central Nepal, the earthquake (as well as more than 500 aftershocks—many of them resulting in significant damage in their own right) led to numerous landslides and disruption to transport routes and infrastructure. Official government sources calculated a total of 8,856 deaths and 22,309 injuries (Nepal Disaster Risk Reduction Portal, 2015). The earthquake gained significant global attention, and assistance poured in from around the world.

As the village closest to the epicentre, Barpak—at the time containing slightly more than 1,000 houses (Nepal Central Bureau of Statistics, 2014)—was particularly badly affected. Almost every house in the village collapsed and 72 villagers died. In some ways, the timing of the earthquake could have been much worse: it struck during the day on a Saturday, when most people were out of their houses and children were not in school. If the earthquake had happened at night, when more people would have been inside their homes, the number of deaths would undoubtedly have been very much higher.

We gathered extensive (and often very moving) testimony of the ways in which people and the community as a whole coped in the immediate aftermath of the earthquake. The first priority was to deal with the seriously injured, many of whom were carried to the centre of the village by family members seeking help. The Officer in Charge at the government health post was away from the village and the building itself was damaged to such an extent that it was unusable. Yet, despite the lack of formal health service availability, villagers found ways of providing treatment to the wounded. The initiative of a private pharmacist was widely cited in interviews and FGDs as having saved many lives on the first day. In a subsequent individual interview, she told us her story of what she and her colleagues did on 25 April 2015:

The pharmacy was closed but we carried all the medicines and equipment in a basket and took it to the square at the centre of the village. We distributed everything for free. . . . We treated minor injuries and provided first aid. It was not possible for us to treat major injuries. . . . We provided painkiller injections and tablets for people who had suffered serious injury. People were scared because of fear and anxiety. Many felt weak, so we provided Vitamin B Complex for them. At the same time, diarrhoea and nausea started spreading among children and we distributed the diapers we had (IDI 3: pharmacist, Barpak).

The road to the village had been severely damaged by landslides, so evacuation of casualties by road was not possible. The following day,⁶ an army helicopter arrived in the village and airlifted some of the most seriously injured to Gorkha District Hospital⁷ and, in more serious cases, to hospitals in Pokhara and Kathmandu (IDI 7: traditional healer, Barpak; IDI 11: NGO worker, Barpak; IDI 15: female villager, Barpak). This was followed by the arrival of an Indian Army medical team (on approximately Day 3) that set up camp in the school playground and provided treatment on site, including field surgery.

Subsequently, further help arrived from the Nepali Army, UK Aid Direct, Care Nepal, the Nepal Red Cross, and many other organisations, with the major focus being on the delivery of tents, blankets, food, and water filtration systems. Local officials from the VDC and political parties also supplied assistance and emergency aid resources to the community (IDI 11: NGO worker, Barpak). As the emphasis shifted from providing emergency medical help to casualties to relief efforts designed to provide for the basics of life, the community found ways of coping—even though conditions remained extremely difficult. As one interviewee put it:

We had lots of problems. We were not able to feed the children properly—we could provide only biscuits and noodles. We had a problem with drinking water, which we had to fetch from the next village. . . . There was no drinking water and only dry food to eat. We were not able to cook food. We had no drinking water. No place to live. We suffered a lot from all these problems (IDI 7: traditional healer, Barpak).

Although undoubtedly influenced by the passage of time, villagers in Barpak were on the whole extremely proud of the extent to which the community had (with external assistance) succeeded in meeting its needs in the days and weeks after the earthquake. There were cases of jaundice and diarrhoea (IDI 13: NGO worker, Gorkha), and a minor epidemic of Hepatitis A, but the absence of more significant outbreaks of disease, such as cholera, following the earthquake was noted by many (for instance, IDI 21: international organisation staff, Kathmandu), and contrasts were made with the experience of other countries, where major epidemics have often followed similar disasters.⁸

However, while our FGDs and IDIs revealed significant pride in the ways in which the village had coped with the disaster, such coping is not the same as ‘resilience’ as defined in Nepali policy. Especially in the early days, much of this coping was the result of ad hoc initiatives by the community itself and by other agencies, as opposed

to the existence of the ‘nine minimum characteristics of a disaster resilient community’ discussed earlier. Indeed, this ad hoc coping was required precisely because of the *absence* of these characteristics.

Combining our findings from Barpak with data collected at the district and the national level, the next three sections provide some empirically grounded reflections on the three critiques of resilience policy outlined above.

The top-down nature of the resilience policy discourse

As shown, the international community played a major role in the promotion of the concept of resilience in Nepal: Rusczyk (2019, p. 834) has described it as ‘another grand plan introduced by the international community to enhance the lives of people’. In purely linguistic terms, we found that the term ‘resilience’ had not penetrated very far domestically. There is no Nepali word that offers a precise translation of the concept of resilience. At the national level, among government officials and representatives of donor agencies, the English word ‘resilience’ was generally used. Even at the district government level, though, this was rarely referred to—and it was not recognised at all at the village level. Instead, participants (and indeed the researchers, in order to be understood) used a variety of related words including ‘लचकता’ (flexibility/adaptiveness) and ‘सामना’ (cope).

Nevertheless, participants had a detailed knowledge of the extent to which systems and communities had been able to withstand and bounce back from disaster, and the roles that national and international agencies had played in this process. Interviewees at all levels were particularly positive in their perceptions of attempts to coordinate emergency relief. Significant efforts were put into this at the district level to minimise duplication and maximise coverage in the face of a huge influx of humanitarian agencies eager to lend assistance. Led by the District Disaster Relief Committee, there was a general feeling that, despite some problems, this system had worked better than could have been reasonably expected in a country where DRR-related governance structures have historically been weak (Jones, Oven, and Wisner, 2016).

Views on the role played by national-level government in the emergency relief period were far more mixed. The government quickly adopted a ‘One Door Policy’, designed to ensure that aid was channelled through the government to improve coordination and efficiency. Although often seen as a good idea in principle (IDI 6: male villager, Barpak; IDI 10: health worker, Barpak), informants felt that this had introduced significant delays in the delivery of aid due to slow processes and bureaucratic systems (FGD 1: male group, Barpak; IDI 23: activist, Kathmandu).

While views on the short-term emergency relief efforts were, on the whole, fairly positive, the same could not be said of opinions on the subsequent reconstruction process. At the time of our fieldwork, one year after the earthquake, there was particular unhappiness in the village with the slow progress in housing reconstruction, with the majority of the village’s population continuing to live in temporary shelters, and in

many cases, still in the tents that had been provided during the initial emergency relief effort. People spoke to us about the deleterious health effects of spending a year at high altitude in these supposedly temporary shelters—with no end in sight for many (FGD 1: male group, Barpak; FGD 2: older female group, Barpak). The elderly, young women, and children were seen as being particularly at risk. One respondent commented:

Now we think that rather than providing just food or temporary things, we need houses. That's our first priority. . . . We have already spent one year living under tarpaulins and in tents. Now that should be over . . . It [living in a temporary shelter] is more difficult for children. They are prone to getting pneumonia and asthma. Two or three older people got affected by asthma, and two more died from the same problem after we started living under this zinc sheet (FGD 1: male group, Barpak).

The government's grant scheme, under which earthquake-affected households could qualify for financial support to rebuild their homes if they did so according to government-approved earthquake-resistant designs, was a particular preoccupation of participants at all levels. These grants (discussed further below) only started to become available one year after the earthquake. In Barpak, many families with the means to do so had already given up waiting on the government and had begun reconstructing non-earthquake-resistant houses from the rubble of their previous homes. A number were sceptical that the grant money would ever arrive even if they waited and constructed according to the government designs. In the words of three respondents:

We have been waiting for government grants and help for the last year. After the earthquake, we stayed through the monsoon in tents waiting for government action, but there was none. Soon after Dashain, our big festival [in October 2015], everyone was expecting help from the government. It took nearly eight months for me to clear the debris of my house and I used those materials for a temporary house.

We are not even sure that the government will provide [the grant].

We waited a long time for government, now no more. If they provide grants, it is okay for us. But actually, we are losing hope in government (FGD 1: male group, Barpak).

Even if the money did come from government, respondents reported that it would be insufficient to cover the cost of building an earthquake-resistant house, with most families being unable to make up the shortfall from their own resources. One said:

I don't think the government has understood our problems. We have so far received 15,000 rupees [approximately USD 140]. Government has promised to give us two lakhs rupees [200,000; approximately USD 1,850]—and even that two lakhs the government wants to give us in instalments. We wish the government would give the money all at once instead of in instalments. If it splits the money into instalments, it won't be any use for us. It will cost seven to eight lakhs [700,000–800,000; approximately USD 6,500–7,500] to build one house (IDI 4: female villager, Barpak).

Here we found a striking example of the failure of government plans to meet the needs of local communities, and a prime example of the problems created by the ‘top-down’ nature of resilience policy. The housing reconstruction grant scheme was the centrepiece of the government’s future-looking DRR policy. It was being heavily promoted by international donors (see, for example, UNDP Nepal, 2015; DFID, 2021) and widely framed in terms of ‘building back better’⁹ with the intention that houses would be able to withstand future earthquakes (and thus buildings and communities made more resilient). With help from its international partners, the Government of Nepal had expended significant time and effort on developing the new housing designs. But problems with the policy—and the elapsed time—had driven many to go their own way. The obstacle created by the payment of the grant in instalments (to enable the construction work to be inspected and signed off by civil engineers at designated ‘checkpoint’ stages) was one clear example of how well-intentioned policy being made in Kathmandu was failing to have its desired effect at the local level. A mantra among government officials and international agencies was that ‘the earthquake didn’t kill people—poorly built houses did’—this was said more than once at the high-level workshop and in district-level interviews. However, the major policy effort to address that problem was having a limited effect at the village level: we did see some people in Barpak beginning construction according to the government-approved designs, but we saw many more reconstructing ‘dry stone walled’ buildings from the ruins of their destroyed houses.

The reconstruction scheme was a clear example of a significant ‘gap’ between the ‘top’ (understood here as the national government and its international partners) and the ‘bottom’ (communities). That was apparent in terms of language and concepts, but perhaps more importantly, in terms of the disjuncture between the government’s (and international donors’) policy efforts to build resilience and address the needs of local communities, particularly with regard to the issue of rebuilding houses. This seems to provide some evidence of the general critique of resilience policy’s top-down nature and of the idea that it does not always pay sufficient attention to the needs of recipients. It also highlights that the ‘top-down’ nature of resilience policy is not only from the international to the national level, but also plays out domestically. The same has been found in other studies of Nepal’s earthquake response, which have similarly pointed to a “‘disconnect” between national policy and local experience’ (Hall and Lee, 2017, p. 42) and have argued for greater community involvement in disaster response and preparedness (Lee, 2016, p. 101).

Resilience and responsabilisation

A more nuanced picture of responsabilisation was evident in Barpak than is often painted in the resilience literature, with two significant variations from the standard critique. First, that the community was already thoroughly responsabilised prior to the earthquake, with very low expectations of government service provision. And second, that there was some evidence that these expectations were actually raised

following the earthquake response, with some noting that the community had developed greater expectations of public services and were in some ways becoming less responsabilised. Indeed, in line with the findings of Gladfelter (2018), some respondents even regretted this trend, seeing it as a loss of the traditional strengths of community independence and self-reliance, and as raising a danger of over-reliance on outsiders.

As described, government services were utterly unable to cope with the earthquake, but we found in Barpak that this was generally how people expected things to be. Given the immediate need to treat the injured, the health system was a particular focus of attention, and it was certainly not resilient at the village level. Although on paper, Nepal's health system is well-structured, people's lived experiences of it had fostered non-reliance for the most part. Low expectations of service delivery were common. As one interviewee pointed out:

People are seen as 'resilient' because they have low expectations, so they get along with things themselves. . . . You can see that even the first responders, the development agencies, everyone says that 'oh all Nepalis are resilient'. But it's not resilient just to expect less (IDI 28: NGO worker, Kathmandu).

This critique is consonant with that made by Ruszczuk (2019, p. 833) who asserted that '[t]he language of resilience allows international and national policymakers to hide behind people who are accorded responsibility for helping themselves in times of hardship'. Resource constraints faced by the country for many years are of course a major cause of the low expectations of government—and indeed, many respondents expressed surprise at how well things had functioned given the scale of the disaster. But these low expectations point to issues about how we conceptualise the resilience of systems and services that are under constant stress, where severe challenges to their ability to function are the norm rather than the exception.

Interestingly, we found evidence that people in Barpak were making greater use of services such as the village health post after the earthquake. Health workers in the village felt that this in part reflected higher levels of need and in part service improvements, but that it was also a result of greater willingness to make use of their services and a greater level of awareness of (and accustomisation to the idea of using) government services in general—in part due to campaigns run by disaster relief NGOs. One participant told the interviewer:

Every service—maternity services, institutional delivery, immunisation rates, and ANC [anti-natal clinic] check-ups—the utilisation of every service has increased. Before the earthquake our institutional delivery rate was 20 per cent, now it's 40 per cent. ANC was 40–50 per cent, it's now 80 per cent.

Interviewer: *What is the reason for the increase?*

Because before [the earthquake] there was no awareness programme. NGOs made so many awareness programmes [during their earthquake response activities]. It was due to NGOs, INGOs, and our health post staff [raising awareness] (IDI 2: health worker, Barpak).

Other interviewees attributed this increase to improvements in the range of medications available from the health post as compared to before the earthquake:

Before the earthquake there wasn't enough medicine at the health post. People were not able to find the medicines that they were looking for. After the earthquake, NGOs and INGOs donated the medicines they had brought along with them. Because of this, the health post has improved a bit these days (IDI 3: pharmacist, Barpak).

One possible lesson to be drawn from this is that disaster response has the potential to raise the expectations of communities about government service provision—and external aid providers during a time of crisis seem to have played a role in doing so. Yet this optimistic take risks obscuring the deep structural inequalities that existed before the earthquake and persisted (indeed in some ways were exacerbated) in the post-earthquake period.

Especially in a social context like rural Nepal, where caste, ethnicity, gender, and social status impact on the ability of individuals to access services and resources in many ways, responsabilisation does not fall evenly. This was also true after the earthquake. As Panday et al. (2021) show, those with various forms of social capital not only fared better in the emergency relief phase, but also in their ability to access resources during the longer-term reconstruction process. They found, for example, that those with established connections to government bodies or NGOs—and those with the physical strength—were able to access resources and support in ways that were not possible by the more marginalised (such as older women or people with physical disabilities). To talk about either the resilience or the responsabilisation of a community as if it is uniform across that community is, therefore, problematic in itself, concealing deep-rooted inequalities. This leads us to the third critique: that resilience as a policy discourse tends to obscure the structural determinants of vulnerability.

Resilience and the structural determinants of vulnerability

The reconstruction process discussed above, which was just getting going at the time of our fieldwork, provides a clear example of this critique. As noted, the mantra of 'building back better'—long a feature of the international resilience and DRR discourse—was routinely espoused by government officials (especially at the national level) and by the government's international partners in our high-level workshop. These discussions of 'building back better' focused overwhelmingly on improving the resilience of physical infrastructure.

It would be wrong of course to argue that improving the resilience of housing and other physical infrastructure, especially in a country highly prone to seismic events, is anything other than a positive step. Nonetheless, the extent to which this dominated the government's agenda raised the risk of a narrow engineering-dominated approach that naturalised both environmental hazards and people's vulnerability to

them. The aforementioned refrain that ‘the earthquake didn’t kill people, poorly built buildings did’ is a useful subject for scrutiny here. Many of our participants at the district and national level used this (or a similar) phrase to underline that the degree of vulnerability that the inhabitants of Barpak (and hundreds of other villages) faced was not unavoidable. Yet this recognition only went so far. It was inevitably accompanied by ready-made engineering solutions (that is, these communities need to ‘build back better’ through the construction of reinforced concrete earthquake-resistant housing) and the assumption that doing so would dramatically reduce their vulnerability to earthquakes in the future.

Assuredly it would, but what is missing in this discourse? We would argue that there are at least two important issues that have become obscured by such a technocratic and engineering-led understanding of vulnerability and the solutions to it.

The first thing missing from the discourse was the question of why so many pre-earthquake buildings were of such poor quality originally—and how, as a result, vulnerability varied between members of the community. It was clear from the architecture in the village at the time of the earthquake (and from what was being rebuilt afterwards) that there was far more at play here than choices or preferences pertaining to tradition or the desirability of particular styles of housing. The few buildings in Barpak that did survive the earthquake were made of reinforced concrete and had been built by families receiving remittances from overseas (often because they had a family member in the British Army’s Brigade of Gurkhas, or who had retired from that service). Some of the lowest-quality pre-earthquake buildings, meanwhile, had been in the area of the village inhabited by Dalits. It was immediately evident from what structures had and had not survived the earthquake that vulnerability was closely related to social and economic inequalities—and that even in what was overall a remote and relatively poor community, vulnerability was unequal. Those who died because of badly built constructions were generally those who could not afford a better building. Importantly, precisely the same inequalities were being reproduced in the reconstruction phase (see also Panday et al., 2021): those able to repair pre-existing concrete homes or build new earthquake-resistant houses following the earthquake were those who had relatively higher levels of income. Poorer households were either in the process of reconstructing non-earthquake-resistant dwellings or were still living in temporary shelters and waiting desperately for government grant money to be released. As a result, vulnerability to future disasters was divided across pre-existing lines of relative privilege/marginalisation.

The second thing absent from the high-level resilience policy discourse was any real consideration of vulnerability beyond seismic risk. This is, perhaps, understandable so soon after the series of earthquakes. It was clear in all of our interactions with villagers, though, that earthquakes were far from the only thing to which the inhabitants of Barpak felt vulnerable. On the one hand, people regularly expressed concern about other forms of ‘shock’ to their livelihoods, including landslides (which could lead to the rapid disappearance of agricultural land) and crop failure. Such occurrences

were often seen as ‘disasters’ in themselves by participants, but they were never discussed by policymakers in relation to resilience. Beyond this, longer-term changes in the village were also seen as creating (or exacerbating) vulnerabilities. In Barpak, as in many other similar villages in rural Nepal, outward migration has been on an increasing trajectory, with inhabitants either leaving permanently (moving to Kathmandu or other urban areas), or, more commonly, temporarily migrating for short-term work. For young men in particular, the most common exit route involves migrant labour in the Gulf countries or Malaysia (or, for a selected few, enlistment in the British or Indian Gurkha regiments). The remittances from these workers are crucial to the local economy, and their visits back to the village are central to the rhythms of family life. Many of the participants in our female FGD (FGD 2: older female group, Barpak) reported that they effectively head their household in between annual visits by their husband, which often result in the next pregnancy and a new child to care for once the father returns to his place of work.

Some migrant workers were able to return to the village soon after the earthquake to help their community clear the rubble and build temporary shelters, but in many cases, this was not possible, leading to more vulnerability and emotional distress. By the time of our fieldwork, most of the migrant workers who had returned to help had already left again, making the task of ‘building back better’ even harder to achieve.¹⁰

These dynamics relate to resilience and vulnerability in complex ways (see also Panday et al., 2021). On the one hand, migration can be a positive factor, resulting in remittances that allow for the development of the village, including infrastructural development and post-earthquake rebuilding. On the other hand, it increases the vulnerability of those ‘left behind’ (frequently women, children, older people, and those with a disability) to disaster. This corresponds with what Rigg et al. (2016) found in a very different social setting in the Terai (Nepal’s southern flatlands), where outward labour migration as well as development interventions have spawned new forms of livelihood risk, exacerbating long-standing ‘inherited’ vulnerabilities and creating new kinds of precarity.

All of this highlights that what it means to be a ‘disaster-resilient community’ is closely related to how threats are conceptualised (Ruszczuk, 2019, p. 828) and how the causes of vulnerability are understood. Even if policy efforts to increase the resilience of Barpak and other villages to future earthquakes were successful, they may be no more resilient than before to other types of threat, whether short-term shocks or longer-term social and economic processes that generate and perpetuate vulnerabilities. The experience of post-earthquake communities during the coronavirus pandemic illustrates this clearly (Schneiderman, Baniya, and Le Billon, 2020). While it may not be inevitable that the ‘resilience project’ obscures the wider structural determinants of vulnerability, we certainly found significant evidence that the resilience discourse among national-level policymakers in Nepal in the aftermath of the earthquake on 25 April 2015 was having just such an effect.

Conclusion

The extent to which the three common critiques of resilience policy analysed here were found to be present in our work in post-earthquake Nepal varied. Certainly, it was clear that resilience was very much a top-down discourse. International organisations and donors were heavily promoting it, and national government officials used language and ideas that were strikingly similar to that of the mainstream international policy discourse. At the village level, though, the concept did not resonate at all. The idea that resilience policy is a form of neoliberal governmentality that has the effect of passing responsibility for their own well-being to communities themselves was somewhat harder to reconcile with what was happening on the ground. The community in Barpak had always been self-reliant and had low expectations of government support, even in a time of crisis. In fact, what we found was amazement that help had come, and, at least in the case of health services, a greater demand for and utilisation of public services than had been the case before the earthquake. At the very least, this suggests that responsabilisation does not inevitably follow from government efforts to promote resilience (Bourbeau, 2015). However, we found that, both pre and post earthquake, social and economic divides (*vis-à-vis* caste, gender, and social capital) had a significant impact on the ability of individuals to access support from the state. In other words, some were more fully responsabilised than others.

It was for this reason that the final of the three critiques (the naturalisation of crisis) had the most purchase in the case we examined. The Government of Nepal's engineering-led approach to conceptualising resilience did indeed seem to be obscuring the deeper structural issues that created vulnerability in the first place, and the ways in which these were perpetuated through resilience-building efforts (such as the reconstruction programme). Resilience is certainly a necessity for a community: if they were not resilient, the residents of Barpak would not be living there at all. Yet, one of the downsides of 'community resilience' is that it can tend to 'flatten' and conceal the experiences of different groups within a community. In a social and economic context like that of Nepal, these divides can be very significant indeed. Top-down approaches to resilience, especially when promoted from outside the country, are never likely to be able to address the local specificities that create differential vulnerabilities within a community. Addressing these vulnerabilities further in both theory and practice will require working more extensively with, and listening to, the communities that are the supposed beneficiaries (or targets) of resilience policy. This would be a crucial corrective to the policy failures that we observed in Nepal. Gladfelter (2018) rightly argues that, to be more resilient, people need to be 'empowered' to confront the political economy of vulnerability, not just empowered to cope with their current circumstances. This is difficult for remote communities such as Barpak as a whole, but even more so for marginalised groups within such communities. Overly top-down, technocratic approaches to resilience-building are ill-suited to meeting such challenges.

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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- ² See <https://www.undrr.org/terminology/resilience> (last accessed on 16 February 2022).
- ³ See, for example, Brand and Jax (2007) and Sanchez, van der Heijden, and Osmond (2018). Notably, Keating et al. (2017) propose a well-being-centred conceptualisation of resilience.
- ⁴ See <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030> (last accessed on 16 February 2022).
- ⁵ In the case of Nepal, the government adopted its ‘Strategy for Resilient Local Communities’ in 2018.
- ⁶ In fact, in the village, reports differed on precisely how many days post earthquake this happened: some said the next day, whereas others said between two and four days later (FGD 1: male group, Barpak).
- ⁷ Gorkha District Hospital, although damaged, did continue to function, with doctors carrying out surgery while wearing helmets to guard against the threat of falling masonry (IDI 20: doctor, Gorkha).
- ⁸ Information from health post records suggested that there had been approximately 120 cases of Hepatitis A in the weeks after the earthquake, but no cases of cholera.
- ⁹ The earthquake-resistant housing designs themselves can be found in Government of Nepal (2015).
- ¹⁰ Research in other districts (Bhaktapur, Dhading, and Sindhupalchowk) also identified additional challenges faced by female-headed households, relating to citizenship and land tenure documents. Although these may also have been an issue in Barpak, they did not appear in our data at the time of the fieldwork—perhaps because the reconstruction programme was at that point in its very early stages (see Limbu et al., 2019).

References

- Alexander, D.E. (2013) 'Resilience and disaster risk reduction: an etymological journey'. *Natural Hazards and Earth System Sciences*. 13(11). pp. 2707–2716.
- Bourbeau, P. (2015) 'Resilience and international politics: promises, debates, agenda'. *International Studies Review*. 17(3). pp. 374–395.
- Brand, F. and K. Jax. (2007) 'Focusing the meaning(s) of resilience: resilience as a descriptive concept and a boundary object'. *Ecology and Society*. 12(1). Article number: 23. <http://www.ecologyand-society.org/vol12/iss1/art23/>.
- Cannon, T. and D. Müller-Mahn (2010) 'Vulnerability, resilience and development discourses in context of climate change'. *Natural Hazards*. 55(3). pp. 621–635.
- Center for Resilience, United States Agency for International Development (2016) *Resilience at USAID: 2016 Progress Report*. United States Agency for International Development, Washington, DC.
- Chandler, D. (2014) 'Beyond neoliberalism: resilience, the new art of governing complexity'. *Resilience*. 2(1). pp. 47–63.
- DFID (Department of International Development) (2011) *Defining Disaster Resilience: A DFID Approach Paper*. DFID, London.
- DFID (2021) 'Post-earthquake reconstruction in Nepal – building back better'. <https://devtracker.fedo.gov.uk/projects/GB-1-205138/summary> (last accessed on 2 March 2022).
- Dixit, A.M. et al. (2018) 'Earthquake risk reduction efforts in Nepal: NSET's experience'. In L. Bracken, H.A. Rusczyk, and T. Robinson (eds.) *Evolving Narratives of Earthquake and Risk: The Gorkha Earthquake, Nepal, 2015*. Palgrave, Basingstoke. pp. 15–43.
- Evans, B. and J. Reid (2014) *Resilience Life: The Art of Living Dangerously*. Polity, Cambridge.
- Gladfelter, S. (2018) 'The politics of participation in community-based early warning systems: building resilience or precarity through local roles in disseminating disaster information?'. *International Journal of Disaster Risk Reduction*. 30(A). pp. 120–131.
- Government of Nepal (2015) *Design Catalogue for Reconstruction of Earthquake Resistant Houses: Volume 1*. Government of Nepal, Kathmandu.
- Haase, T.W. (2010) 'International disaster resilience: preparing for transnational disaster'. In L.K. Comfort, A. Boin, and C.C. Demchak (eds.) *Designing Resilience: Preparing for Extreme Events*. University of Pittsburgh Press, Pittsburgh, PA. pp. 220–243.
- Hall, M. and A.C.K. Lee (2017) 'The 2015 Nepal earthquake disaster: lessons learned one year on'. *Public Health*. 145 (April). pp. 39–44.
- Holling, C.S. (1973) 'Resilience and the stability of ecological systems'. *Annual Review of Ecology and Systematics*. 4. pp. 1–23
- Illcan, S. and K. Rygiel (2015) "'Resiliency humanitarianism": responsabilizing refugees through humanitarian emergency governance in the camp'. *International Political Sociology*. 9(4). pp. 333–351.
- Jones, S., K.J. Oven, and B. Wisner (2016) 'A comparison of the governance landscape of earthquake risk reduction in Nepal and the Indian state of Bihar'. *International Journal of Disaster Risk Reduction*. 15 (March). pp. 29–42.
- Jones, S., K.J. Oven, B. Manyena, and K. Aryal (2014) 'Governance struggles and policy processes in disaster risk reduction: a case study from Nepal'. *Geoforum*. 57 (November). pp. 78–90.
- Joseph, J. (2013) 'Resilience as embedded neoliberalism: a governmentality approach'. *Resilience*. 1(1). pp. 38–52.
- Joseph, J. (2016) 'Governing through failure and denial: the new resilience agenda'. *Millennium*. 44(3). pp. 370–390.
- Joseph, J. (2018) *Varieties of Resilience: Studies in Governmentality*. Cambridge University Press, Cambridge.
- Keating, A. et al. (2017) 'Disaster resilience: what it is and how it can engender a meaningful change in development policy'. *Development Policy Review*. 35(1). pp. 65–91.

- King, H., S. Crossley, and R. Smith (2021) 'Responsibility, resilience and symbolic power'. *The Sociological Review*. 69(5). 18 January. <https://doi.org/10.1177/0038026120986108>.
- Labonté, R. (2016) 'Health promotion in an age of normative equity and rampant inequality'. *International Journal of Health Policy and Management*. 5(12). pp. 675–682.
- Lee, C.K. (2016) 'Barriers to evidence-based disaster management in Nepal: a qualitative study'. *Public Health*. 133 (April). pp. 99–106.
- Limbu, B., N. Rawal, M. Suji, P.C. Subedi, and J. Baniya (2019) *Reconstructing Nepal: Post-earthquake Experiences from Bhaktapur, Dhading and Sindhupalchowk*. Working Paper. Social Science Baha, Kathmandu.
- Mackinnon, D. and K. Driscoll Derickson. (2013) 'From resilience to resourcefulness: a critique of resilience policy and activism'. *Progress in Human Geography*. 37(2). pp. 253–270.
- Matyas, D. and M. Pelling (2014) 'Positioning resilience for 2015: the role of resistance, incremental adjustment and transformation in disaster risk management policy'. *Disasters*. 39(S1). pp. S1–S18.
- Ministry of Home Affairs (1982) 'Natural Disaster Relief Act'. Ministry of Home Affairs, Kathmandu.
- Nepal Central Bureau of Statistics (2014) 'National Population and Housing Census 2011: Gorkha'. Volume 6. NPHC2011. Central Bureau of Statistics, Kathmandu.
- Nepal Disaster Risk Reduction Portal (2015) 'Nepal earthquake 2015: country profile'. <http://drrportal.gov.np> (last accessed on 2 March 2022).
- Oven, K., J. Rigg, S. Rana, A. Gautam, and T. Singh (2019) 'Women, gender planning and disaster risk reduction in Nepal'. In C. Kinvall and H. Rydstrom (eds.) *Climate Hazards, Disasters, and Gender Ramifications*. Routledge, Abingdon. pp. 138–164.
- Panday, S., S. Rushton, J. Karki, J. Balen, and S. Ghimire (2021) 'The role of social capital in disaster resilience in remote communities after the 2015 Nepal earthquake'. *International Journal of Disaster Risk Reduction*. 55 (March). Article number: 102112. <https://doi.org/10.1016/j.ijdrr.2021.102112>.
- Pugh, J. (2014) 'Resilience, complexity and post-liberalism'. *Area*. 46(3). pp. 313–319.
- Rigg, J., K.J. Oven, G.K. Basyal, and R. Lamichhane (2016) 'Between a rock and a hard place: vulnerability and precarity in rural Nepal'. *Geoforum*. 76 (November). pp. 63–74.
- Roberts, E., S. Andrei, S. Huq, and L. Flint (2015) 'Resilience synergies in the post-2015 development agenda'. *Nature Climate Change*. 5. pp. 1024–1025.
- Rose, N. and F. Lentzos (2017) 'Making us resilient: responsible citizens for uncertain times'. In S. Trnka and C. Trundle (eds.) *Competing Responsibilities: The Politics and Ethics of Contemporary Life*. Duke University Press, Durham, NC. pp. 27–48.
- Ruszczuk, H. (2019) 'Ambivalence towards discourse of disaster resilience'. *Disasters*. 43(4). pp. 818–839.
- Sanchez A.X., J. van der Heijden, and P. Osmond (2018) 'The city politics of an urban age'. *Palgrave Communications*. 4(1). Article number: 25. <https://doi.org/10.1057/s41599-018-0074-z>.
- Schneiderman, S., J. Baniya, and P. Le Billon (2020) 'Learning from disasters: Nepal copes with coronavirus pandemic 5 years after earthquake'. *The Conversation*. Website. 23 April. <https://theconversation.com/learning-from-disasters-nepal-cope-with-coronavirus-pandemic-5-years-after-earthquake-134009> (last accessed on 17 February 2022).
- Thiede, B. (2016) 'Resilience and development among ultra-poor households in rural Ethiopia'. In D. Chandler and J. Coaffee (eds.) *The Routledge Handbook of International Resilience*. Routledge, Abingdon. pp. 345–357.
- Tiernan, A. et al. (2019) 'A review of themes in disaster resilience literature and international practice since 2012'. *Policy Design and Practice*. 2(1). pp. 53–74.
- Tozier de la Poterie, A. and M.-A. Baudoin (2015) 'From Yokohama to Sendai: approaches to participation in international disaster risk reduction frameworks'. *International Journal of Disaster Risk Science*. 6. pp. 128–139.
- UN (United Nations) (2015) *Transforming Our World: The 2030 Agenda for Sustainable Development*. United Nations, New York, NY.

- UNDP (United Nations Development Programme) Nepal (2015) *Supporting Nepal in Building Back Better*. March. UNDP Nepal, Lalitpur.
- United Nations Office for Disaster Risk Reduction (2016) 'What is the international strategy?'. <https://eird.org/americas/we/what-is-the-international-strategy.html> (last accessed on 17 February 2022).
- van de Pas, R. (2017) 'Global health in the Anthropocene: moving beyond resilience and capitalism'. *International Journal of Health Policy and Management*. 6(8). pp. 481–486.
- World Bank (2013) *Building Resilience: Integrating Climate and Disaster Risk into Development*. World Bank, Washington, DC.