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Dark and bright spots in the shadow of the pandemic: Rural livelihoods, social vulnerability, and local governance in India and Nepal

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ABSTRACT

The global COVID-19 pandemic has brought unprecedented disruption to lives and livelihoods around the world. These disruptions have brought into sharp focus experiences of vulnerability but also, at times, evidence of resilience as people and institutions gear up to respond to the crisis. Drawing on intensive qualitative enquiry in 16 villages of Himalayan India and Nepal, this paper documents both dark and bright spots from the early days of the pandemic. We find intense experiences of fear and uncertainty, heightened food insecurity, and drastic reductions in livelihood opportunities. However, we also find a wide range of individual and collective responses as well as a patchwork of policy support mechanisms that have provided at least some measure of basic security. Local elected governments have played a critical role in coordinating responses and delivering social support, however the nature of their actions varies as a result of different institutional arrangements and state support systems in the two countries. Our findings highlight the changing nature of vulnerability in the present era, as demographic shifts, growing off-farm employment and dependence on remittances, and increasing market integration have all brought about new kinds of exposure to risk for rural populations in the context of the present disruption and beyond. Most importantly, our research shows the critical importance of strong systems of state support for protecting basic well-being in times of crises. Based on these findings, we argue that there is a need for greater knowledge of how local institutions work in tandem with a broader set of state support mechanisms to generate responses for urgent challenges; such knowledge holds the potential to develop governance systems that are better able to confront diverse shocks that households face, both now and in the future.

1. Introduction

As the spread of novel coronavirus disease (COVID-19) continues to upend life around the globe, there has been concern about the impacts on the poor, especially in the developing world (Barnett-Howell & Mobarak, 2020; Lancet, 2020; Sumner, Hoy, & Ortiz-Juarez, 2020). Rural areas are particularly exposed to negative impacts from both disease and associated control measures, owing to high levels of poverty, significant dependence on migratory wage labor, uneven access to state support, inadequate health infrastructure, and other factors (Ranscombe, 2020). As countries have implemented drastic restrictions on movement and social interaction, there is – at the time of writing, May 2020 – mounting evidence of severe social and economic dislocation in many contexts.[1]

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[1] A great deal of such discussions at the time of writing have been published in blogs and other fast publishing online forums see: https://coronapolicyimpact.org, http://blog.castac.org/2020/05/roundtable-covid-19-views-from-the-field/, https://culanth.org/fieldsights/editors-forum/covid-19, http://somatosphere.net/series/dispatches-from-the-pandemic/, and many others.

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Widespread loss of income, broken supply chains, disruptions in basic social services, and more suggest that the pandemic has caused unprecedented threats to the basic well-being of the poor around the world. Yet amidst this upheaval, there may also be some reason for hope; unprecedented challenges can also highlight experiences of resilience, while at times bringing people together with renewed determination to address shared challenges (Auerbach & Thachil, 2021; Issac & Sadanandan, 2020; Lele, Bansal, & Meenakshi, 2020).

This paper documents dark spots and bright spots from the early days of the COVID-19 pandemic in South Asia. Our analysis is built upon the conviction that improved knowledge of vulnerability is critical for developing strategies to mitigate loss (Wisner et al., 2004; Ribot, 2014); yet equally so, we believe that examples of success can lend critical insight into conditions and innovations that can lead to more desirable outcomes, especially in otherwise unfavorable contexts (Bennett, Blythe, Tyler, & Ban, 2016; Cinner et al., 2016). Such knowledge should be important not only for improving social security during the present upheaval, but also as a first step toward more rigorous analysis of the conditions that have shaped divergent impacts and recovery trajectories from the pandemic—a debate that will surely continue for years to come.

Our data is drawn from intensive qualitative enquiry in 16 villages, including 8 villages in Chamba and Sirmaur Districts of India's northern state of Himachal Pradesh and 8 villages in the Kavre and Ramechhap Districts of Nepal. When our original research project was disrupted by countrywide lockdowns (in March 2020), we instructed our team of research assistants to return to their own villages and systematically record how events were experienced during the lockdown period. At a time when movement was sharply curtailed, our data thus provides an in-depth look at the quickly changing situation through the eyes of those who have experienced these events first-hand.

Our data shows intense experiences of fear and uncertainty, drastic reductions in livelihood opportunities, and heightened food insecurity. Negative impacts have been worse for those who were already poor, and often experienced in tandem with a wide variety of other livelihood challenges. Such observations resonate with recent scholarship on vulnerability to climate change and other natural disasters (Bennett et al., 2016; Fischer & Chhatre, 2016; McDowell & Hess, 2012; Sapkota, Keenan, Paschen, & Ojha, 2016). However, we note that much of this existing scholarship has tended to focus, implicitly if not always explicitly, on exposure to risk within a farm-based production system. In the present context, we find that people who depend heavily on migratory wage-labor – a group that is often less exposed to other kinds of livelihood risks and shocks – have been affected the most, revealing a distinct geography of vulnerability in the context of COVID-19. This, we argue, underscores the need to better account for how rural transformations in the present, especially growing off-farm employment, increasing dependence on remittances, and intensified market integration, are altering the nature of rural vulnerability. Although growing off-farm employment in recent decades has reduced susceptibility to farm-based threats in some contexts, our work suggests that it has also resulted in new forms of exposure to systemic shocks, including the present disruption.

Nevertheless, we find a wide range of individual and collective responses that households have undertaken to mitigate negative outcomes as well as a patchwork of policy mechanisms — for both food and income – that has provided at least some measure of basic security. We also find that local elected governments have played a particularly important role in coordinating responses and delivering social support. However, the nature of their actions varies greatly as a result of different institutional and policy arrangements. Local governments in our study sites in India have focused primarily on strengthening implementation of central government schemes, while in Nepal local governments' actions have been centered around identifying and undertaking their own discretionary responses. These observations build upon existing scholarship that has highlighted the critical role of local institutions in helping rural households respond to livelihood threats and disasters (Agrawal et al., 2010; Amaru & Chhetri, 2013; Tselios & Tompkins, 2017; Fischer, 2020), while also documenting their particular role in responding to the present crisis, for which no institutional or policy history for coordinating local action exists. In so doing, we highlight the need for deeper understanding of how an interplay between institutional arrangements and the nature of state support systems influence both actions taken in response to crises as well as the outcomes of those actions.

Our analysis builds upon several existing bodies of research. To begin with, existing theory on vulnerability has argued that the consequences of shocks are rarely straightforward outcomes of that shock. Rather, some people are more exposed to negative events to begin with, more susceptible to their effects, and have less capacity to respond (Wisner et al., 2004; Füssel, 2007; Ribot, 2010). Existing scholarship has explored a wide variety of factors that contribute to vulnerability, such as a lack of financial resources and savings, limited productive assets, political exclusion, social marginalization, economic exploitation, and many others (Watts & Bohle, 1993; Ribot, 2014; Bennett et al., 2016). Even within specific localities, vulnerability is most often differentiated, with some segments of the population – especially historically marginalized groups such as women, ethnic minorities, and the poor – more likely to suffer the negative consequences of many different kinds of events (Fischer & Chhatre, 2016; Williams et al., 2016). People with already risky livelihoods often experience multiple threats and shocks at the same time, which may have a cumulative effect on the negative impacts overall (Eakin & Luers 2006, McDowell & Hess, 2012). Over a longer timeframe, experience of livelihood stress can alter livelihood trajectories by damaging productive assets, increasing indebtedness, and otherwise undermining productive capacities, thus contributing to a vicious cycle of increased poverty and vulnerability (Swift, 1989; Wisner et al., 2004; Mainali & Pricope, 2019). From this work, we draw an appreciation of vulnerability as differentiated, dynamic and evolving, and deeply influenced by social and political structures that determine one's livelihood prospects in the first place. However, we note that COVID-19 is a disruption that is very different from many previously studied livelihood shocks. While many existing analyses of rural vulnerability have tended to focus on threats to farm based livelihoods, especially those relating to climate, the present moment draws attention to the precarity of non-farm livelihoods as well. In so doing, it highlights how livelihood transformation in the present era, especially growing off-farm employment, are altering the nature of rural vulnerability – a point we shall return to in the conclusion.

A second body of relevant literature examines the ways in which households respond to threats and shocks, and the conditions that enable them to do so. Rural livelihoods are already exposed to a wide variety of risks, and rural populations have already developed response strategies to mitigate against risks they face (Mortimore & Adams, 2001; Ellis, 2000). A burgeoning body of scholarship has sought to explore the conditions that enable different groups to undertake effective responses (Nelson et al., 2007; Engle, 2011; Cinner et al., 2018). Existing response strategies may provide important means for dealing with future shocks such as those associated with climate change (Nyong et al., 2007; Forsyth & Evans, 2013; Naess, 2013). However, the disruptions associated with COVID-19 have also limited many existing strategies to mitigate risk, especially as a result of restrictions on mobility, trade and exchange, and opportunities for diversification (Agrawal et al., 2010). It thus seems apt to explore what strategies people adopt in the present disruption, and to what

extent those strategies mitigate negative consequences in the pandemic.

Finally, we build upon existing literature that explores the role of state support – and in particular local institutions – in facilitating responses to livelihood risks and shocks. To begin with, classic work by Dreze and Sen (1989) documents the critical role of social security mechanisms in mitigating against starvation in the context of drought by helping to ensure that people still have access to food; other scholarship has highlighted the importance of a broader range of state support mechanisms in helping to address the needs of different social groups (Davies et al., 2009; Fischer & Chhatre, 2016; Lemos et al., 2016). However, effective state support is not simply a matter of "good" policy crafted from above. Local-level institutions navigate diverse local contexts in the implementation of disaster recovery programs, help to coordinate collective responses to livelihood risks, and serve as a critical channel for citizens to access state support (Agrawal et al., 2012; Kruks-Wisner, 2011; Chhetri et al., 2012; Tselios & Tompkins, 2017; Dutta & Fischer, 2020). However, there remains a lack of knowledge of how different governance arrangements shape response trajectories (Burnham & Ma, 2018; Engle & Lemos, 2010; Huitema et al., 2016). In our cases, we find the distinct character of local institutions in our Indian and Nepali study sites have led to different kinds of response strategies. These findings, from the early days of the pandemic, highlight some promising areas for future enquiry of how the nature of governance systems shape longer-term impacts and recovery.

2. Methods

The present paper grew out of a larger research project, which sought to study the role of state support systems in shaping local responses to climate risk and change. While COVID-19 was unexpected, it became immediately apparent that the great uncertainty that it brought to the lives of rural communities offered important insights into how communities experience and respond to shocks. As the threat of COVID-19 became a reality and strict lockdown measures were implemented, we redesigned our data collection efforts to continue our research from a distance.

We told our 16 field assistants to go home with their families during the lockdown. For 13 of our field assistants (8 in India and 5 in Nepal), this meant going home to villages in which they live. Three field assistants in Nepal that live in urban localities conducted interviews remotely over the phone in villages of their origin, where they have family contacts. The assistants were explicitly advised to abide by all government regulations and not to initiate any in-person conversations for the purpose of data collection. Rather, as the effects of widespread lockdown became a reality, they were told to record and reflect upon their observations of events as they unfolded in their own lives and other close contacts that they are already in touch with, and to initiate conversations with friends, relatives, and others that could be safely conducted over the phone. Throughout, we sought to ensure that ethical guidelines of informed consent as well as updated guidance from our Institutional Review Board were followed. Our field assistants found that in the days following the lockdown, people were often very eager to speak at length over the phone, both to register their concerns as well as a result of boredom from being confined in their homes.

While our field assistants were already well-trained, the revised research design meant that they would now put their analytical tools to work by analyzing their own lives and those of their close contacts. To facilitate data collection, we provided a series of open-ended questions for collecting and analyzing different aspects of events. This included how the lockdown was being perceived and experienced, its impacts on livelihoods, and responses to these challenges. We requested the field assistants to create daily journals to reflect on these points. Where possible, they were instructed to include key quotes from their conversations with family and friends, and also to document any observations from social media, radio, and the news. Finally, we asked them to keep a timeline of events in their villages through the process of lockdown, including information dissemination, external support mechanisms, and any other notable aspects. Facebook and Whatsapp groups were created for the research team to ensure that the field assistants were able to share information with each other and project collaborators throughout the data collection process. Regular phone conversations were scheduled with the field staff in order to monitor developments and capture information to feed into the analysis of this paper. This format allowed for thoughtful exchanges between field assistants and the paper's authors, providing the opportunity to consider, clarify and expand meaning (Debenham, 2001; Irvine, 2011). The authors also conducted interviews of state and non-state actors including several bureaucrats in Himachal Pradesh, locally elected officials in both our India and Nepal sites, and other civil society actors. We also reviewed policy documents and government circulars and monitored local media to keep abreast of COVID-19 related developments.

Relying on field assistants' reflections of their own lives and those of their close social relationships allowed us to capture an uncharacteristically intimate view of how the effects of lockdown were experienced. All of our assistants either live in or grew up in and continue to maintain strong family ties in rural villages in our study area. However, the make-up of the team also meant that certain perspectives are likely to be represented more than others. All of the research assistants in Himachal Pradesh are men; 5 have completed secondary education (i.e. high school) and 3 have a bachelor's degree from small government colleges located in towns near their villages. 6 of the assistants are of *General Category Castes* (i.e. not historically marginalized) while 2 are *Scheduled Castes* (i.e. "low" castes). 2 of the assistants are designated as below the poverty line (BPL), while an additional 2 are eligible for extra entitlements under India's National Food Security Act (due to their low income status). The remaining 4 are of more comfortable economic status, however none would be considered wealthy or from "elite" households. 5 of the assistants do agriculture as a main livelihood, and 3 of these have high value cash crops as a primary income stream. 3 assistants run small shops in their villages with their families. None of the assistants come from households with monthly salaries, however 2 have fathers with a pension from retired government service, which provides a measure of financial security.

The assistants in Nepal, in contrast, are a majority female (6 of 8). They have comparatively higher levels of education; all have college degrees, and three have master's degrees. Three of the assistants belong to indigenous ethnic groups (Janajaati), while 5 are upper caste (Brahmin and Chhetri). None come from historically powerful families in their village. Five come from families with more secure off-farm employment and thus are of a higher level of economic security than others in their villages. Six do subsistence agriculture alongside other livelihood activities, while 1 has a primary income stream from cash crops. In some ways, the gender composition of the Nepal team has provided a more intimate look at women's challenges in our Nepal field sites; we observed that some of the women respondents formed bonds with the research assistants, which led them to speak candidly about their hardships. However, complementary insights came up in the study countries, for example about women's labor and caregiving responsibilities during the lockdown, suggesting that we have at least been able to capture similar data on these themes across the country teams. Moreover, the ongoing and iter-

ative nature of our data collection allowed us to cross-check emerging insights from one country with our team in the other, thus building insights across both. Although the make-up of our team has surely influenced our data, the diversity of their socio-economic backgrounds suggests that their experiences and interactions can still provide a relatively broad overview of the situation in the study area.

The data for this paper spans approximately six weeks of intensive data collection from early April until the middle of May 2020. Due to constraints on movement, our assistants were more able to interact with friends and relatives living in proximity to their own homes, which were thus closer to their own socio-economic background. However, we also encouraged them to get in touch with individuals of other social backgrounds wherever possible. We estimate that each assistant has anywhere between 6 and 12 households in their direct kinship and friendship networks that they interacted with on an almost daily basis, and many more across the village that they interact with less frequently. These included people of different castes and social backgrounds, men and women, and households with different livelihoods and income statuses (farmers, wage laborers, shopkeepers, people with secure off-farm employment). The extent that assistants were able to talk beyond their immediate networks varied significantly; about half of the enumerators reported conversations restricted mainly within their own hamlets while the other half were able to undertake substantial additional conversations with other households in their villages. The assistants also had conversations with key informants including elected local leaders, community health workers, leaders of resource management institutions (e.g. forest and drinking water user groups), other key government employees (teachers, low-level bureaucrats, and people administering government support). Interactions included a mixture of open-ended discussions and participant observations that were recorded in detailed fieldnotes and then described to the authors in phone conversations. Based on their accounts and the variation across the sample, we conservatively estimate that assistants meaningfully interacted with at least 100 households regularly and more than 200 households in total to gather information for this paper. Throughout the duration of the fieldwork, the authors of the paper interacted with the field assistants twice every week, leading to approximately 100 conversations across the team. This allowed us to gain a real-time understanding of how the situation was developing in different contexts, which would otherwise have been inaccessible in the early days of the pandemic.

3. Study sites and background

Our study areas in India and Nepal are both located in the middle Himalayas, with broadly similar agro-ecological conditions. Our study villages were selected simply because they are where our research assistants live and could collect data during severe restrictions of the lockdown (in the case of the three Nepali enumerators that conducted fieldwork from a distance, the study villages are where they have existing family ties).

In India, our sites are located in the state of Himachal Pradesh, including four villages each in the Sirmuar District (Rajgarh and Sangrah blocks) and the Chamba District (Bhattiyat and Saluni blocks). In each area, livelihoods are a mixture of agriculture, livestock husbandry, and various forms of off-farm employment (Census, 2011). Sirmaur is located in the southern part of the state and is well integrated with the large lowland cities Chandigarh and Dehradun. Agriculture is prosperous due to the temperate climate, as farmers are able to cultivate fresh vegetables when they are off-season elsewhere in India. Rajgarh Block in particular is known for its horticulture and intensive vegetable production, while our sites in Sangrah focus much more on subsistence food grains alongside commercial production of garlic and ginger. The Chamba District is located in the north-western part of the state. Here, our sites are also well integrated with markets and urban areas, especially Pathankot in neighboring Punjab state. Subsistence food production remains dominant in Bhatiyat Block, while cash cropping has increased in our sites in Saluni in recent years. Across all of our study sites, as in much of Himachal, skilled off-farm employment – for example government and military service, or skilled jobs in lowland cities – are common, partly as a result of high levels of education attainment in the state. Significant growth in off-farm incomes over the past several decades have made the state relatively prosperous in comparison to other rural areas in India as well as our sites in Nepal. Still, many households live close to the margin, particularly those without steady off-farm employment. Agriculture remains an important livelihood for many, and farmers remain exposed to many uncertainties throughout the year from untimely rains, dry spells, extreme weather events such as hail, and market perturbations.

In Nepal, we have four study sites each in the Ramechhap District (Gokulganga Rural municipality and Ramechhap Municipalitiy) and Kavre District (Dhulikhel Municipality and Temal Rural Municipality). Kavre is located just east of Kathmandu, the capital city of the country. The Dhulikhel Municipality, an emerging tourist town and district center of Kavre, has strong market connections with other cities such as Banepa and Kathmandu. Our study sites in this area have developed a thriving cash crop economy, especially for vegetable, poultry, and dairy production. Further east, our study sites in the Temal municipality are more remote, and agriculture is far less commercialized. Ramechhap District, in turn, is in the east of Kavre. It is even more remote and has only been connected to the national highway for the past six years. The cash cropping economy is much less developed, while subsistence cultivation remains the mainstay of the rural economy. However, agriculture is moving in the direction of semi-commercial farming, with increasing growth in vegetables, goat, and pig production. Significant water shortages in the Ramechhap Municipality have been a major constraint for diversification, while our sites in Gokulganga have been able to experiment and increasingly scale up different kinds of crops such as potato and kiwi. Overall, both sites in Ramechhap Districts and the Temal Rural Municipality of Kavre have much higher outmigration than Dhulikhel. In these areas, a substantial proportion of households have at least one family member working in Kathmandu or abroad, primarily in unskilled labor. Like in Himachal, farmers in our Nepal sites are exposed to a variety of other risk to agriculture from climate, pests, and markets, among others.

Importantly, overall developmental and institutional conditions also vary greatly between sites in the two countries. Our sites in India are located in Himachal Pradesh, a state known for relatively high levels of social development achievements compared to other parts of India in areas such as health, nutrition, and education (Dreze and Sen, 2013; Mangla, 2015a,b). Scholars have highlighted a range of factors that have helped to bring about these gains: a relatively disciplined development bureaucracy, strong traditions of community-level collective action (especially for forest and water management), a well-developed civil society, and intense party competition for control over the state legislature over the past three decades (Dreze and Sen, 2002; Chhatre and Saberwal, 2006; Mangla, 2018). More broadly, India has a well-entrenched system of local governments, known as *panchayats*, built on a strong legislative foundation of the 73rd constitutional amendment (1992). It also has a robust social security net of heavily subsidized food through its Public Distribution System (PDS) under the

National Food Security Act (NFSA) and basic employment security (up to 100 days minimum wage labor per year for all rural households) under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

The sites in Nepal, in contrast, are comparatively poorer with less developed infrastructure such as health services and roads (CBS, 2011). The country suffered from ten years of civil war (1996–2006) and a protracted political transition thereafter as well as a catastrophic earthquake in 2015 from which many areas are still recovering. With the promulgation of the 2015 constitution, Nepal adopted a federal governance structure with stronger local governments known as *Palikas* with substantive authorities and resources (Nightingale et al., 2019; Acharya, 2018). Nepal does not have a public food distribution system or a counterpart to the MGNREGA. While the basic social safety net from the central government is less expansive than India, Palikas in our study areas undertake a broad range of discretionary roles for development and social support such as social security allowances (Acharya, 2018), as discussed below in Section 4.5. These institutions, although relatively new in comparison to that of our study sites in Himachal, have become an increasingly important locus of service delivery, and there are hopeful signs of committed local leadership in different parts of the country (Acharya & Zafarullah, 2020).

4. Lockdown in Himachal Pradesh and Nepal

4.1. Government actions for the COVID-19 crisis

March 24th 2020 marked the beginning of the nationwide lockdown in India and Nepal, a step that was adopted to control the spread of *COVID*-19 in both countries. Both countries closed international borders and suspended public transport to regulate movement within and across different states/provinces. In our study areas, the panchayats (local government in India) and Palikas (local government in Nepal) were directed to monitor their borders and bar all entry except for government vehicles, essential goods carriers, ambulances, the press, medical staff and those with curfew permits. Temporary quarantine centers were set up by state/provincial governments and managed by the district government to ensure those coming from outside were quarantined and screened for COVID-19 before reuniting with their families.

Following the national lockdown, state/provincial and local governments required all commercial and private establishments, industry, and government offices to be closed, except those involved in the supply and manufacture of essential goods and emergency services. Social distancing was mandated, and social media outlets such as Facebook, Whatsapp and Twitter alongside conventional media such as television, radio and newspapers were used for disseminating information about disease prevention. When schools were shut in the field sites in Himachal and Nepal, online classes continued on web-based applications. Classes were also conducted on local television channels in Himachal and local radio in Nepal. All events that involved social gatherings and events like festivals and marriages were either cancelled or the number of attendees was reduced to avoid the risk of spreading the virus. Public awareness campaigns to sensitize people about basic hygiene practices like washing hands and the use of sanitizers were carried out. In addition, the Accredited Social Health Activist[2] (ASHA) workers in Himachal and Female Community Health Volunteers[3] (FCHV) in Nepal were mobilized to do door-to-door health screening and monitor people with recent travel history.

4.2. Local perceptions

It is hard to overstate how much the sudden lockdown measures upended life in our study sites. Many people were initially indifferent to *COVID*-19 and its seriousness, as they believed that it was a disease "from the outside". But as the days went by and the number of cases in the region began to rise, people's anxiety rose. As migrants returned home, many were stigmatized by people in their community, who feared that returnees might bring the infection to the village. The uncertainty of the lockdown made people fearful.

4.3. Food access and security

Historically, households in our study sites in Himachal Pradesh derived a substantial proportion of their food from subsistence production, and while many still grow food for home consumption, they often complement their food stock by buying from the market. Households that grow their own food often maintain storage that lasts them for a few months. However, the timing of the lockdown was such that it coincided with the end of the food storage cycle. The sudden halt in transportation and the disruption of the food supply chain thus created great uncertainty for many households. "We normally store grains for the entire season, but now, as we are nearing the end of the cycle and are close to harvesting our crops, our stock is running low. As soon as we heard about the lockdown we were worried if we would be able to manage enough cash to stock up food in case the food supply stops" said a small farmer in Chamba, Himachal Pradesh.

Our sites in Nepal experienced similar challenges with food security. Although many households that depend on subsistence farming had food stocks that would last them for at least a few weeks, the prolonged lockdown stressed their supplies. Our field assistants also reported that prices of many staples such as rice, potatoes, lentils, and oil increased by 20–30%, thus compelling households to carefully use their food reserve, rely on their savings, and in some extreme cases decrease their food consumption (see Table 2). As one interviewee who was a small farmer in Kavre, Nepal shared, "The stock of maize from last year has almost finished now. We have wheat and barley, but it is very limited. Since the price of food has increased, we have been selling milk and buying rice from that money. We are skipping our breakfast and afternoon snack and limiting our meals to two meals a day; but we have made no compromise on the diet of the children in the family".

People employed in the informal sector such as daily wage laborers working on construction sites, street vendors, and others lost their regular income almost immediately, thus generating significant challenges for their ability to purchase food. "We really hope we are able to start work soon otherwise it will be hard to sustain our family", shared a landless farmer in Chamba district in Himachal, India. Similarly, a brick kiln worker in Kavre, Nepal, who returned home with just USD 30 told us, "my family has already run out of the money we had, the shopkeeper stopped giving us groceries on credit like before. We are now relying on whatever we can borrow from our neighbors." Both of these quotes speak to another pattern we found in our data: food insecurity is

[2] ASHA workers are community health workers in the age group of 25–45 years. They are trained to work as an interface between the community and public health system. They serve as the first point of contact in case there is health related emergency, especially for women and children.

[3] FCHV are a part of a program that was initiated in 1988 in Nepal to spread awareness about family planning in rural areas. Over the years their roles have expanded beyond family planning to focus on maternal and child health services at a larger scale. During lockdown, both ASHA workers and FCHV have been mobilized to do door-to-door health monitoring and screening of the members of the households in their respective villages.

Table 1
Food and livelihood security in our study sites in India.

Food Access and Security			
Impacts		Households and Community Level Responses	Institutional Level Response
	Depleting food stock during harvest season. Uncertainty of cash income to buy food. Concern of infection from fresh fruit and vegetables in the market.	Stockpiling non-perishable food. Foraging Limiting expenditure on food Increased reliance on kitchen garden and farm. Purchasing produce from neighbors' farm. Increasing home production for consumption. Traditional recipes that require all locally available ingredients revived.	Extra food ration beyond the actual entitlement under the public food distribution scheme (PDS). Increase to two months ration available under PDS. Distribution of mid-day meal ration to families. Home-delivery of ration to pregnant and lactating mothers under *Poshan Ahaar* Scheme (Holistic Nutrition Scheme). Distribution of food kits to migrant workers and others stranded during the lockdown.
Livelihood Security			
Farm-based livelihoods	Low harvest income resulting from restricted market access. High transportation cost to markets due to restricted transport. Crop wasted because of lack of market access. Lack of access to agricultural inputs due to inability to get to shops. Lack of access to livestock feed due to disrupted fodder transport.	Storing farm harvest for household consumption. Storing harvest for future sale. Selling harvest to neighbors instead of in the market. Using personal connections to transport farm produce to market for sale. Setting-up collection centers for collective sale of harvest of farm produce. Use of natural methods to deal with plant pests/diseases. Increased extraction of livestock feed from common land. Feed farm produce normally used for household consumption to livestock.	*Kisan Rath* mobile application to connect buyers with farmers. Advance release of installment of PM-Kisan Samman Scheme Free refills of cooking gas under Ujjawala Scheme. Three months advance payment of Social Service Allowance (senior citizen, widow, handicap) home-delivered. Helpline numbers of the agricultural office to provide technical help to farmers.
Non-farm based livelihoods	Loss of jobs of wage laborers. Loss of income in dairy sale.	Tacit agreements with shopkeepers and large farmers for credit in exchange of labor. Preservation of dairy products for future sale.	Increase of daily wage amount and scope of work under MGNREGA.

Table 2
Food and livelihood security in our study sites in Nepal.

Food Access and Security			
Impacts		Households and Community Level Responses	Institutional Level Response
	Insufficient food stock in the household. Increase pressure on food stock due to influx of migrants returning home. Lack of transportation to buy food. Increased market price of food. Decreased food supply in the market. Scarcity of cooking gas.	Stockpiling non-perishable food. Foraging Increased reliance on kitchen garden and farm. Purchasing produce from neighbors' farm. Limiting expenditure on food. Switching to cheaper and more nutritious substitutes. Increased reliance on fuelwood. Increased preference for biogas. Traditional recipes that require all locally available ingredients revived.	Creation of list of vulnerable families for planned distribution of relief material. Distribution of food packages to daily wage workers. Political and other state actors' contribution of cash and distribution of relief material to vulnerable households.
Livelihood Security			
Farm-based livelihoods	Lack of access to agricultural inputs. High transportation cost due to reduced transport options. Lack of transportation to carry harvest to the market. Lack of access to livestock feed due to disruptions in transport.	Using local seeds Borrowing/buying from neighbors. Use of bio-pesticides. Using personal connections to transport farm produce to market for sale. Personally carrying the harvest and walking long distances to sell in the market. Share/buying agricultural inputs from families and friends. Selling produce to traders at a low price. Grazing livestock in common lands. Feed food grain from household stock to feed livestock.	Distribution of subsidized seeds by palika. Cooperatives collecting farm produce and selling in market. Distribution of agriculture inputs. Agriculture knowledge center provided technical help to farmers. Palika officers personally visited farmers with technical experts to provide help.
Non-farm based livelihoods	Loss of jobs of wage laborers. Loss of income in dairy sale.	Working in the farms of others. Household consumption, preserving dairy in the form of butter, selling to neighbors.	Palikas prepared list of people who lost their jobs and employed them in construction work. Dairy cooperatives mobilized to demand smoother operation of diary vans.

linked to assets. People with land, even if small, were able to grow their own food and often had some food stores from the previous year. This, if not fully, at least partially mitigated their distress.

Another implication of the lockdown was an increase in the burden of household chores on women. "We are constantly worried about what to feed everyone in the family. We cannot

buy produce from the market because of the fear of infection so often we are left with very few options to cook," said an interviewee in Chamba, Himachal. She further added, "it also has been hard to fetch water from the springs after the lockdown. We have to make sure we take the back roads to not get caught by the police, so we end up walking longer distances than usual". Similarly, in Kavre, Nepal, one of the respondents shared that her three sons who used to live in Kathmandu returned to the village. She regretfully said, "there are so many people in the house, but nobody helps me in the kitchen. I am busy all day cooking food four times a day, washing dishes, and going to the forest to collect fodder. I do not get time at all, not even to work on the farm these days. Finding time to get any rest is hard even to imagine." As primary caregivers, women are responsible for ensuring their family members are adequately fed and also performing other household chores.

Overall, our evidence also suggests that food insecurity is more severe in our study areas in Nepal, where we observed household food rationing more often than our study sites in India. This may be the result of overall higher levels of poverty, greater reliance on remittances from the informal sector, and less expansive public food support—a point we return to below.

4.4. Livelihood disruptions

The lockdown caused a wide variety of challenges for rural livelihoods. Under normal circumstances, people in the study area derive income from a wide spectrum of activities: commercial agriculture, pastoralism (including both the sale of meat and dairy), private businesses, trades (carpentry or tailoring, for example), government service, remittances, and the MGNREGA. Tourism is an important source of income for many residents who work in regional towns.

The lockdown had immediate consequences for all these income generating activities. Daily wage workers and tradesmen were impacted due to the shutdown of markets. Households that work in trades and businesses in nearby towns could no longer travel to work and those who relied upon daily wages lost their key source of income.

Lockdown also plunged commercial agriculture into a high degree of uncertainty. For example, in our study sites in Himachal the timing of the lockdown coincided with the harvest season of *rabi* (winter) crops, including wheat, peas, and garlic. Due to restrictions on movement, many farmers could not sell their harvest. Those who did manage to sell their harvest reported heavy losses due to a precipitous drop in market prices and high transportation costs (see Table 1). Many cash crops need to be sold soon after they are harvested, but it became challenging to do so during lockdown. "Curfew passes" allowing travel were issued by the government to a limited number of individuals, however few traders had them. "We could not take our harvest to the market as there are no busses and we do not have the curfew pass. People with the pass are seeing lockdown as an economic opportunity and are quoting hefty transportation costs. We ultimately had to give in and sell our peas that we normally sell for Rs. 30/kg for Rs. 2/kg" said a farmer in Sirmaur, Himachal. For some products, marketing opportunities dried up completely; due to restraint on public gatherings like marriages and festivals across India, floriculturists in Himachal did not even try selling their flowers that season. A distraught farmer said, "We ploughed through our flower farms and instead planted vegetable seedlings there." He added grimly, "It is a huge loss, but there was no other choice left for us".

In our study sites in Nepal, farmers also faced limited access to markets because of lack of transportation and market closure. "In Dhulikhel, lack of public transport meant that farmers carried their harvest on foot to the nearby market center before 4 AM as the market opened only in the morning for limited hours during the lockdown. Farmers who cannot access markets on foot are selling their harvest to middlemen who have curfew passes [see Table 2]. The farmers have no other option but to sell their harvest to the contractors for whatever price the contractor quotes them. We sold our cucumber that we used to sell for Rs. 60/kg for Rs.10/kg", said the interviewee in Kavre, Nepal.

Unfortunately, the effects of lockdown in Himachal were experienced in tandem with other challenges not related to COVID-19. This is particularly in case of agriculture. For example, the months of March, April and May recorded excess pre-monsoon rain, resulting in heavy crop loss for garlic, a particularly important crop in Sangrah. As one farmer described, "Sangrah is known as the garlic belt and people normally refer to garlic as white gold, but we are worried this season because we already see the leaves of garlic turning yellow due to fungal infection caused by waterlogging, and we cannot do anything". The impacts this year come on the heels of challenges faced by garlic farmers in recent years, including pests, disease, excessive rain and hail. Wheat growing farmers who were ready to begin harvesting also anticipated crop damage and yield loss due to excess rain and hail. Rain during harvest season causes moisture in the wheat harvest making it almost impossible for farmers to sell. One of the farmers in Sangrah, Himachal shared, "We were already quite uncertain about being able to find buyers for our harvest, but now we are not sure if we would manage to sell our harvest at all". Similar challenges were also faced by farmers growing fruit. Another farmer in Rajgarh, Himachal said, "In the beginning of the season, we observed leaves were curling in our apricot and peach trees, and we were mentally prepared that we will not get as much fruit this season. But we lost all hope [for any fruit] when the flowers on the fruit trees got damaged due to excess rain and hail".

Excessive pre-monsoon rain and hail was also a problem for farmers in our study areas in Nepal, causing yield losses. "We bear such hardship in planting our crops, but now all our crops are damaged and we have nothing left.I am really worried how I will manage enough money to feed my family", said a farmer. Due to extreme weather events, crops of wheat, barley, peas, vegetables, and lentils were damaged, as were fruits of rosary plant (*Buddhachitta)*. These areas are still recovering from the 2015 earthquake as well as flash foods, storms, and pest infestations. In 2019, a large proportion of farmers in Ramechhap lost their maize crops due to the worm *Spodoptera frugiperda,* which appears to be extending its spread in Ramechhap and Kavre in 2020.

Lockdown also meant that many farmers could not get expert advice that they would normally seek. "The usual course of events, when faced with a crop pest/disease, would be to board a public bus to the nearby town, and seek consultation from scientists at the agriculture or horticulture department, or at an agrochemical shop. Faced with the lockdown, without public transport to commute for information or resources, farmers struggled to make sense of what they were observing and had no idea of why it was happening, let alone, how it could be remedied", shared a farmer reflecting on the disease in the garlic crop in Sirmaur, Himachal. Farmers in our Nepal study sites also struggled with accessing agricultural inputs. In Ramechhap, farmers reported that there was lack of supply at local agrovets (agricultural inputs supplier), and also that the prices were higher than usual.

The yield loss and crop damage may also have longer-term impacts on economic security for many farmers. "Lockdown has not only meant loss of income, but also deepening of indebtedness, as farmers continue to bear interest on their loans", shared a distressed farmer in Chamba, Himachal. In addition, lockdown compounded the challenge of getting ready for the sowing season for farmers in our study sites in Himachal and Nepal.

Livestock production, which is a critical source of both income and sustenance in our study areas in both countries, was disrupted due to lockdown as well. In both contexts households fed food they would normally consume themselves to their livestock. In our sites in India, although livestock feed was listed as an "essential" good eligible for transport and was available in some areas, the entry of trucks carrying the feed was denied in others. As one small farmer in Chamba said, "Since our panchayat is quarantined due to high COVID-19 cases, we do not have access to livestock feed, so we are feeding our livestock food we grow in our farm that we normally use for our consumption".

Likewise, in Nepal, some farmers also fed food grains that they stocked up for their own consumption to their livestock. In Ramechhap, poultry farmers mixed their food grains with the farm feed bought from the market to feed their chickens. Some farmers also reported reducing the portion of the feed they were giving to the cattle.

Loss of income brought significant challenges to people across the livelihood spectrum. The impacts were especially dire for the landless and subsistence farmers – many of whom have limited, if any, savings. Yet, the extended nature of livelihood disruptions – over two months and counting – meant that even more well-off people faced challenges. Having incurred high economic loss due to income deprivation in farm and off-farm related livelihoods across our field sites in both Himachal and Nepal, hope was slowly replaced by helplessness and desperation.

4.5. Household and community level responses

When the lockdown first occurred, one of the first actions that many households adopted was to stockpile food. "As soon as we learned about the lockdown, we made sure we had enough food to last at least for a few weeks, and we used the interim time to buy and stock up food" shared a farmer in Sirmaur, Himachal.

Increasing difficulty and concern with purchasing food from the market, coupled with reductions in expendable income, meant that many people sought to substitute produce that they would ordinarily purchase from the market with vegetables grown in their kitchen garden as well as by foraging for green leafy vegetables and mushrooms from common lands. Increased reliance on foraging and locally grown vegetables, in turn, revived traditional recipes and food. For example, in Nepal we observed increased use of stinging nettle, different varieties of green leafy plants like Fiddlehead fern (*Niuro*), watercress (*Sim saag*), and taro leaves (*Jaluko*) by households in their meals.

Some of the informants also highlighted dairy as an important nutritional source. With the shutdown of restaurants, households shared or sold extra milk in their neighborhood and also preserved milk in the form of dairy products. "For families that have a lot of livestock and whose business is suffering due to lockdown, they are either selling extra milk to their neighbor or preserving it in the form of clarified butter", shared a local milk producer in Chamba, Himachal. Similar actions reportedly have been adopted in our field sites in Nepal as well.

Given heightened insecurity of off-farm employment, many households chose to invest more in farm-based production. As one informant described "a lot of households have family members returning during the lockdown, and these people are helping in the farm; also there are lands that were abandoned by households for several years when men in the family had migrated [for work]. Now, the returning men in those families are using their time to farm their lands". Likewise, in Nepal the traditional practice of *Parma (*reciprocal labor exchange) with neighbors and relatives increased. One of the farmers shared, "we can't stay inside the home with fear of coronavirus infection. We would rather work in the farm to avoid mental stress". Some landless people also made tacit agreements with local shops and large landholding farmers to acquire credit in exchange for their labor (see Table 2).

Interestingly there was also evidence of some small-scale farmers resorting to using natural methods to deal with pest and diseases in their farms, "Some of the farmers are using organic farming methods on a small scale and making concoctions of natural fertilizers by recycling livestock and household waste/products to deal with difficulty in accessing inputs", said an interviewee in Sirmaur, Himachal.

To cope with transportation challenges, a lot of farmers chose to store their harvest for either future sale when the lockdown was over or for later consumption in the household. Those growing cash crops like peas could not store their harvest, so they ended up selling it to their neighbors. "We were incurring huge losses by selling our harvest to the contractors, but our neighbors are willing to buy for a better price so we are choosing to sell to them instead", said a farmer in Sirmaur, Himachal. In another example, a farmer's collective planned to set up a collection center so they could aggregate produce from local farmers and transport it to the market, "we are aware of farmers in the region who have been struggling to transport produce to the market for sale. Our farmers' group is trying to set up a collection center so we can collect all the produce and take it to the market," said an interviewee in Sirmaur, Himachal.

4.6. State and other institutional support

As described in the previous section, households and other local actors undertook an impressive array of responses. These actions, in turn, were complemented by other kinds of actions and support mechanisms from institutions at federal, state/provincial and local levels. In Himachal, the government undertook several different responses designed to ensure basic food and livelihood security, largely by implementing existing national-level programs such as the PDS, the Mid-day Meal Scheme and *anganwadis* (see Table 1). For example, PDS, which normally provides one month supply of subsidized food items to households, was adapted at the time of the lockdown to distribute food for two months. Also, an extra ration of 5 kg of rice was provided to BPL (below poverty line) families. Similarly, although schools were shut, the share of food grain that children eat as a part of the Mid-day Meal Scheme[4] was given to families directly. *Anganwadis*, village childcare centers, which also provide food support, were instructed to home-deliver rice, lentils, black chickpeas, protein mix, and cooking oil derived from state supplies to pregnant and lactating mothers.

In addition, there were several national-level support schemes that were mobilized to provide income support. Farmers, senior citizens, physically disabled, and widows were eligible for advance payment of three months' benefits under existing schemes targeting these groups, while women account holders under the Prime Minister Financial Inclusion Scheme[5] (PM-Jan Dhan Yojana) were given an additional Rs. 500/month (roughly equivalent to 2.5 days wages) during the three months of lockdown. Households were allowed free refills of gas cylinders used for cooking under the Ujjwala Scheme. The federal government also launched a mobile application called Kisan Rath to help farmers and traders identify

[4] The Mid-day meal scheme is a school meal program of the government of India that provides free lunches to children. During the lockdown, since children were not going to school, rice and some money was sent to their homes. In Himachal, 2 kg of rice and Rs. 62 was given to the families of children at the primary level (up to 6th grade) and those studying in grades 7th-12th were given 3.5 kgs of rice along with Rs. 93.

[5] Pradhan Mantri Jan Dhan Yojana is a large financial inclusion initiative. The scheme ensures access to a range of services like need-based credit, remittance transfers, insurance and pensions. During lockdown the government announced that Rs. 500 will be transferred for three months to women account holders in each family.

suitable transport facilities for the movement of farm produce during lockdown. Although work under the MGNREGA was halted during the initial stage of the lockdown, some activities resumed thereafter and wages increased from Rs. 185 to Rs. 205/day (USD $2.50). Labor under the Act offered a buffer to purchase basic necessities at a time when very few other wage labor opportunities were available (see Table 1).

In Himachal, panchayats played an important role in coordinating many of these responses. They spread awareness of COVID-19 and its precautionary measures like social distancing, and they were also active in assessing food security and coordinating distribution of food kits to families that were out of food or unable to buy food. For example, a panchayat president in Chamba, Himachal said, "We are regularly staying in touch with our village members to take stock of the situation in the respective wards and we are ensuring there are no households that are struggling with inadequate food". She described sending messages on social media platforms like Facebook and Whatsapp urging people to reach out in case of any food shortage. She also shared how panchayats have helped to coordinate the distribution of food from local depots (subsidized food shops) under the PDS, "We have asked ward members to create a list of households in their respective wards and assign specific days and times to each household to visit the depot; this is to avoid overcrowding and mitigating risk of spread of the infection". They were also in charge of overseeing the implementation of the MGNREGA.

In our study sites in Nepal, Palikas played an important role in coordinating a variety of responses and spreading public health awareness. However, Nepal does not have an expansive social safety net of central government programs (such as the PDS, MGNREGA, and other income supports in India). Thus, while panchayats in India focused on strengthening the implementation of existing schemes, Palikas took a wider range of responses. In Nepal, the central government provided relief funds, especially for food support (see Table 2). Palikas were in charge of assessing the food security situation and identifying vulnerable households. In Kavre, palikas issued food packets that included rice, salt, sugar, and oil. The Deputy Mayor of Kavre took a particular interest in providing nutritional support and warm clothes to pregnant women and postpartum women during the lockdown, as she described, "It is a very difficult time for the poor and more than that it is difficult for pregnant women and women with newborn babies who are also poor, so I decided to support them. I could support 100 women from all the 12 wards [across the Palika]." In Ramechhap, food was distributed to daily wage workers and to pregnant and lactating women and young children. While in some areas of heightened food insecurity in Kavre and Ramechhap, Palikas decided to provide food relief of up to 70–100 percent of households, in other areas the coverage was far less. Nepal's targeted approach to food support coordinated by palikas stands in contrast to the more universal food support assured by central legislation in India.

Palikas also provided agricultural inputs to farmers in distress at subsidized rates or for free. As a Mayor from Kavre, Nepal described "*palikas* have distributed subsidized seeds, chemical fertilizers and pesticides to farmers". He added, "We have created a Corona Combat Fund at the palika level as per the guidance from the Ministry of Finance to use for relief work". In a village in Ramechhap, subsidized maize seeds were distributed to small farmers. The distribution of the agricultural inputs was coordinated by local government actors within the Palika structure who coordinated with agricultural cooperatives for distribution. In addition, helplines were created by the Agriculture Knowledge Center at the district level so farmers could consult and seek advice from technical experts remotely. Information about common agricultural problems that farmers were facing at the time of lockdown, including transportation, was also disseminated on websites and facebook pages of the *palika.* Online forums to help buyers and sellers of agricultural inputs connect with each other were also established (see Table 2).

Palikas also worked with the district administration to ensure transportation services for stranded migrants in Kathmandu so they could return home. In Ramechhap, approximately 1400 citizens were ferried back to their villages. An elected Palika member at our study site in Ramechhap said, "People were returning to the village by walking and cycling covering hundreds of kilometers, and since we were aware of their distressing condition we arranged transportation to facilitate their return."

We were also struck by the sense of social responsibility demonstrated by some of the bureaucrats we spoke to in both study countries, which seems to have been intensified by the magnitude of the crisis at hand. As a sub-divisional magistrate (mid-level bureaucrat) in Himachal noted, "state actors at different levels are coordinating on a regular basis via online meetings and conference calls to take stock of the situation on the ground based on which decisions about necessary actions are being taken". He added, "For example, we are taking food security during lockdown very seriously and have assured that nobody irrespective of whether they are residents or non-residents of this state will starve under our watch. We are regularly coordinating with all the line officers and panchayat presidents to ensure implementation of lockdown guidelines and at the same time relaying the information on the ground to the District Collector (higher-level bureaucrat) who is then communicating the information to the state Chief Minister. This kind of feedback is really helping the state to adapt its responses to best suit the needs of specific local contexts". Another bureaucrat we spoke to shared, "We have created various helplines to help farmers and even women under distress during lockdown. She also added, "We are all on alert mode and have teamed up with the police to make sure lockdown rules are properly enforced and any chaos or confusion is effectively managed".

Overall, there has been a complex patchwork of policy support mechanisms across both countries as well as some institutional arrangements that helped direct the support to people in need. As the preceding sections reveal, this was not enough to mitigate widespread social and economic disruption resulting from the lockdown. On the other hand, it is easy to imagine that the situation could have been far worse. If anyone had, just a few months ago, told us that all movement would be halted, with people confined to their villages, and off-farm employment almost entirely disrupted, we might have expected significant social conflict, widespread starvation, or worse. So far, at least, the worst has not come to pass. The following section reflects on some of the implications of our findings for understanding of vulnerability in the context of COVID-19 as well as local institutional dimensions of state support for disasters and others livelihood shocks.

5. Discussion and conclusion

The preceding analysis provides a close look at how the present crisis has been experienced at the local level, drawing upon empirical material from 16 villages comprising a range of contexts. First and foremost, our data shows how people have experienced the lockdown and its effects on livelihoods and well-being. We find that impacts have brought about unprecedented challenges to many in the study region, and that the impacts have been differentially experienced by different households. For example, the empirical material shows that households that are already poor, that have little or no landholdings for subsistence food cultivation, and depend heavily upon migratory wage labor have been most affected. Our data also shows that women who bear the central responsibility for securing food for the family have disproportion-

ately experienced extra burdens. Moreover, the shock of lockdown has been experienced in tandem with other existing stressors related to agricultural production, which has exacerbated overall negative effects (Bennett et al., 2016; Phillips et al., 2020). Each of these patterns hint at underlying social and economic conditions that have placed households in a position to be harmed, even before the lockdown took effect (Ribot, 2010; Nichols et al., 2020). These findings are hardly surprising, and they resonate with existing scholarship on disasters and other livelihood threats which has shown vulnerability to be deeply shaped by households' existing social and economic circumstances rather than the straightforward outcomes of exposure to a shock (Wisner et al., 2004; McDowell & Hess, 2012; Sapkota et al., 2016; Panda, 2017).

Yet in other ways, the experiences are illustrative of some of the ways in which vulnerability may be changing as a result of socio-economic shifts in the present era. Much existing scholarship on social vulnerability is rooted in analysis of rural livelihoods, which has tended to particularly emphasize farm-based economies (Scoones, 1998; Bebbington, 2000; Fischer and Chhatre, 2016). Analyses of climate change and other weather-related threats have likewise tended to focus on the susceptibilities of agriculture to negative climate events (Harvey et al., 2014; Williams et al., 2016; Ghosh & Ghosal, 2020). Yet in our study sites, as elsewhere in the developing world, there has been a broad shift toward migratory wage labor and off-farm employment, a trend which seems to have been driven by households' attempts to escape grinding poverty and the uncertainty of agricultural production (Maharjan et al., 2013; Gautam, 2017). At the same time, parts of the Himalayan region have increased cash crop production, which has led to rising incomes alongside growing market integration (Vedwan, 2008). In general, these trends have widened the bundle of livelihood options available for many rural populations while reducing the precarity of heavy reliance on subsistence production for food security. Yet these trends have also generated new kinds of exposure to larger systemic shocks. Most fundamentally, the present moment renders in stark clarity just how dependent rural lives and livelihoods are upon movement of both goods and people (Agrawal et al., 2010). Correspondingly, reductions in mobility in the context of the lockdown have greatly circumscribed the range of options that households have available to sustain their basic well-being.

It is in this context – and particularly concerning a shock with little historical precedence, which occurred with little warning to prepare – that state support has been critical. To be clear, we do find evidence of a wide variety of individual and collective responses, which have helped to mitigate negative impacts (Forsyth & Evans, 2013; Agrawal et al., 2010). Overall, these strategies are testament to the ingenuity of households in the face of stress. Nevertheless, household-level responses by themselves are unlikely to be enough to avoid widespread economic dislocation from the present shock. In our study sites in each country, a patchwork of policy mechanisms, especially food and income support, has played an important role in helping to mitigate against more severe impacts by providing at least a basic measure of security for the poor.

These state support mechanisms were shaped by local and sub-national institutions that determined both what forms of support were granted as well as the ways that they were implemented on the ground. In this respect, our research adds to a growing body of evidence that has documented the critical role of local and sub-national institutions in facilitating responses to livelihoods threats (Agrawal et al., 2010; Chhetri et al., 2012; Rodima-Taylor et al., 2012; Tselios & Tompkins, 2017), yet adds nuance to this work by highlighting how different policy arrangements have influenced the character of support across the two study countries. In our study sites in India, local governments have focused especially on strengthening the delivery and implementation of already existing central government support, including the PDS, MGNREGA, and other basic income schemes. In Nepal, local governments have undertaken a wide variety of roles, primarily at the discretion of elected authorities; as a result, responses have varied substantially across the country and have been carried out in a much more ad hoc manner. It is not possible to say with the data we have whether one arrangement is better than the other for protecting well-being. Greater discretion of Palikas may allow them to coordinate responses that are more appropriate for their specific localities. We also find it notable that Palikas have played an important role, despite being established in their present institutional forms only in year 2017. We do note, however, that India's strong, well-entrenched public food distribution system (PDS) provided a policy structure that could be quickly mobilized for the present crisis. Overall, the PDS has provided a much more extensive and broadly accessible support for food in comparison to Nepal's more piecemeal approach, which seems to have been an important factor in ensuring higher levels of food security compared to Nepal.

The kinds of support needed for longer-term recovery may be very different from those required after the initial onset of a shock; how the situation develops in the coming months remains to be seen. At the very least, our analysis from the early days of the pandemic underscores the need for greater understanding of how different governance arrangements intersect with a broader portfolio of state support to shape longer-term impacts of livelihood threats (Lemos et al., 2016; Huitema et al., 2016). We also note that there may be a recursive effect of exposure to shock on institutions themselves. By galvanizing new kinds of actions and interactions across different administrative bodies, the urgency of the present moment may have longer-term impacts on the nature of governance processes, which could also improve local response capacities in the future.

At the time of writing, the pandemic continues to develop quickly. Things may look very different as the virus continues to spread and amidst ongoing disruption to lives and livelihoods in our study region. At least at the moment, we find the present disruption has led to significant challenges for rural livelihoods, with detrimental impacts upon the poor. There is an acute risk that impacts will grow more severe as households exhaust their existing response capacities. We also find evidence of local agency, state support that seems to have averted the worst, and a bubbling up of social responsibility among some key state and local actors at a time of shared distress. We hope that the data from this paper, gathered during the early days of the pandemic in South Asia, contributes to a growing body of empirically-rooted evidence on how the pandemic was experienced at the local level, while also identifying some key factors that are likely to influence trajectories of impacts and recovery in the months and years to come.

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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