

Disasters and Reconstruction in a Mountain Tourism Area: A Case from 2015 Nepal Earthquake in Solukhumbu, Nepal

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Abstract

A 7.8 magnitude earthquake struck Nepal on 25 April 2015, followed by its largest aftershock of magnitude 7.3 on May 12. This series of earthquakes killed nearly 9,000 people and injured more than 22,000 others, damaging more than 800,000 buildings across Nepal. This paper provides ethnographic material on the situation at the time of the earthquake and its aftermath in Village P, located in a mountain tourism destination in the Solukhumbu District of eastern Nepal. By tracing the recovery process of the village, I argue that recovery from the earthquake damage was accomplished mainly through a network established by the tourism industry and that several characteristics of mountain tourism destinations have positively affected the process. Based on such data, I explain that the vulnerability that characterizes mountainous terrain is also linked to its resilience and argue that disaster prevention measures, and development projects in general, in mountainous areas should be promoted using an approach that takes advantage of the intrinsic resilience of mountainous environments.

Key words: 2015 Nepal earthquake, disaster, Himalaya, Sherpas, tourism

1. Introduction

A 7.8 magnitude earthquake struck Nepal on 25 April 2015, followed by its largest aftershock of magnitude 7.3 on May 12. This series of quakes killed nearly 9,000 people and injured more than 22,000 others, damaging more than 800,000 buildings across Nepal. The disaster also caused significant damage to mountain communities to varying degrees. The purpose of this paper is to provide ethnographic material on the situation at the time of disaster and examine the recovery process in an area serving as a destination for mountain tourism, investigating the 2015 Nepal earthquake and the effects it had on a Himalayan village.

At the moment of the initial earthquake, I was in the Khumbu region of Solukhumbu District in eastern Nepal for fieldwork. I stayed there for the next two months and spent time with the people during the tremors. How did the earthquake damage Nepal's remote mountainous areas, how did the people respond to the earthquake, and how did communities in the roadless mountainous terrain recover? Based on research in Village P, located in the mountain tourism destination of Khumbu in northern Solukhumbu, this paper describes how the vulnerability that characterizes mountainous terrain is also linked to its

resilience and argues that disaster prevention measures in mountainous areas should be promoted using an approach that takes advantage of the intrinsic resilience of mountainous areas.

2. Literature on the 2015 Nepal Earthquake

Nepal is an earthquake-prone country affected by Himalayan orogenic movements, with a history of major earthquakes striking approximately once every 80 years. A significant amount of literature has been published on the 2015 Nepal earthquake since immediately after its occurrence (e.g., Hossain *et al.*, 2015). Some researchers have analyzed Nepal's vulnerability to the earthquake in terms of societal characteristics, such as multi-caste and patriarchal systems (e.g., Arora, 2022; Hülssiep *et al.*, 2021). Regarding the reconstruction process, it has been pointed out that the government's centralized support measures failed and that each village followed different reconstruction processes (e.g., Daly *et al.*, 2017).

Most previous studies, however, are based on post-earthquake interviews, and there are no academic articles that have described the situation at the moment of the earthquake as far as I can ascertain. Also, many of the

previous studies focused on the damage to and reconstruction of urban areas. The importance of this paper is that it provides ethnographic material on the earthquake and subsequent reconstruction process, specifically in an area at an altitude of over 3,000 meters serving as a destination for mountain tourism.

In terms of the impact on the tourism industry and its destinations, Min *et al.* (2020) reported from a macroeconomic perspective that heritage tourism destinations have strong resilience. Also, Ketter (2016) found that the media strategy taken by the Nepal Tourism Board (NTB) after the earthquake was shifted to target “crisis resilient” trekkers. On the other hand, Mishra *et al.* (2017) pointed out that roads are crucial for reconstruction. Therefore another feature of this paper is that it clarifies the resilience and reconstruction of a roadless mountain tourist destination, using anthropological micro-observations.

3. The Research Site, 2015 Nepal Earthquake and Related Damage

I have conducted research in Solukhumbu District, especially in the Khumbu region in the north (Fig. 1). The Khumbu region, located in the southern foothills of Mt. Everest and home to the Sherpa people, has been designated as Sagarmatha (Everest) National Park and is now a popular mountain tourism destination, attracting tens of thousands of trekkers and climbers annually.

There are no roadways in this rugged mountainous terrain. Tourists typically fly into the airstrip built in the village of Lukla, located at an altitude of 2,840 meters. The main trekking route is from Lukla to Everest Base Camp (5,364 m) and back, which takes about 10 days to two weeks. Nowadays, many residents of Khumbu work as trekking guides and high-altitude porters. Namche (Namche Bazaar, 3,440 m), the largest village in Khumbu, is a two-day walk from Lukla. This horseshoe-shaped village now brims with more than 100 lodges and other tourist facilities. Village P (3,800 m), where I conducted my research, is a half-day walk from Namche, with 450

people and 90 households. Although the village itself is not a major tourist destination, more than 50 Everest ascenders reside in the village, and most households receive some income from the tourism industry.

In Solukhumbu District, the death toll from the 2015 Nepal Earthquake was relatively low: 22 people died, 18 of whom were climbing Mt. Everest, including seven foreigners (Government of Nepal, n.d.). However, the earthquake caused significant damage to the region’s buildings, mostly built of stone, and resulted in landslides that cut off trails, electricity and other infrastructure. Furthermore, the tourism industry, which is almost the only source of cash income for the region, suffered severe damage and temporarily disappeared.

My methodology is cultural anthropological fieldwork based on participant observation and interviews. I had lived in the Khumbu region for a total of one year and nine months up to the occurrence of the earthquake. My survey was primarily conducted in Nepali, with the supplementary use of Sherpa and English.

4. Two Tremors of the Earthquake

In this section, the situation at the time of the earthquake is described in diary style, based on my field notes, which were partly cited in my immediate report of the earthquake (Furukawa, 2016).

4.1 First Tremor

25 April 2015. Early in the morning, I arrived at the Lukla airstrip and started heading toward Village P with my Sherpa friend. As we walked along the trail, we reached the outskirts of Phakding village, which has a cluster of tea shops. At 11:56 a.m., a familiar face spotted me and was coming out of a shop to shake hands with me when a huge tremor hit us, making me unsteady on my feet. People were jumping out of buildings one after another, shouting, “It’s an earthquake (*bhuincalo aayo*)! A house in front of me collapsed from the second floor with the sound of wall stones rattling (Fig. 2). This slow horizontal tremor seemed to last for about 30 seconds.

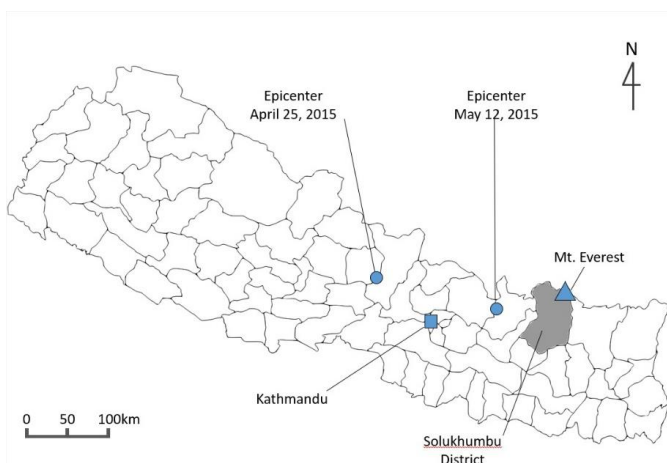


Fig. 1 Map of Nepal and the Epicenters.



Fig. 2 Broken House.

When the tremor stopped, someone pointed across the river, and we saw a white-gray line of sand crumbling on a shrubby green slope. A moment later, a thunderous roar filled the air. People started shouting warnings like, “It’s coming again!” and “Stay away from the houses!”

We saw several groups of trekkers running down the trail from the direction of Namche. It was the spring trekking season, and there were many tourists in the area. At this point, cell phone service was almost completely disrupted, with only an announcement that the service was to be used for emergency calls only. We passed settlements along the trail where residents had come out of their houses and were anxiously standing by the roadside and talking to each other. We decided to head toward Namche and exchanged what information we knew with the people we met along the way. There was much divergence, however, from one group to another. Some said that Kathmandu had not suffered much damage, while others insisted that the city was almost in ruins. The information was confusing. Then it started to rain.

Cracks ran along the mountain trail, and several landslides had obliterated it (Fig. 3). This forced us to climb up the mountainside to detour around them. As time passed, however, new trails came to be stamped out by people and animals on the collapsed slopes, and improvised footholds were created using wood scraps and flat stones.

We reached my friend’s house in the settlement of Chumoa around 2 pm. When we entered the room, we saw that about 20 rocks, each the size of a human head, had fallen through the plywood ceiling (Fig. 4). We decided to spend the night at this house. We removed the damaged ceiling boards that were hanging overhead and stacked them up in the corner of the room. Then we threw the rocks outside and created a sleeping place in the middle of the room, away from the walls.

At 3:06 p.m., my friend’s family and I were drinking tea inside when the house creaked again with another large aftershock, so we quickly ran outside. Next door, several Western groups were taking shelter in a small lodge. I saw a barefooted woman crying and a man, who seemed to have rushed out of the lodge, comforting her. Nepalese trekking guides told us that they could not

contact their office, so they were planning to return to Lukla and then head back to Kathmandu. After that, every time an aftershock struck, people rushed out of the buildings one after another. One of the guides murmured in Nepali, “We won’t be able to sleep tonight,” and we all laughed. Around 11:30 p.m., we felt a huge tremor. Someone shouted, “Here it comes!” We all ran outside again.

26 April 2015. Early in the morning, I saw many groups of trekkers coming down the trail from Namche. They told us that people in Namche had heard and believed rumors that another big earthquake would hit, supposedly at noon, and all the residents had closed their lodges and stores and fled. At this point, however, some trekkers chose to continue trekking. I could see that several groups were going in the same direction as we.

We arrived in Namche at around 1:00 p.m. and were taking a break at a teahouse located at the entrance to the village. As we were resting, I felt a relatively large tremor, which caused the building to creak and scream. When we stepped outside, we noticed cracks running through the wall of the teahouse we had just been in. Looking across the valley, I saw a large landslide occurring, with a cloud of dust rising from it. In the center of Namche, all the lodges were locked, and foreign trekkers, especially those without a guide, were going back and forth looking for a room to stay in. The elementary school was full of tents, and people were staying in the middle of vacant spaces to avoid the town’s densely clustered buildings (Fig. 5).



Fig. 4 Inside of a Broken Room.



Fig. 3 Landslide.



Fig. 5 People Staying Outside.

Fortunately, I was able to find a room at a small lodge owned by an acquaintance. In Namche, electricity was available, but telephone service was still intermittent.

Just before 5:00 p.m., I was in my room when the lodge owner's wife called me from outside. She said it was time for another aftershock. I went out unwillingly to see what would happen. As I expected, nothing happened, and we all went back inside laughing.

At night, the lodge owner and his family left the lodge to sleep in tents at the elementary school. He told me, "I would like to find a tent for you, but there are no spare ones, so you should run out if an earthquake strikes." In the middle of the night, whenever there was an aftershock, I could hear voices of cheer outside.

27 April 2015. We left Namche for Village P. On the way, people we passed on the way warned us that another large earthquake would hit at 1:00 pm that day, so we had to reach the village before then, otherwise it would be dangerous. When I asked them who had said so, they gave vague answers such as "Someone heard it on TV."

We arrived in Village P a little after 1:00 pm. As we entered the village, we saw women sitting on blue sheets in the middle of a potato field, chatting over tea. They explained to us that it was time for an earthquake. They also told us that their houses had been destroyed but fortunately, no deaths or injuries had occurred in the village. Many of the village men who had been working on Mt. Everest with foreign climbing parties were safe, but some were stranded in high camps, waiting to be rescued by helicopter. Although the extent of the damage varied, the walls of all the houses were broken as far as I could see. The villagers were using logs to prop up slanting walls of houses, and tents had been set up here and there in the fields. The villagers were starting to repair the houses that had suffered less damage.

At the time of the initial earthquake, the outlook in Solukhumbu seemed optimistic. Although buildings had been damaged, there was still some tourist traffic. Residents of less-damaged houses returned inside after the four-day aftershock warning period, allegedly reported on TV news, ended. When I visited Namche again on May 4, many lodges and grocery stores were already back in business. A lodge manager said he planned to decrease the number of his staff, but the lodge would keep operating until the next trekking season. Although the number of tourists was significantly lower than usual, I observed some trekkers newly coming up the trails. At this moment, I thought the area was gradually recovering to its pre-earthquake condition.

4.2 Second Tremor

12 May 2015. At 12:55 p.m., my host family in Village P and I had just finished lunch and were having tea in front of their lodge. Suddenly, the ground shook heavily again, and the lodge building made a creaking sound, with plaster peeling off from the walls. As I looked

over at the community center, which stood about fifty meters away and had been leaning since the previous earthquake, it was collapsing in front of us (Fig. 6).

The villagers all came outside, shouting to check on the safety of their relatives. Walking through the village, I saw that stone walls had collapsed in many places, blocking the paths, and the damage to houses was obviously greater than that of the initial earthquake. People were gathered here and there by the side of the trail. As I walked by, they moaned remarks like, "Now this village is completely destroyed," and asked me questions such as, "Did Japan ever have an earthquake like this?" and "Why do earthquakes happen, you Japanese must know." An old man stood still, chanting a mantra while turning a *mani*-wheel.

Nevertheless, it being the second time, they had already learned how to manage the situation. After half an hour or so, tents were set up again and those without tents were building simple living quarters using wood, blue sheets and stones in the fields. This time, the village's hydroelectric pump broke down, causing a power outage. Throughout the night, we were jolted awake by several small aftershocks.

13 May 2015. The sound of hammering was echoing in the village from early in the morning. My host mother and her son told me not to enter the house between 1:30 and 2:00 p.m. when an earthquake was predicted to occur. Then they went to help clean up another damaged house. Meanwhile, my host father spread mats in the potato field and started drinking with three other men from the village.

19 May 2015. At 2:15 p.m., a few young villagers were in front of the community center and called out loudly to the whole village from there. The villagers gathered and were told that tarpaulins and instant noodles had arrived that day as aid supplies from the Himalayan Trust. The villagers who had gathered paid Rs.60 (Rs.100 being approximately one dollar) per household in transport fees, and only those who needed tarpaulins took them. The instant noodles were distributed to elderly persons living alone. I noticed that the villagers who had gathered included many young people I had not met



Fig. 6 Collapsed Community Center.

before. They had temporarily returned home to avoid the danger in Kathmandu, taking vacation from their schools due to the earthquake.

23 May 2015. At 9:45 a.m., a few young men set up desks again in front of the community center and called loudly again for people to gather. This time, two members of an American NGO that holds climbing school in this village during the winter season, brought a relief fund. Each household received Rs.5,000 and put their thumbprint on the list. In return, the villagers put a *katha* (white cloth of gratitude) on the Americans' shoulders, which grew bigger each time like a snowball (Fig. 7). After the distribution was complete, the village youths called out the names of the elder people from the list, and one by one they received clothing from Patagonia, an outdoor equipment manufacturer. After a total of 44 people had received clothing, the young man announced that tens of thousands of rupees had also been donated to temples and community centers for reconstruction, and the villagers applauded. Later that day, a Sherpa couple who had immigrated to the U.S. also came to the village and gave Rs.5,000 each to needy households.

25 May 2015. On this day, I stayed in Namche again. Although a few stores had opened, most of the lodges remained closed, and I saw only one tourist. My friend told me that most of the lodge owners had gone to their own villages after the second earthquake. I was staying in the same small lodge as before, lying on a wooden bed. At around 9:30 p.m., I heard a lot of noise outside the window and saw people with flashlights passing by one after another. As I lay there wondering what was going on, one of the daughters of the lodge owners came calling to me and said, "We have to evacuate because it is coming (*aauncha*)!" I asked her what was coming, but she said she had no idea. I insisted that I would stay, but the lodge owner and his wife also appeared and ordered me to put on my shoes. I reluctantly did so.

Our group, including the couple who owned the lodge, their two daughters and I, climbed the slope behind the village. According to the owner, we had to escape to a higher place because a glacial dam was about to burst. We



Fig. 7 Relief Money Distribution.

walked quickly along the trail heading for the owner's natal village. When I turned back, I saw a line of flashlights of myriad people lighting their way. After two hours of walking, we finally reached his village and slept in the field. After returning to Namche the next day, I confirmed that a rumor had broadly circulated in the village the previous night and caused panic.

Subsequently, I experienced no large tremors or other incidents of significance. Nonetheless, on 27 June 2015, the final day of Dumji, the most prominent festival in Village P, many participants rushed to the exit of the temple after someone shouted, "Earthquake!" The impact of the earthquake permeated daily life. In Solukhumbu, the damage inflicted on houses by the second earthquake surpassed that of the first, and numerous villagers were still residing outdoors when I left the area on 4 July 2015.

5. The Reconstruction Process and International Connections

As seen in the previous section, the village received significant amounts of relief supplies immediately after the earthquake on 12 May. I was able to confirm the following funds and materials received in 2015 (Table 1).

Support from abroad continued in the years that followed. For example, during my revisit to the village in September 2016, a Spanish trekking group brought clothing for children and donations for households in need.

In Village P, a group of youth voluntarily organized an "Earthquake Relief Committee," which prioritized the distribution of aid supplies to households in need, such as the elderly, single women or people without connections to the tourism industry. They also helped clear and repair houses lacking able-bodied inhabitants and wrote documents on behalf of those who were illiterate.

The demand for house reconstruction created a significant income opportunity for workers who came from lower regions. In this village, the reconstruction of houses began well before the government decided to fund earthquake-resistant house reconstruction. In the Khumbu region, the daily wage for a laborer is Rs.1000, or Rs.2000 for an engineer, which are higher than the rates in other regions (Minami, 2017). When I left the village at the end of June 2015, I saw several teams of carpenters from the lowlands heading toward the Khumbu villages. The higher wage was profitable for the carpenters, who themselves were also victims of the disaster.

Also, there were more porters than usual in the same season (Furukawa, 2017). Typically, the Spring trekking season finishes at the end of April, after which there will be less cargo and porters. However, after the earthquake, there was high demand for building materials, which led to an increase in work for porters. Most of the porters came from lower regions and they explained to me that soon after the earthquake hit the first time, they returned

Table 1 Relief supplies received by Village P in 2015.

-For the entire village	
-Himalayan Trust (May 19): 100 tarpaulins and 5 boxes of instant noodles.	
-Climbing School K (May 23): Rs.5,000 for each house and 44 items of Patagonia clothing.	
-Climbing Agency I (June 26): Rs.28,000 for each household.	
-Government (July and November): Rs.25,000 or Rs.3,000 in total for each house, depending on the level of damage.	
-Monastery K (July 2015): 100 tarpaulins.	
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-For some households	
-A Sherpa who had emigrated to the U.S. (May 23): Rs.5,000 each for 10 elderly people.	
-Climbing Agency A (August 3): Rs.155,000 each for its employees (9 households).	
-Climbing Agency I: House reconstruction budget for its employees.	
-NGO S: Reconstruction of houses for several needy households.	
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-For public facilities	
-Himalayan Trust: Rs.840,000 for the school and Rs.200,000 for first aid at the village temple.	
-French philanthropist: Rs.800,000 for the water supply.	
-Climbing Agency N: Rs.1,500,000 for reconstruction of the village temple.	
-Climbing School K: Rs.300,000 for reconstruction of the community center, \$1,800 for the stupa, etc.	

to their villages and immediately came back to work to earn money repairing their houses. The shopkeepers who were hiring porters found a business opportunity, raising the portage fee per Kg to encourage them to keep working while passing the cost along to the price of building materials. Speaking somewhat metaphorically, aid from abroad to the mountain villages flowed down to the foothills through labor.

The government, on the other hand, was slow to provide support. The Nepalese government distributed Rs.25,000 or Rs.3,000 to every household, depending on level of damage, as “temporary relief” in 2015 (Kathmandu Post, 2016). In October 2015, the government decided to provide Rs.200,000 (later increased to Rs.300,000) to households that built earthquake-resistant houses. The funds were to be distributed in three stages: Rs.50,000 upon application, Rs.150,000 upon the start of construction, and Rs.100,000 after completion (The Asia Foundation, 2016). In Village P, thanks to the efforts of the committee, all households were promised to receive Rs.300,000. In September 2018, though, the completion rate for distributing the first Rs.50,000 had not even exceeded 50%; in March 2020, distribution of the last installment of 100,000 still had a completion rate of only about 50%.

Moreover, due to the high cost of transportation in mountainous areas, the Rs.300,000 provided by the government could only partially cover the costs of rebuilding residences. In some cases, the cost of reconstruction of a destroyed house exceeded Rs.2,000,000, while in other cases, a half-destroyed house could be made “earthquake-resistant” with less than Rs.100,000. The policy of providing funds uniformly for earthquake-resistant houses regardless of level of damage and income has sometimes been criticized for its inequality. For example, I heard someone saying, “The poor receive money from foreign donors, the rich receive money from their foreign clients (of tourism), and the middle receive the least amount of money.” In fact, the

larger lodges and houses that had been built strongly tended to suffer less damage and received more support from clients, while some households with less participation in the tourism industry were forced to sell their livestock to finance the rebuilding of their homes.

6. Discussion

Village P was probably one of the most fortunate communities affected by the disaster. When I visited the village again in September 2016, people observed that most of the houses had been reconstructed and repaired well, even without the delayed government aid. One volunteer from Germany expressed her impression, “I was amazed at how quickly the houses were reconstructed. The village seems to be better than before.” When I asked a village woman if the earthquake had changed anything, she replied bluntly, “Nothing has changed, the earthquake has gone.” Although the absence of fatalities despite the destruction of the houses might be one factor in the quick recovery, I would like to consider two more perspectives: efficient distribution of relief supplies and the resilience of mountain tourism destinations.

The village was also fortunate in that it did not experience the social divisions that are commonly seen in Nepal. Arora (2022), for example, pointed out of Nepali women’s intersectional vulnerabilities that originated from a combination of the caste system and patriarchy. Hülssiep *et al.* (2021) also noted that the patriarchy had a negative impact on reconstruction and that households whose head was working abroad faced difficulties in the process. While these observations are true, all households in Village P, except for those of an elementary school teacher and two grocery stores, were Sherpa households, thus precluding caste exclusion and increased social inequality. Also, ethnographic reports have suggested that Sherpa society is relatively egalitarian in terms of gender and household hierarchy (Fürer-Haimendorf, 1964). Indeed, in the many village meetings held after the

earthquake, I often heard women express their strong opinions about the reconstruction process. In addition, the youth committee helped those households where the head of the household was absent or unable to read or write. However, it happened in some cases in Village P that those who had enough capital were able to receive additional support (Hülssiep, 2021).

In terms of the resilience of mountain tourism destinations, this case study has demonstrated that the infrastructure in the mountains was vulnerable, yet at the same time exhibited strong resilience, such as trails being quickly rehabilitated after landslides. For example, we started walking right after the earthquake, and when we passed a settlement called Toktok about an hour later, we found that stones had already been placed as footholds at the site of a landslide, allowing people to pass through. Moreover, at least before the big aftershock of the earthquake, there were tourists still continuing their trekking. As Ketter notes, “The NTB was aiming at a new audience segment, one that is much more crisis resilient, and can better cope with the current situation in the country” (Ketter, 2016). This underscores the resilience of mountain tourism itself too.

Furthermore, certain features of mountain tourism worked positively at the time of the disaster. For example, work opportunities in the mountains kept young people from leaving rural villages, and they worked effectively as a force for reconstruction. The seasonality of tourism favored continuation of existing potato cultivation and yak herding, preventing an immediate livelihood crisis. In addition, the availability of tents and other climbing equipment enabled people to evacuate rapidly.

Panday et al. pointed out that “These (remote) communities often lack adequate road networks and have limited access to external development services, which are crucial in building resilience after a major disaster” (Panday *et al.*, 2021). This village certainly lacked roads and support from the government, but the remoteness of the mountains enabled them to connect with tourism networks around the world directly. In addition, unpaved mountain trails are not necessarily a problem here. As we saw in this case, trails that had been damaged by landslides could reopen soon because the people knew how to repair the trails. If, for example, the trails had had to be cemented together, the repair work would have been left to specific technicians, and the attractiveness of the area to “adventure-oriented” tourists would have been reduced. Therefore, disaster preparedness strategies should consider the unique characteristics of mountains and mountain tourism.

7. Conclusions

This paper has reported the impact of the 2015 Nepal Earthquake on an area serving as a destination for mountain tourism. It has also traced how a village

recovered with the help of a tourism network rather than government support, and how the characteristics of mountain villages have encouraged relatively egalitarian distribution. This paper has aimed to describe my experience of an earthquake in a village from a cultural anthropological perspective, and is not intended to provide any specific proposals. Nevertheless, the data presented above may allow me to offer some general observations:

- (1) The existence of the “Earthquake Relief Committee” organized by the youth in Village P effectively facilitated the process of relief-supply distribution and house reconstruction. Although the situation would be more complex in a multi-caste community, it would be effective in times of emergency to prepare a disaster response committee that includes people who are often marginalized in normal times (Arora, 2022).
- (2) What the Khumbu case also indicates is that a lack of roadways does not necessarily lead to vulnerability. After the earthquake, cement paving of mountain trails rapidly progressed in this area, although this will not only reduce the resilience of the trails but also have a negative impact on the area’s image as a tourism destination with an unspoiled natural environment. Disaster prevention measures, and development projects in general, in mountainous areas should be promoted using an approach that takes advantage of the intrinsic resilience of mountainous environments.
- (3) As this case study shows, there may be many rumors circulating during a disaster. Also, being from the outside, I was frequently asked about the cause of and prospects for the earthquake. Therefore, providing “correct” knowledge of what cannot be fully interpreted in the local context would be an important contribution from the outside. On the other hand, this case study also confirmed that as reconstruction progresses, the lessons learned from the earthquake fade away. It will be necessary to create a system to prevent people from forgetting what they learn from earthquakes.

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