NEPAL EARTHQUAKE 2015

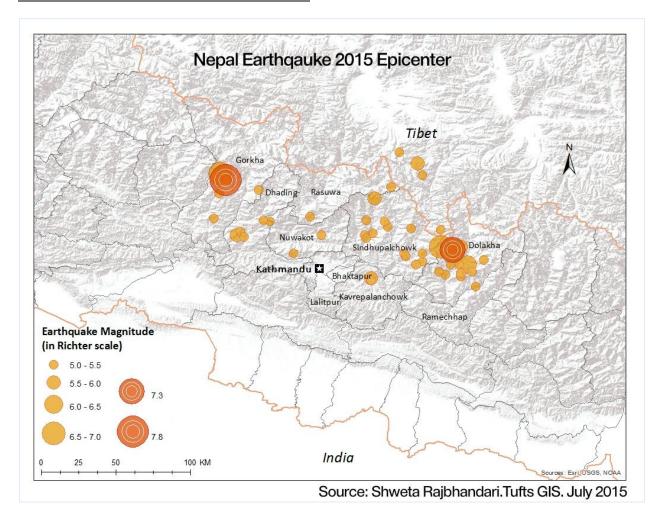
Field Research in the Earthquake's Epicenter



September 2015

This report was produced for review by International Innovation for Innovation Network (IDIN) at MIT D-lab. It was prepared independently by Shweta Rajbhandari, Master's of Law and Diplomacy Candidate (2016) at The Fletcher School of Law and Diplomacy.

Background



The Himalayan country, Nepal, is the 11th most earthquake prone countries in the world¹. Owing to its predominantly steep mountain terrains in the north, unstable geologies, haphazard urbanization, political instability. weak governance and socioeconomic vulnerability, the land locked country of Nepal has had a history of being highly vulnerable to a range of natural hazards. especially for earthquakes, droughts, floods, and landslides.

On 25 April, 2015, at 11:56 local time, an earthquake of 7.8 magnitude shook the country to its core causing insurmountable devastation, panic and heavy loss of life.

This catastrophic earthquake was followed by thousands of aftershocks and another powerful 7.3 magnitude quake less than four weeks later on 12 May. More than 8,600 Nepalese lives have been lost to the disaster and over 95,000 people displaced.

Key infrastructures in the country such as schools, health facilities, accessible roads, temples and heritage sites have been severely damaged or destroyed across 14 worst affected districts of Nepal². The most

² These 14 priority affected districts in Nepal are: Kathmandu, Kavrepalanchowk, Nuwakot, Sindhupalchowk, Dhading, Gorkha, Dolakha, Ramechhap, Makwanpur, Sindhuli, Bhaktapur, Lalitpur, Okhaldhunga and Rasuwa.

¹ UNDP (2009)

devastating series of earthquakes to strike Nepal in the past 83 years, the catastrophe intensified the already pre-existing vulnerabilities of Nepalese of food insecurity, public health risk, and grave risks of sexual violence for women and girls.

Emergency relief and humanitarian assistance to the affected population was provided with the active support of and contribution of over 60 nations as well as the United Nations and other international agencies. In order to meet the overall objectives of recovery and rebuilding efforts in the following months, a broad sector multi-sector response was proposed by the Government of Nepal (GoN) and the humanitarian community in the form of:

- delivering urgent supplies including tarps, tools, blankets, food, water and medicines to the worst affected areas and the most vulnerable victims
- provision of temporary and intermediate solutions including distribution of shelter and emergency non-food relief items, access to food for the most vulnerable populations
- through food and cash assistance mechanisms, revitalize primary health care services, and identification of the need and support to temporarily displaced population by the earthquakes.
- provision of unrestricted and unconditional cash transfers as an effective and efficient modality of relief delivery

through Cash Coordination Working Group.

- mainstreaming protection into the response and ensuring accountability to the affected people.
- promoting gender equality, and protecting and enabling youth participation in the emergency response, and
- utilizing efficient telecommunication means to underpin the earthquake

Key Figures

More than 500,000 households without houses

1.4 million people require immediate food assistance

5.6 million people in need of medical care and access to health services

1.1 million
people in need of water services
1.0 million
people in need of sanitation services
3.0 million
people in need of hygiene services

2.8 million people in need of protection

1.5 million school-aged children require education in emergency support

404,000

children suffering from malnutrition including 10,000 SAM children. 70,000 MAM and 200,000 pregnant and breastfeeding women.

Purpose of the Research

The 2015 Nepal earthquakes in Nepal and their devastating effects not only demanded tremendous leadership in part of the state, but it also sparked extensive international and major involvement fundraising initiatives both within and outside the country. While urgent assistance in the form of rescue efforts, medical assistance and most basic survival needs poured into devastated areas immediately after the disaster struck. the government-led recovery phase, in particular, has been very slow and challenging. In the face of this reality, majority of the disaster affected population is now left to recover on their own, in which attempts of building back is prone to a return to even more vulnerable and less resilient states due lack of resources, information, heavy economic loss, and emotional and psychological trauma. Regrettably, in the midst of utter devastation and chaos, exists another invisible disaster: the mental and emotional impact of the earthquake. Through my field research this summer, I was interested to study how devastated Nepali communities have been coping with the bleak and discouraging circumstances surrounding them since the earthquakes to bring a sense of normalcy back in their lives, if at all.

Approach and Methodology

I traveled 73-km west of Kathmandu city to the district of *Gorkha*, which was the epicenter of the April earthquake. This remote and mountainous district was one of the hardest hit regions in the country. I traveled 80-km west of Kathmandu city to the district of *Gorkha*, which was the epicenter of the April earthquake. This study was undertaken over the period of 22 July - 11 August 2015. The research methodology was required being mindful

of the fact that I was interacting and interviewing victims who have lost everything to the calamity, including their loved ones. Since the research was being conducted in areas that had been heavily devastated, the situation demanded a certain degree of sensitivity on my part, and not to forget, flexibility in gathering necessary information. Furthermore, given the dire needs of the affected population, I decided to conduct my research alongside an ongoing relief work that I was a part of. However, this also meant that I was not able to follow a scientifically rigorous research methodology or adhere to a specified work plan, deadlines or timelines prepared in advance. As a result, selecting participants to interview, the nature/demographic of respondents was often not highly controlled for and depended on the local situation.

Much of the field research was conducted in Bungkot Village Development Committee (VDC) in Gorkha. With a population of 6,260,3 Bungkot lies 6-km away from the district headquarters of Gorkha. The monsoon season and recent landslides had blocked the narrow, pre-existing makeshift roads connecting the village to the Prithvi *Narayan* highway. Thus, it required nearly 2 hours walk to get to the village from Gorkha headquarters. My research in the village was facilitated by Tulsi Meher UNESCO Club, a non-profit organization based in Gorkha municipality that has been working in the district for the past 26 years and had been very active in coordinating relief efforts in the region after the earthquakes.

³ Nepal Central Bureau of Statistics, Census 2011

My interaction with the earthquake-affected people of *Bungkot* VDC involved informal conversations, which intended on capturing some key elements about the general effect the earthquake, the relief efforts they had received thus far, their coping strategies and any other mechanisms that had been adopted by families with or without the help of the state or any other institutions. Strict requirements were not made to interview people of specific gender, caste, ethnicity or degree of vulnerability. In total, 41 individuals (age range between 17 - 56) were interviewed, out of which 25 of them were females.

Observations

The loss of human life, public and private property damage has been immense in *Gorkha*. Despite announcements of ambitious Disaster Risk Reduction (DRR) programs by the GoN and international non-governmental organizations in Nepal following the adoption of the Hyogo Framework for Action (HFA)[1] for disaster resiliency, there was little to no evidence of any form of community-based disaster education implemented in the vulnerable *Gorkha* village prior to the devastation.

Typical to many disasters, rescue and relief workers from within and outside the country and countless community members came to help vulnerable survivors in Gorkha in the days immediately after the first earthquake. Reportedly, some of the earliest and most effective relief efforts in the village came through educated, social media-savvy urban youth and other well-off members of the civil society who sprung into action almost immediately to share information, raise funds, and use their resources and relative security to immediately begin delivering critical aid. While the village vouths did not have the same technical means and resources to do so, their volunteerism came in a different form.

Bungkot youths galvanized into action in digging out neighbors from the rubbles, carrying injured survivors to medical centers, and providing whatever assistance possible before arrival of rescue teams. During the time frame of the fieldwork as well, there were several self-organized Nepali groups on the ground who were rising up to the occasion and embodying a grass-roots movement to provide relief materials to the earthquake survivors, working alongside with a network of NGOS and local affiliates of INGOS based in Nepal.

From the local government standpoint, it had been clearly hamstrung, under staffed, and shaken themselves. Many local authorizes had lost family members and their houses had been destroyed. In the initial days, they had to work out of tents and temporary shelters in providing public services to its people. In July, the government identified families in the 14 priority districs and released NPR. 15,000 (USD 150) in cash to buy corrugated zinc sheets and other materials to build temporary shelters. Having lost his wife and his ancestral home to the earthquake, 42year old Buddhi Bahadur Chhetri in the village said,

> "Yes, I recently received 15,000 rupees from the state. We had to wait a month to get the cash. I have three daughters and an infant son who lost their mother in the earthquake. I have lost everything – my wife, our house, all of our stored grains, everything. I spent most of the money already to build a temporary shelter for me and my children. I hear we are supposed to receive more cash relief. But I don't have much hope about it."

Resiliency

In the face of utter devastation and critical depravation, one factor that has helped villagers in *Bungkot* to cope with this catastrophe has been its social capital. I observed was high level of community support and togetherness. Immediately following the first earthquakes, the villagers of *Bungkot* VDC had formed an informal group of able-bodied individuals who assisted community members and aid workers to rescue trapped victims under the rubbles and evacuate personal items from damaged or destroyed houses when possible.

"There was complete devastation" everywhere around us. I, myself, did not lose my family members, but my home and everything we owned, we lost. This earthquake came out of nowhere and in less than a minute destroyed everything...what can we do? Life has to go on. These animals need to be fed. The next day of the earthquake, I went to cut grass and get fodder for my cattle as if nothing had changed. But everything had."

Their resilience shone in different forms. Less than 24 hours after the earth quake struck, *Bungkot* villagers had started helping those who had survived, cutting grasses for animals, and salvaging woods, bricks and metal sheets from their devastated old homes to build temporary shelters. Literate locals and students in the village started keeping records of the public and private properties that had been damaged, listing names of people who were killed or injured so as to effectively communicate the desperation and needs of the village when any help might arrive. Those individuals who could walk did so for hours injured villagers to carry to *Gorkha* municipality where medical camps were being set up. There were numerous examples of individuals -

ranging from young children to women and men who not only helped each other, but made all efforts to inform and guide rescue workers to other villages where help was necessary. I found all these to be remarkable instances of strength, especially in a people that had just lost everything to a disaster.

Remittance

Of the 41 respondents interviewed, 46% of them (i.e. 19 of them) had one family member or more who had emigrated for work. I quickly found out that majority of them were enlisted in the Indian or British Army as *Gurkha* soldiers, few of them went to neighboring India or the Gulf states to work as unskilled laborers, while the rest moved within the country – to bigger cities like Kathmandu or *Pokhara*.

Drawing from the experience of Haiti, it is often argued that in the face of natural disasters, remittances sent home increase more rapidly than do foreign aid. In addition, unlike international aid, it is believed that they provide direct benefit to the immediate needs of the family members receiving it. Post earthquake, the Nepali media reported a similar increase in the inflow of remittances from abroad by 20 percent compared to the trend before the earthquake.[2] In Bungkot, too, many families received remittances in the aftermath of the earthquakes. Of the respondents who had families outside the country, 11 of them received remittances. Reportedly, several money transfer agencies such as Western Union, Money Gram, UAE Exchange, etc. waived their service fees on remittances to Nepal for the month of May 2015 to facilitate urgent money transfers to their families in need. For the families in *Bungkot* who received money from relatives abroad, the additional funds were largely used to purchase food and daily necessities. The husband of 36-year old Maya Devi K.C., whose house got completely flattened by the earthquake, has

been working in Doha, Qatar for the past seven years. Maya used to be a subsistence farmer and had been able to educate her two children with the money her husband would send nearly every two months. After the earthquake, she reported that he has been sending money much more frequently, ranging fro NPR 7,000-9,000 (USD 700-900) each time after the earthquake

"It must have been difficult for him [my husband] to try to send us money frequently. But if it wasn't for the money he sent us, I don't know how we would have survived after we lost everything in the earthquake."

Concluding Remarks

The 2015 earthquake of Nepal revealed the extent of vulnerability of its people, which was especially destructive in the most impoverished and poverty-stricken communities. Despite alarming disaster statistics of the past and an undeniable urgency of disaster risk reduction works, the GoN and international agencies fell very short in their attempts to build a resilient, society. Inadequate disaster safe infrastructures, weak building codes, lack of disaster preparedness, and lack of resources all contributed to the severe magnitude of devastation of the recent earthquakes.

Despite this grim reality, Nepal seems to have an important and existing capacity that can be effectively leveraged for a resilient recovery: its community. The strong relationships between community members and joint family structures make for strong social capital that can be influential in the pace of long-term recovery efforts. At this community level, Nepal has previously witnessed remarkable successes of forestry, micro and medium level hydropower projects, local land and water management systems, and farmer cooperatives in providing critical services when and where the state has failed to do so. These existing community structures and local capacities

can – and should – be leveraged to their full potential as entry points for resiliencebuilding interventions in the near future.

Similarly, the potential to capitalize the country's high remittances could prove to be a critical move in Nepal's post-earthquake recovery, rehabilitation as well as disaster preparedness process. The importance of remittances in Nepal cannot be overstated. With a bleak economy, young Nepali citizens have been migrating in droves. Over 60% of families in Nepal now receive some form of remittance from family members working abroad. In the fiscal year 2013/14 alone, the total official remittance received during the first nine months was NPR 400 billion (USD 4 billion), which is close to 30% of the country's total GDP.[3] At a national level, remittance income exceeds agricultural income, tourism earnings and international aid.

In the aftermath of the earthquake, it is quite likely that migration for work will increase even more. With limited national and international funding reaching the most in need, remittances will be the primary resources available to most families for recovery. Leveraging this mechanism and empowering families to easily access and effectively use remittances for building resilient shelter and livelihood systems could lead Nepal to the most effective route towards longer-term development.

This is not to imply that simply an in-flow of cash through remittances can boost disaster preparedness for a catastrophe as the 2015 earthquakes. Much of the recoverv mechanisms related to migration and remittances can largely depend on various factors such as destination of the migrant, place of origin, amount and frequency of remittance, cost of migration, etc. Nevertheless, access to economic resources through remittance is certainly а mechanism that can be utilized as a tool (DRR awareness programs and campaigns, for instance) to foster greater readiness in

the face of future disasters. It is noteworthy that broad literature on migration and natural disasters imply that remittances can a greater degree of disaster foster preparedness through improved social and resilience.⁴ Although economic this particular research did not focus on examining the linkages between migration and disaster preparedness, observations from the field point to the conclusion that if leveraged effectively, national remittances, which make up close to 30% of the country's GDP and flow directly into the hands of families, could play a vital role in building back a more resilient Nepal.

A greater, more efficient and effective information dissipation that focus on awareness raising, access to disaster preparedness programs, and proper financial management of remittances by the state as well as international organizations are necessary if Nepal is to enable transformative change through recovery interventions. The objective, for all citizens, government and foreign agencies alike, should not be to simply target immediate recovery. Rather, the goal in mind should be to ensure that Nepali communities are able to thrive and persevere at the threat of future shocks and potential disasters.

⁴ Refer to S. Mohapatra, G. Joseph and D. Ratha *Remittances and Natural Disasters: Ex-post response and contribution to ex-ante preparedness* (Policy Research Working Paper 4927), World Bank, 2009; Practical Action and Nepal Risk Reduction Consortium, *Remittances and Earthquake Risk in Nepal (draft).* Kathmandu, September 2014.