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<http://researchonline.ljmu.ac.uk/id/eprint/10753/>

### Article

**Citation** (please note it is advisable to refer to the publisher's version if you intend to cite from this work)

**Bista, SB, Simkhada, PP, Ross-Houle, K and Khatri, RJ (2018) Nepal's Response to Earthquake 2015: Experience of Emergency Responders and Humanitarian Assistance providers in Inclusive and Accessible Humanitarian Assistance Delivery. National Federation of the Disabled -**

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# **Nepal's Response to Earthquake 2015: Experience of Emergency Responders and Humanitarian Assistance Providers in Inclusive and Accessible Humanitarian Assistance Delivery**

Sapana Basnet Bista<sup>1</sup>, Padam Simkhada, Dr. Kim Ross-Houle, and Rose Khatri

The earthquake that hit Nepal in 2015 received worldwide attention for the devastation it caused to lives and infrastructures. Yet, the impact of it on persons with disabilities and experiences of emergency responders and humanitarian assistance providers have remained under-researched. This study aims to explore first-hand experiences faced by emergency responders and humanitarian assistance providers to evaluate the effectiveness in the implementation of inclusive and accessible emergency response during disasters. In addition, this paper will identify good practices and barriers faced by them in facilitating inclusive and accessible recovery and rehabilitation post-disaster. Lessons learnt from barriers and challenges faced by the service providers, when addressed, will promote improved policies, processes and programmes around inclusive and accessible emergency and humanitarian response, recovery, and rehabilitation. This study is based on semi-structured interviews with 20 key informants and thematic analysis of data. Findings suggest that most stakeholders were engaged in inclusive disaster risk management (DiDRM), capacity building, and resilience developing awareness campaigns. However, there are significant gaps in policies, training, and practices. These gaps include, a dire lack of inclusive and accessible equipment and resources; lack of and failure to implement and utilize knowledge and resources available; lack of data and guidelines on disability inclusive emergency response (DIER); and lack of communication and coordination between emergency responders and DPOs. These challenges hindered the search and rescue (SAR) and relief efforts, which resulted in the slow recovery and rehabilitation of persons with disabilities. This study recommends including persons with disabilities in planning, designing, and building inclusive and accessible emergency preparedness, response, SAR toolkit, and emergency shelters. Nepal now has opportunities to integrate accessible infrastructures, DiDRM and implementation at the community level. One way of achieving DiDRM at community level could be building a bank of desegregated data, skilled volunteers, and accessible equipment to meet the emergency needs of persons with disabilities.

**Keywords:** Nepal Earthquake, Accessibility, Humanitarian Assistance, Persons with Disabilities, Inclusive Emergency Response

## **Background**

A major earthquake on 25<sup>th</sup> of April 2015 (addressed as 'Nepal earthquake' hereafter) resulted in the deaths of 9,000 and injured over 23,000 people (GoN, 2017). The earthquake and an estimated 300 aftershocks destroyed infrastructures and livelihoods of

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approximately 2.8 million people and affected a further estimated 8 million (UNOCHA, 2015). In addition, it stretched the capacity of every humanitarian agency involved. Persons with disabilities were one of the severely affected groups during and post-earthquake (HI, 2016; WHO, 2015; CBM, 2016), however, the number of persons with disabilities affected, their experiences and the experiences of emergency responders and humanitarian assistance providers are barely focused in the academe.

Earthquakes and other natural disasters have detrimental consequences on the health, social, and economic welfare of persons with disabilities (WHO, 2011; CBM, 2013; ESCAP, 2013; WHO, 2013). This vulnerable group is disproportionately disadvantaged in humanitarian crises due to underlying disaster risk drivers such as their inherent and existing conditions, social inequalities, and disparity in accessible humanitarian assistance provided. This not only constrains their responses to the disaster, but also shapes and deepens their vulnerability to further hazards in the post-disaster stage. Therefore, inclusive and accessible emergency response for persons with disabilities and the role of emergency responders and humanitarian assistance providers are crucial to ensure that the suffering of persons with disabilities are minimized at the time of disaster.

Nepal's institutional setup for disaster management dates back to 1982 with the National Calamity Relief Act and since then it has made progress in developing disaster risk reduction (DRR) policies and programmes. Nepal has ratified the Convention on the Rights of Persons with Disabilities 2006 (CRPD) and adopted disaster management frameworks such as Hyogo Framework for Action 2005-2015 and Sendai Framework for Disaster Risk Reduction 2015-2030. These frameworks have played a significant role in advancing the agenda for DiDRM in Nepal. Several DRR programmes facilitated by governmental and non-governmental organisations indicated that Nepal had been actively involved in pre-earthquake DiDRM campaigns. However, despite international frameworks and national policies governing DiDRM and preparedness programmes, Nepal was considered unprepared for the earthquake and was extremely challenged in providing accessible and inclusive emergency response to persons with disabilities (HI, 2016; WHO, 2015; CBM, 2016).

### **Objectives and Rationale of the Study**

This study aims to explore first hand experiences faced by emergency responders and humanitarian assistance providers that, when addressed, will promote improved policies, processes and programmes around inclusive and accessible emergency and humanitarian response, recovery and rehabilitation. In order to achieve the above objective, this study aims to:

- Evaluate the effectiveness of implementation of disability inclusive and accessible emergency response during disaster.
- Identify good practices and barriers faced by emergency responders and humanitarian assistance providers in facilitating inclusive and accessible recovery and rehabilitation post disaster.

For the purpose of this study, Kathmandu valley is selected as the research site as it covers some of the hardest earthquake-hit areas (Kathmandu, Bhaktapur, Lalitpur, Kritipur, and Madhyapur Thimi) (Figure 1) with the second highest death toll and the highest number of injury; 1,751 deaths and 13,102 injuries (Figure 2) (GoN, 2018). Kathmandu valley, a capital city and hub for all development organizations, is expected to be the most prepared district in Nepal. However, it is also the most populated and hardest to evacuate at the time of earthquake due to its densely built-up area and narrow streets. This setting allows the study to explore experiences faced by emergency responders and humanitarian assistance providers in assisting persons with disabilities during and post-earthquake.

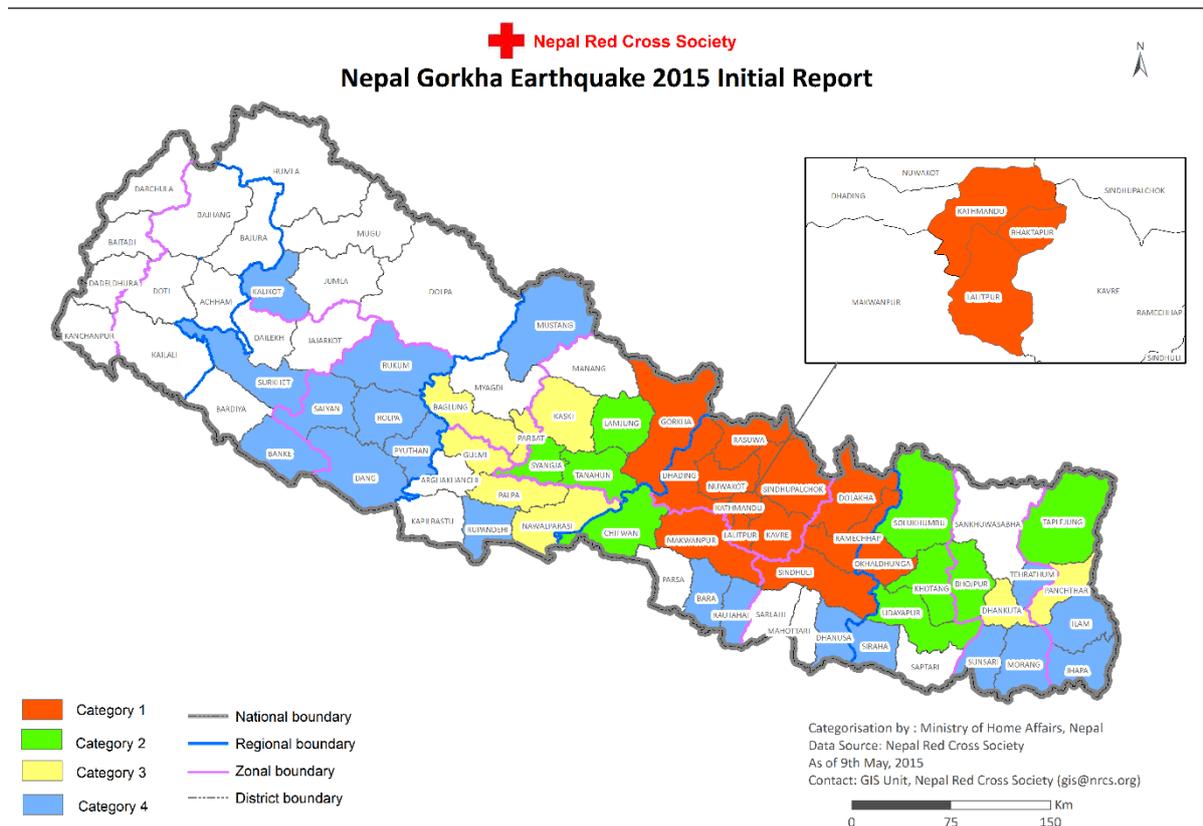
**Figure 1 (Table of death toll and injuries) 15 Hardest Hit Districts by Nepal Earthquake 2015<sup>2</sup>**

District	Total Death	Injury
Sindhupalchok	3570	1569
<b>Kathmandu</b>	<b>1233</b>	<b>7950</b>
Nuwakot	1112	1050
Rasuwa	681	771
Dhading	680	1218
Gorkha	450	952
<b>Bhaktapur</b>	<b>333</b>	<b>2101</b>
Kavre	330	1179
<b>Lalitpur</b>	<b>185</b>	<b>3051</b>
Dolakha	180	661
Ramechhap	42	134

<sup>2</sup> Government of Nepal 2015, Ministry of Home Affairs, Data on Earthquake. Available at: <http://www.drrportal.gov.np/reports>

Makawanpur			33		229
Solukhumbu			22		100
Okhaldhunga			20		61
Sindhuli			15		230

**Figure 1 (Map of Nepal with hardest earthquake-hit districts)**

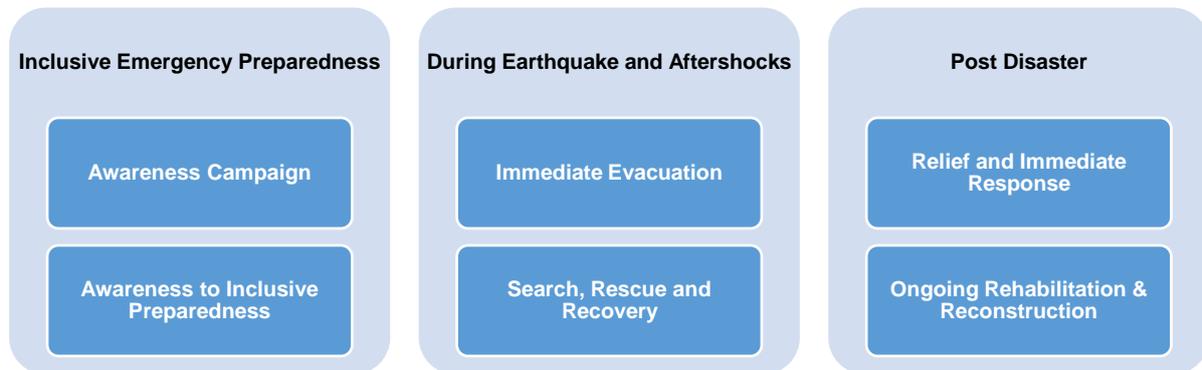


## **Methodology**

This study employs a qualitative methodological approach using semi-structured interviews with 20 key stakeholders representing DPOs, DRR policy makers, Nepal government’s emergency response team and international humanitarian assistance providers. Interviews took place between June 2016 and March 2018. Stakeholders were recruited through purposive sampling facilitated through researcher’s professional links and networks. Qualitative methodology has been effective in obtaining specific information about opinions, behaviours, experiences and social contexts as argued by scholars like Holloway and Wheeler, (2010) and Ulin, et al., (2005). However, it is worth noting that due to research site as Kathmandu valley, the finding reported here may not be generalised to other parts of Nepal.

## **Findings**

Three key themes and six subthemes emerged from the stakeholder interviews.



### **Inclusive Emergency Preparedness**

Theme ‘Inclusive Emergency Preparedness’ emerged from discussions around DiDRM and preparedness programmes. These discussions also raised questions about awareness campaigns, accessible resources available to match preparedness plans and emergency needs of persons with disabilities.

#### **Awareness Campaign**

The majority of stakeholders mentioned awareness initiatives from both government and non-governmental organisations and some believed that these efforts might have mitigated the extent of devastation. A senior staff member at Armed Police Force says: “If awareness about inclusive disaster risk reduction and earthquake safety had not been circulated through national, local and community radios and television, I think, the devastation would have been 20 times bigger.” (R1). However, the day of earthquake being on Saturday, midday may have also saved many lives.

A senior physician at Bir Hospital mirrored that view saying: “Awareness and preparedness programs have definitely helped the government run hospitals to react to the emergency effectively.” (R2) Many government run hospitals were retrofitted for earthquake resistance as part of preparedness programmes few years before the earthquake. All stakeholders interviewed reported to have attended numerous awareness raising workshops, conferences and consultations. Some were critical of these being non-inclusive and non-country specific.

#### **Awareness to Inclusive Preparedness**

Whilst awareness efforts had been apparent, this study identifies gaps between awareness campaigns, training, policies and practice. A majority of emergency responders reported inclusive emergency preparedness in practice as “negligible” and “focus-less”. Founder of a rehabilitation centre for people with long-term disabling health conditions narrated the workshops and seminars as: “only discussion about infection control and managing emergency cares in hospitals. They did not address the issues around inclusive and accessible preparedness and recovery processes.” (R4)

A senior staff member at Armed Police Force added: “for Armed Police Force the financial and resource focus has always been around peace building and response to disasters; inclusive preparedness is discussed more during seminars, trainings and in policies but less in actual implementation.” (R15) The only stakeholders reported to have some elements of DiDRM programmes and some accessible resources were DPOs. Despite awareness, none of the stakeholders reported of having a disability-inclusive emergency action plan for earthquake or any other natural disaster. The lack of planning is reported to have led to making emergency short-term decisions and an inability to provide appropriate and accessible services to persons with disabilities.

### **During Earthquake and Aftershocks**

This theme emerged from discussions around execution and effectiveness of inclusive SAR. Emergency responders reported that numerous aftershocks made SAR challenging and risky and those persons with disabilities ‘were not prioritised’.

### **Immediate Evacuation**

Most emergency responders reported ‘not’ to have assisted in evacuation of persons with disabilities due to the sudden and unpredictable nature of the earthquake. An army captain who worked in SAR mission reported of not prioritising persons with disabilities during SAR: “everybody needed help at that time. We did not have special provision to look for disabled people. We did not have any record of where they lived, so how could we look for them?” (R12) Record every local ward office keeps about its residents is still manual and locked up in cupboards making the data inaccessible and segregated.

Only stakeholders who provided living accommodation for persons with disabilities pre-earthquake were involved in evacuation. Stakeholder who manages independent living centre for persons with disabilities shared his frustration: “We evacuated all our residents.

However, aftershocks made evacuating people extremely hard; there was no safe space to take persons with disabilities from our shelter to.” (R5) Those who evacuated persons with disabilities reported of lack of emergency evacuation mechanism and equipment and lack of accessible emergency shelters.

### **Search, Rescue and Recovery**

Several emergency responders reported of struggle in search, rescue and recovery of persons with disabilities because of inadequacy of data on where they lived and lack of accessible equipment. Many had to wait for the international team to arrive with their equipment before being able conduct proper SAR and recovery. The secretary of one of most densely populated and hardest hit ward shared his experience: “there was this paralyzed man in my ward, their house was completely destroyed. His family members managed to get out but we could not dig him out from the ruins. Chinese team recovered his body on the fifth day.” (R3)

Frustration and stress caused by lack of equipment echoed through all emergency responders as another respondent, a member of Nepal army involved in SAR shared: “We were notified of a trapped disabled 5 year old child under a badly damaged building on the second day of the first earthquake. We could hear a faint cry but could not locate where it was coming from. The cry got weaker. It took us two days to find the body of the child.” (R11)

DPOs reported that they did not reach out for persons with disabilities who were not in their contact list and acknowledged that persons with disabilities who lived alone or relied on family support or those who begged for living were not provided with any emergency accessible relief supplies. Stakeholders also reported deaths of many persons with disabilities however; no official records have been located.

### **Post Disaster**

This theme emerged from stakeholder discussions about their experiences of providing immediate and long-term accessible relief support, rehabilitation and reconstruction aid, and lessons learnt.

### **Relief and Immediate Response**

Many stakeholders reported a severe lack of coordination between the government, INGOs and DPOs initially, which resulted in a wide variation and duplication in distribution of relief materials and services. Eventually, when coordinated cluster's relief distribution started, it only covered persons with disabilities affiliated with DPOs or who made formal requests.

Psychological impacts caused by lack of accessible facilities in temporary shelters noted were obvious. A member of Nepal Red Cross Society who worked in temporary shelters talked about the trauma: "Persons with disabilities who stayed in our camp were so scared by the earthquake and stressed by the lack of accessible facilities that they struggled to sleep at night. Continuous aftershocks made their stress worse; they were in total panic." (R7) Some facilitated counselling within the camps whilst others reported using group activities like singing and quizzes to help manage trauma.

A staff member of an INGO gave examples of the condition of temporary shelter: "Because our tents were on bare grounds, there was no access to water and sanitation. Toilets for wheelchair users were the biggest problems as the makeshift toilets were just a hole in the ground and some plastic sheets wrapped around some bamboo sticks." (R4) All stakeholders reported problems with providing and managing accessible toilets and washing facilities in temporary shelters especially for wheelchair users and women with disabilities.

### **Ongoing Rehabilitation and Reconstruction**

Many DPOs reported to have continued with inclusive and accessible recovery and rehabilitation programmes including financial aid as well as psychological counselling. Despite this experience of earthquake, none of the stakeholders reported to have designed any action plan for future natural disaster/earthquakes. An executive member DPO who in involved in rehabilitation and livelihood generation for economic recovery programme shared: "We are focused on rehabilitations and reconstructions. We do not know how to design inclusive action plan for future disasters." (R7)

Since the earthquake, there has been accelerated advocacy efforts from DPOs calling state to construct accessible infrastructures.

### **Conclusions**

This study identifies that the Nepal government with the aid of UN agencies, bilateral agencies and international organisations have worked on improving DiDRM policies, programmes and practices to strengthen inclusive disaster preparedness. However, a serious gap lies between policies, preparedness and the execution of it at the time of disaster, especially for persons with disabilities. These gaps include a dire lack of inclusive and accessible equipment and resources; lack of and failure to implement and utilize knowledge and resources available; lack of data and guidelines on DIER and SAR to emergency responders; and lack of communication and coordination between emergency responders and DPOs. It was evident that Nepal had progressed notably in relation to policy formation to include the rights, needs, and dignity of persons with disabilities in line with CRPD, Hyogo Framework for Action and Sendai Framework for Disaster Risk Reduction. However, it was equally evident that the participation of persons with disabilities in policy drafting and phases of disaster preparedness and management process was minimal, leading to gaps in policy implementation and inadequate inclusive and accessible emergency service design and delivery. Many DiDRM activities treated persons with disabilities as mere recipients of the services resulting in segregation from mainstream policies and programmes.

The government has recently developed a Post Disaster Recovery Framework (PDRF, 2016) which includes the needs of persons with disabilities. Many DPOs and INGOs have accelerated their efforts in needs assessment, situation analysis and DiDRM to bridge knowledge and resources gaps since the earthquake. It is clear that without channeling local, national, multilateral, and bilateral implementation in shaping Nepal's ability to prevent, mitigate, and prepare to respond to disasters, Nepal will have a major challenge ahead in implementing the Sendai Framework for Disaster Risk Reduction.

### **Policy Recommendations**

- Nationwide disability inclusive and accessible emergency preparedness, response and SAR toolkit that will serve as a resource for emergency responders, humanitarian assistance providers and DPOs to prepare comprehensive SAR, evacuation and recovery plans
- Including persons with disabilities in planning, designing and building disability inclusive and accessible emergency shelters.

- Building a bank of desegregated data, skilled volunteers and accessible equipment to meet the emergency needs of persons with disabilities at every level of state and community.

## References

- CBM. (2013). Disability Inclusive, Disaster Risk Management. Accessed on 20-10-2017. Available at: <http://www.cbm.org/Publication-on-Inclusive-Disaster-Risk-Management-389451.php>
- CBM. (2016). Nepal 2015 Earthquake – Impact Assessment. Accessed on 30-09-2017. Available at: <https://www.cbm.org/Nepal-2015-earthquake-Impact-assessment-511918.php>
- ESCAP. (2013). Building Resilience to Natural Disasters and Major Economic Crises. United Nations
- GoN (2018). Ministry of Home Affairs's Data on Earthquake. Accessed on 15/04/2017 Available at: <http://www.drrportal.gov.np/reports>
- GoN. (2017). Data on Loss of Lives and Properties from Disaster 2068-2072. National Emergency Operation Centre, Ministry of Home Affairs. Accessed on 15-04-2017. Available at: [http://www.neoc.gov.np/uploads/news/file/Five%20year%20data\\_20160623112212.pdf](http://www.neoc.gov.np/uploads/news/file/Five%20year%20data_20160623112212.pdf)
- HANDICAP INTERNATIONAL. (2016). Nepal Quake Anniversary: Your Impact by the Numbers. Accessed on 25-04-2017. Available at: [http://www.handicapinternational.us/nepal\\_quake\\_anniversary\\_your\\_impact\\_by\\_the\\_numbers?utm\\_campaign=nepal1year\\_s&utm\\_medium=email&utm\\_source=handicapinternational](http://www.handicapinternational.us/nepal_quake_anniversary_your_impact_by_the_numbers?utm_campaign=nepal1year_s&utm_medium=email&utm_source=handicapinternational)
- Holloway I. & Wheeler S. (2010). *Qualitative Research in Nursing and Healthcare*. Third edition. Wiley-Blackwell. Oxford
- PDRF. (2016). Nepal Earthquake 2015, Post Disaster Recovery Framework. Government of Nepal National Reconstruction Authority, Kathmandu.
- Ulin, P. R., Robinson, E. T., & Tolley, E. E. (2005). *Qualitative methods in public health: a field guide for applied research*. John Wiley & Sons
- UNOCHA. (2015). Earthquake 2015 Situation Report No. 20 (as of 3 June 2015). Accessed on 20-08-2016. Available at: <http://reliefweb.int/report/nepal/nepal-earthquake-2015-situation-report-no20-3-june-2015>
- WHO. (2011). World Report in Disability. Accessed on 20-09-2016. Available at: [http://whqlibdoc.who.int/publications/2011/9789240685215\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240685215_eng.pdf)
- WHO. (2013). Guidance Note on Disability and Emergency Risk Management for Health. Accessed on 01-10-2015. Available at: [www.who.int/iris/bitstream/10665/90369/1/9789241506243\\_eng.pdf](http://www.who.int/iris/bitstream/10665/90369/1/9789241506243_eng.pdf)
- WHO. (2015). Disability and Health Fact Sheet. Accessed on 10-10-2016. Available at: <http://www.who.int/mediacentre/factsheets/fs352/en/>