

# Earthquake Induced Displacement and living arrangements in Nepal

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## Abstract

*The article is based on the issues of IDPs in Nepal. Introduction of IDPs is the main focus of the article whereas it deals with the methodology and show the status of Nepal in the world. It is the quantitative descriptive types of study. The objective of the study is to identify the status of living arrangements, shelter sources of water and toilet facility of IDPs. The IDPs have the very poor situation of living arrangements. The government must take initiatives to protect the IDPs. And further research must be conducted in the issues of IDPs*

**Key words:** IDP, Earthquake, Displacement, Shelter, Sources of water, Toilet facility, Caste/Ethnicity

**Background:** Internally displaced persons (IDPs) are people or groups of people who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of Human rights or natural or Human-made Disasters, and who have not crossed an internationally recognized State border.

Displacement is the forced or obliged movement, evacuation or relocation of individuals or groups of people from their homes or places of habitual residence in order to avoid the threat or impact of a Disaster. It refers to situations where people are forced to move by other people and organizations, including local or national authorities, but also when people act of their own volition in response to the threats and severe conditions they face.

In regard to population displacement resulting from development there are typically two types: direct displacement, which leads to actual displacement of people from their locations and indirect displacement, which leads to a loss of livelihood. Forced to leave the home Region to which they are attached and for which they have the knowledge to make a living most effectively,

displaced populations often become impoverished. The displacement of people as a result of development projects, policies and processes therefore constitutes a social cost for development.

One of the major challenges today is the growth in the number of internally displaced persons (IDPs) worldwide. While there are no official definitions of an internally displaced person, the Guiding Principles on Internal Displacement set by the Office for the United Nations High Commissioner for Refugees (UNHCR) holds internally displaced persons to be "persons or groups of persons who have been forced to flee, or leave, their homes or places of habitual residence as a result of armed conflict, internal strife, and habitual violations of Human rights, as well as natural or man-made Disasters involving one or more of these elements, and who have not crossed an internationally recognized state border".

Estimates on the number of IDP estimates are often very rough, and they tend to differ greatly in terms of the source (governments, international agencies, non-governmental organizations). This is partly because IDP movements, in contrast to forced migration, typically involve short distances and often short time frames. In addition, internal movements are much less recorded than international movements. One reason is that the inherent interest of a receiving country in who is entering is absent in the case of internal movements, which are free of restrictions and subject to fewer administrative hurdles. In addition, considering that they are still living in the country where they have been persecuted, the internally displaced may be less willing to register than those who enjoy the protection of their asylum country.

**Earthquake in Nepal and IDPs:** Nepal is the 11th most earthquake-prone country in the world. Ever since the first recorded earthquake of 1255 AD that killed one-third of the population of the Kathmandu Valley and its King, Abhaya Malla, Nepal has experienced a major earthquake every few generations. The last great earthquake (of magnitude 8.4) in 1934 AD resulted in more than 10,000 deaths in the Kathmandu Valley. Most of the infrastructure and major heritage sites had to be rebuilt. There have since been earthquakes causing severe Human and physical loss in 1980, 1988 and 2011.

On Saturday, 25 April 2015 at 11:56 local time, a 7.6 magnitude earthquake as recorded by Nepal's National Seismological Centre (NSC), struck Barpak

in the historic district of Gorkha, about 76 km northwest of Kathmandu. Nepal had not faced a natural shock of comparable magnitude for over 80 years.

The catastrophic earthquake was followed by more than 300 aftershocks greater than magnitude 4.0 (as of 7 June 2015). Four aftershocks were greater than magnitude 6.0, including one measuring 6.8 which struck 17 days after the first big one with the epicenter near Mount Everest. To date, there are over 8,790 casualties and 22,300 injuries. It is estimated that the lives of eight million people, almost one-third of the population of Nepal, have been impacted by these earthquakes. Thirty-one of the country's 75 districts have been affected, out of which 14 were declared 'crisis-hit' for the purpose of prioritizing rescue and relief operations; another 17 neighboring districts are partially affected.

The destruction was widespread covering residential and government buildings, heritage sites, schools and health posts, rural roads, bridges, water supply systems, agricultural land, trekking routes, hydropower plants and sports facilities. The geodetic network centers including horizontal and vertical control points have been damaged in a manner that will affect reconstruction planning. Rural areas in the central and western Regions were particularly devastated and further isolated due to road damage and obstructions. In the worst hit areas, entire settlements, including popular tourist destinations like Langtang, were swept away by landslides and avalanches triggered by the earthquakes. Due to the weakened, ruptured, and destabilized slopes and surfaces, the vulnerable areas have now become even more susceptible to flooding and landslides that can occur during the monsoon.

Hundreds of historical and cultural monuments at least a century old were either destroyed or extensively damaged. Over half a million houses were destroyed. The damage exposed the weaknesses of houses that did not have any seismic-resistant features or were not in accordance with the building codes. The Disaster also highlighted aspects of inequities in Nepali society spanning geography, income and gender. Poorer rural areas have been more adversely affected than towns and cities due to their inferior quality of houses. More Women and girls died than men and boys, partly because of gendered roles that disproportionately assign indoor chores to Women.

The time and day the first earthquake was experienced saved thousands

of lives. Being a Saturday, the weekly holiday, schools across Nepal were closed on 25 April. The death toll of young people could have been much higher considering that nearly 7,000 schools were completely or significantly damaged. Similarly, if the earthquake had struck at night, and not in the middle of the day, there would certainly have been greater casualties. (PDNA, 2015)

The study has the objectives to identify the situation of food security and health status of the IDPs due to the earthquake of 2015.

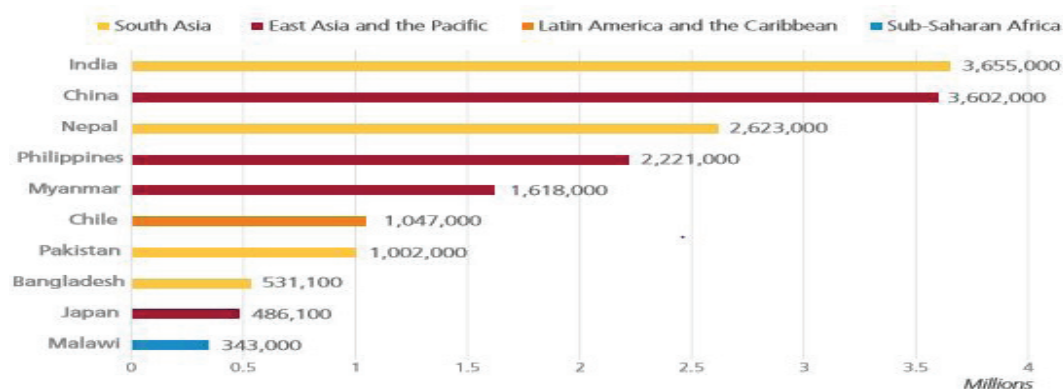
### Methodology

The study is based on the quantitative data. Which is collected through random sampling method with a well-structured questionnaire by visiting the study area. The study as part of literature review have collected the information from different reports. The study the completely descriptive analysis and processed the data by SPSS computer software.

### Status of Nepal in IDPs

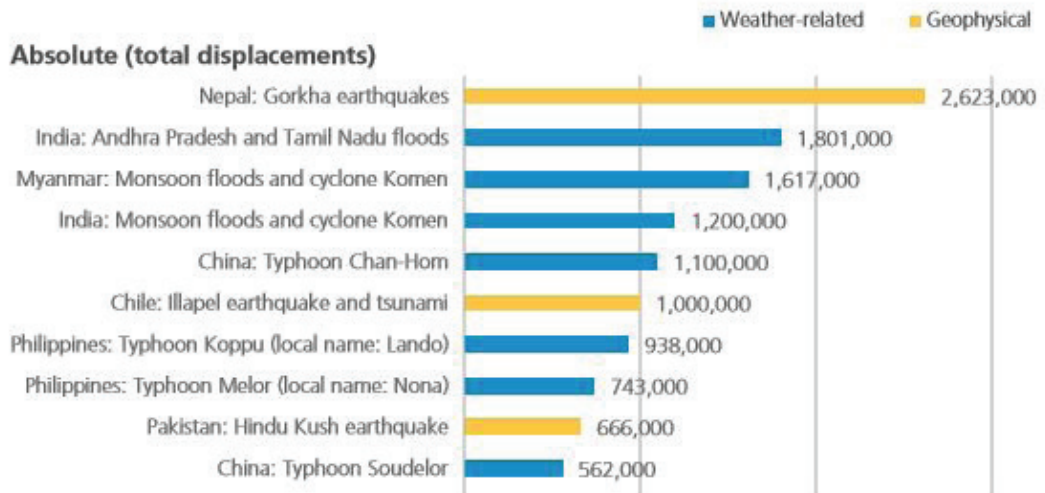
The earthquakes in Nepal in April and May, the thousands of aftershocks that followed and the landslides they triggered left 712,000 homes and much infrastructure damaged or destroyed. The Disaster took a heavy toll on the developing nation, affecting almost a third of the population and killing 8,700 people. Many of the 2.6 million who were displaced have been unable to return to their homes, and recovery and reconstruction will take many years to complete.

### Countries with most new Disaster displacements in 2015 (absolute number)



Source: IDMC,2016

The ten largest displacement events of 2015, absolute and relative to population size.



Source: IDMC,2016

### Earthquake effect and situation of IDPs in Nepal

The Humanitarian challenge became immediately apparent as millions of people whose houses were either destroyed and those who were fearful of imminent aftershocks started camping out in the open. This put a tremendous demand on the government and philanthropic associations for materials to erect makeshift shelters and to supply essentials. More than a month after the Disaster, tens of thousands of people are still reported to be living either in temporary or transitional shelters in spaces presumed to be safe from landslide and rain. The distribution of relief materials proved challenging because of the remoteness of many villages, rugged terrain, threat of landslides, and logistical difficulties. In the earliest days, when the coordinating authority of the District Administration Offices had yet to be fully asserted, there were also duplication and imbalance in the supply of

relief materials benefiting the more accessible villages disproportionately.

Two major earthquakes in April and May 2015 and thousands of associated aftershocks took a

devastating toll on the already fragile nation of Nepal. They affected almost a third of the country's population of 28.2 million, killed 8,700 people, damaged or destroyed more than 712,000 houses and displaced more than 2.6 million people. They hit both urban and rural areas hard, and triggered landslides and avalanches in high mountain areas, razing entire villages and leaving hundreds of thousands of people with acute shelter, livelihood, protection, food, water and education needs.

Most of those displaced stayed at least initially in makeshift or temporary shelters near their damaged or destroyed homes. Those who took shelter in open spaces or public buildings began to return to their homes within a week of the first earthquake. Displacement patterns changed, however, after the second earthquake. Many people who feared their homes were structurally unsound went back to open areas such as fields. Many Others fled the worst-affected rural areas toward displacement sites in the densely populated urban areas of the Kathmandu Valley. Among the IDPs who sought shelter in collective urban sites were many poor people, including Dalits and female-headed households, whose homes had been badly damaged or destroyed, and whose access to jobs and basic services had also been disrupted. The vast Majority did not own the property they lived in, and the earthquakes severely reduced the amount of rental accommodation available and inflated rents.

Around June, IDPs in just under half the sites assessed by the International Organization for Migration (IOM) said they had not received adequate assistance, and Women and children in

around half the sites felt unsafe. Sixty-eight per cent of the IDPs surveyed said damage to their homes was the main obstacle to their return. other issues included personal security, family separation, damage to infrastructure such as roads and a lack of food.

In the absence of medium-term plans to settle IDPs, some lived in fear of eviction from their shelters, particularly in Kathmandu. The monsoon

and winter seasons that followed brought further hardship. Around 200,000 households were still living in temporary shelters as of November at an altitude of over 1,500 meters.

Since Nepal's last major earthquake in 1934, only the last decade has seen significant investment in Disaster preparedness and coordination. Much of the focus, however, has been on preparing communities in the Kathmandu Valley, to the neglect of less populated but highly vulnerable towns and villages in higher mountain areas. Over the last four years the UK government, one of Nepal's major bilateral donors, has invested more than \$30 million in earthquake resilience programming. Despite such initiatives, the 2015 earthquakes caused large-scale destruction. The delivery of Humanitarian assistance was slow and vulnerable groups were not well protected.

The country's national Disaster response framework, which the Ministry of Home Affairs adopted in 2013, established coordination mechanisms that were implemented in the aftermath of the earthquakes. Their impact was largely determined by the poor quality of buildings unable to withstand the seismic activity, and their exposed location on steep mountain slopes. The government approved a national building code in 2003, but when the earthquakes struck only 26 of 191 municipalities had begun implementing it. poverty, rapid urbanization and weak institutional oversight have led to hasty and low-cost construction. Enforcement has also been undermined by corruption, judicial delays and a lack of building inspectors.

Political instability and weak institutions have also hampered the Humanitarian response. National and local government capacity had been significantly weakened by civil war and more than 12 years without local elections. After the end of the war in 2006, Nepal struggled to adopt a federal constitution and key legislation on Disaster risk Management was overdue. After the earthquake, the stalled process of finalizing the constitution was expedited and it was adopted on 20 September 2015.

### **Findings and conclusions**

Safe and livable shelter is one of the main need of internally displace persons. shelters are severely damaged and needed reconstruction for safe and healthy living. shelter must provide protection from the elements of



space, to live and store belongings. Most of the literature has identified that the living arrangements of the IDPs was poor. living arrangement refers to the situation of the shelter in terms of shelter, source of water, fuel, toilet facility etc.

### **Living Arrangements by Sex**

In Nepal more than two-third (72.0%) households have just adequate housing. Highest percentage of the household (58.0%) had the Zink slum as shelter. It was found the same by sex where two fourth (50.0%) of the female and around three-fifths (59.0%) of the male household lived in the Zink slum. The lowest (4.0%) of the household lived in the abandoned building comparatively male household live in abandoned building more than the female household head that was (4.0% )and (3.0% )respectively. More than one fourth (27.0%) of the households had lived in the tent. That was more than one-fourth (26.0%) of male household and nearly one-third (32.0%) of the female household.

Highest (47.0%) of the household reported the main source of water was private network followed by pipe line network (26.0%). The same was reported by the male and female household that was (47.0%) and (47.0%) respectively. The lowest (2.0%) of the household reported that the main source of water was well. It was found that just more than one-tenth (11.0%) of household had reported stone spout as source of water which was more than one-tenth (12.0%) for male and below five percent (3.0%) for female. No female household had the well and in (2.0%) of the male household had well. Spring water was reported as main source of drinking water by just more than one-tenth (14.0%) of the household which was more than one-tenth (13.0%) of male household and slightly more than one-fifth (21.0%) for the female household.

Near about two-third (63.0%) households in Nepal have improved toilet facility. Out of the Total household more than two thirds (83.0%) household had the facility of the toilet. There was not much more difference in the access to toilet facility in male and female. More than two thirds (83.0%) of the male and female (84.0%) household had access to toilet. It was found that below one fifth of the male (17.0%) and female (16.0%) household had not facility of the toilet. The facility of toilet was seen little bit more in the household of female compared to male.



### Living Arrangement by Caste/Ethnicity

There was difference in the living arrangement of the household by caste/ethnicity. Out of the Total displaced house hold the highest near about three fifths (58.0%) lived in Zink slum. Highest overwhelming Majority (98.0%) of Tamang household lived in Zink slum followed by more than two-thirds (72.0%) of Magar household. Nearly two-fifths (48.0%) of Newar household, slightly more than two-fifths (41.0%) of the Chhetri lived in the Zink slum. The lowest two-fifths (40.0%) of the Brahmin only lived in the Zink slum. The Lowest, just below five percent (4.0%) of the household lived in the abandoned building after displacement which was not reported by the Magar. It was found that highest (8.0%) of Newar and followed by Chhetri (7.0%) and that was just (2.0%) for the Brahmin. More than, one-tenth (11.0%) of the households lived in the rent house after displaced. The highest, nearly one-fourth (24.0%) of the Brahmin and below one-fifth (18.0%) of the Chhetri lived in the rent house. Whereas one-tenth (10.0%) of the Newar and (4.0%) of Magar lived in the same situation after displacement. But the Tamang didn't reported about rend house.

Near about Majority (47.0%) of the household reported private network as the source of water. Which was highest in Newar that was reported as four-fifths (80.0%) and followed by Chhetri, reported two thirds (66.0%). The Tamang had reported the lowest (2.0%) likewise Brahmin and Magar had reported the source as private network as nearly two-fourths (48.0%) and one fifth (20.0%) respectively. The lowest (2.0%) of the household reported that the spring as the source of water that was reported only by Chhetri and Newar which was (4.0%) for both. Pipe line network as source of water was reported by more than one-fourth (26.0%) of the household which was not reported by Magar and the highest overwhelming Majority (96.0%) of them were reported by the Tamang followed by the Brahmin more than one-fourth (26.0%). The lowest was reported by the Newar that was below one-tenth (8.0%) followed by Chhetri also below one tenth (9.0%).

Spring was the source of water for more than one-tenth (14.0%) of the household. Which was reported highest, nearly one-fourth (24.0%) for Magar and the lowest (4.0%) for Newar. It was found that more than one-fifth (22.0%) of Brahmin and more than one-tenth (12.0%) of Chhetri reported spring as their source of water. No Tamang reported the source of water as spring. The Tamang were living on the top of the hill where there was not any spring.

Slightly more than one-tenth (11.0%) of the household had reported stone spout as the source of water. Highest, nearly three-fifths (56.0%) of household of Magar followed by Chhetri below one-tenth (8.8%) reported stone spout as source of water. The lowest below five percent (2.0%) of Tamang followed by Brahmin and Newar was (4.0%) each.

## Conclusions

The overall situation of IDPs of then Dahachwok VDC (Chandragiri Municipality 1 and 2) was not satisfactory. They lacked minimum requirement of shelter, food, water and sanitation and fuel. Majority of the households are compelled to live in Zink slum having with inadequate facility of water and toilet. Whenever the IDPs suffered from water crisis, they reduced the consumption and relied on friends. Below one fifth of the households had not facilities of toilet and most of them used open space as the toilet.

Overall situation of IDPs is not satisfactory. They are depriving shelter, water and sanitation. Furthermore, female were more vulnerable compare to male, Brahmin and Chhetri were less vulnerable than other caste/ethnic groups.

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