

Highlights from

Nepal Earthquake 2015: A Socio-Demographic Impact Study

(With Reference to the 14 Most Affected Districts)



A study conducted by the Central Department of Population Studies (CDPS), Tribhuvan University for the Ministry of Population and Environment (MoPE) with support from the United Nations Population Fund (UNFPA) and the International Organization for Migration (IOM)



Central Department of
Population Studies,
Tribhuvan University

Introduction to the Study

The April 25 earthquake in Nepal and the subsequent aftershocks resulted in losses not only in terms of lives and physical infrastructures but also of historical, social, cultural and economic aspects of the country and its population. Thirty-one out of the 75 districts of Nepal were affected by this devastation with 14 of them located in the Central and Western mountains and hills including Kathmandu Valley and categorized by the Government of Nepal as the most affected¹. An estimated 5.4 million people live in these 14 districts.

In order to carry out a Damage and Loss Assessment (DaLA), the Government of Nepal conducted a Post Disaster Needs Assessment (PDNA) in May-June 2015 under the broader concept of building back better. While the PDNA assessed the damages of houses and buildings as well as the post-earthquake needs using a globally accepted methodology, it did not really focus on the socio-demographic impacts of the earthquake, that is, how households and communities had been affected, the level of local resilient social capacity to respond and how recovery and reconstruction efforts could be made more responsive.

Against this backdrop, it was decided to carry out this study in order to assess the socio-demographic impacts of the 2015 earthquake, with a focus on cultural diversity pertaining to household settings including caste/ethnicity, population dynamics (fertility, mortality, migration), as well as population size, composition and distribution. The study was meant to contribute to more cost-effective government policies on population dynamics resulting from the post disaster context.

Methodology

The survey was conducted among affected households in the 14 districts using multiple approaches and both quantitative and qualitative techniques to measure the socio-demographic impacts of the earthquake. The CDPS/TU led the overall research and study design, fieldwork training, survey tool refinements, sample design, and data collection and management with technical support from MoPE, UNFPA, and IOM. The fieldwork was carried out during 20 November – 15 December 2015 with a total of 3,000 households surveyed, which was a statistically representative number.



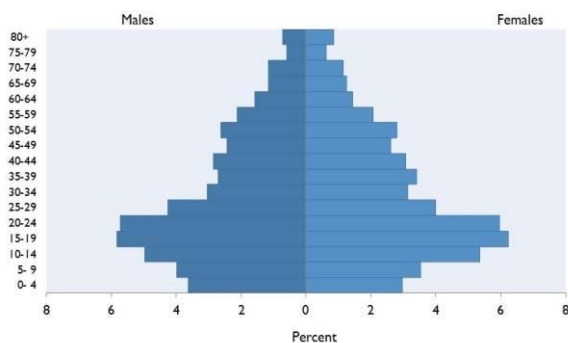
Categorisation of the earthquake affected districts by severely hit, crisis-hit, hit with heavy losses, hit and slightly affected
Source: PDNA, 2015

¹ They are Bhaktapur, Dhading, Dolakha, Gorkha, Kathmandu, Kavrepalanchowk, Lalitpur, Makawanpur, Nuwakot, Okhaldhunga, Ramechhap, Rasuwa, Sindhuli, and Sindhupalchowk.

- The survey used the list of earthquake affected households in VDCs/ municipalities in each of the 14 most affected districts as the sampling frame provided by the District Disaster Relief Committee (DDRC) through a screening survey conducted in August 2015.
- The Team covered 150 Primary Sampling Units (PSUs) determined through a scientific sampling method.
- The sample size was drawn from three domains: 7 'severely hit' districts, 4 'crisis hit' out of the Kathmandu valley, and 3 'crisis hit' within the valley².
- The sample size was determined at 3,000 households from 150 PSUs of 20 households each.
- To substantiate the findings of the quantitative survey, a team of trained researchers carried out 37 focus group discussions among community representatives, 43 key informant interviews, case studies and participatory observations.

Socio-Demographic Characteristics of Household Population

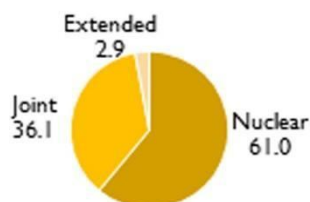
Age-Sex Composition



The total population of 3,000 sampled households consisted of 14,987 people, of which 7,419 were males and 7,568 females. The sex ratio in the household population was found higher (98.0) than the national average indicating a similar trend, that is, a higher number of females.

The economically active population aged 15-59 years was 65 percent whereas the total dependent population aged below 15 and 60+ years was reported at 25 and 11 percent respectively. The overall dependency ratio was estimated at around 55 percent.

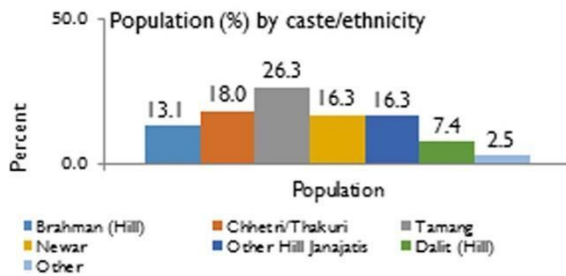
Type of Family



The proportion of nuclear households was the highest (61%) followed by joint and extended respectively. On average, the household size was estimated at 5.0. About one in five (19.6%) households consisted of more than six family members.

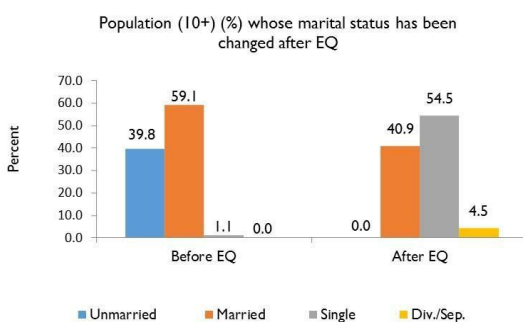
² Severely hit districts: Dhading, Dolakha, Gorkha, Nuwakot, Ramechhap, Rasuwa, and Sindhupalchowk; crisis-hit districts: Bhaktapur, Kathmandu, Kavrepalanchowk, Lalitpur, Makawanpur, Okhaldhunga, and Sindhuli.

Caste/Ethnicity



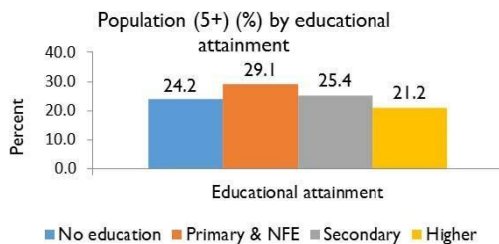
Nepal is known as a mosaic of diverse-caste ethnic groups. The study found, Tamang (26.3%), Chhetri/Thakuri (18%), followed by Newar, other Hill Janajatis, Brahmin and Hill Dalits³. These percentages are different from the national average given that the earthquake hit in particular the mid hills and the mountainous areas.

Changes in Marital Status



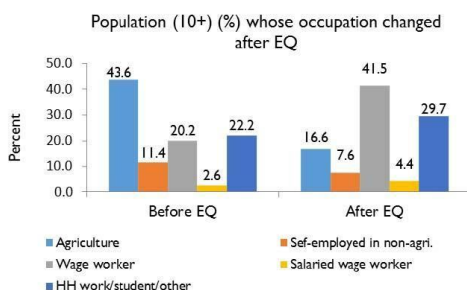
More than one-third of the total population aged 10 years and above (36%) was unmarried during the survey. The proportion of single people was higher among females as compared to male counterparts. The marital status of 88 household members out of 12,870 (aged 10 years and above) changed following the earthquake. The majority of these married women (59.1%) had become either widows or divorced/separated, followed by unmarried women (39.8%) who had married following the earthquake. By sex, more females had changed their status than males. By caste/ethnic composition, the change in marital status was highest among the Tamang community.

Literacy Status and Level of Education



Out of 13,999 people surveyed aged 5 years and above, around 75 percent could read and write. This figure was 67 percent for females and 84 percent for males. Nearly one-third (29.1%) of the household members had completed primary education, followed by secondary (25.4%).

Occupational Status



The highest percentage of the people surveyed were engaged in agriculture prior to the earthquake (34.3%) followed by students (27.9%) and household work (12.0%). Following the earthquake, two in five members of the entire households surveyed (43.6%) had changed occupation from agriculture to other types, such as wage labours and household works.

³ Other Hill Janajatis include Gurung, Magar, Danuwar/Sunuwar, Kumal and Sherpa; and other include different caste/ethnic groups with small number of cases like Rai, Limbu, Majhi, Thami, Yakkha, Thakali, Baramo, Jirel, Khaling, Brahman (Tarai), Tharu and Rajbanshi.

Psycho-Social Problems

Nearly 3 percent of the household members out of 14,987 reported suffering from psycho-social problems. Females (3.5%) were more affected than males (2.2%).

Citizenship Certificate

A large majority of household members (88.5%) reported having a citizenship card; among them the proportion of males was higher (91.8% vs. 85.3% for females).

Conclusion

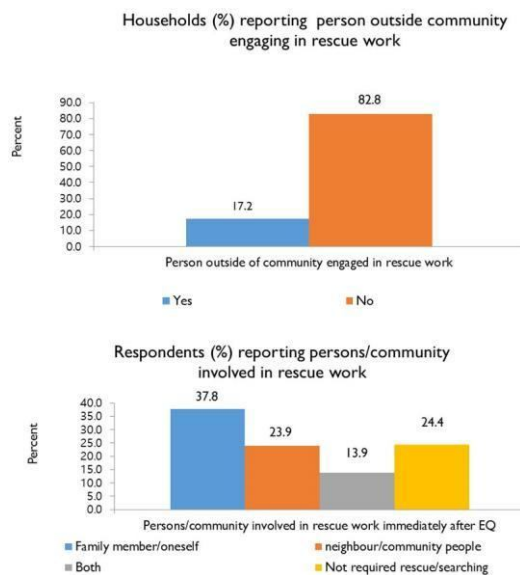
The sex ratio in the household population was higher than the national level. The economically active population was also higher. The proportion of nuclear households was nearly two-thirds. The marital status of several people, women in particular, changed following the earthquake. Overall literacy rate was around 75 percent which varied by gender. Following the earthquake the population involved in the agricultural sector had decreased. Appropriate measures need to be taken to address the psycho-social problems identified.

Policy Actions

- Take advantage of the fact that the economically active population is present in the affected districts; provide them with appropriate skills for employment opportunities related to reconstruction activities. Connect this initiative to long-term economic and livelihood opportunities in order to prevent this age group from migrating.
- To respond to the changes observed in the marital status of females, including those under the age of 18, after the earthquake, conduct further analysis to understand the extent to which the changes affected adolescent groups belonging to specific caste and ethnic groups in order to inform appropriate interventions to prevent future early marriages in post-disaster settings.
- Recognizing that the earthquakes affected different communities disproportionately due to their different socio-economic statuses and geographical locations, take appropriate measures to ensure equity-based reconstruction support prevails over blanket interventions.

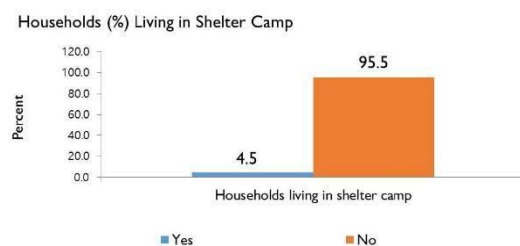
Stakeholders' Participation in Rehabilitation and Reconstruction

Rescue Operations Immediately after the Earthquake



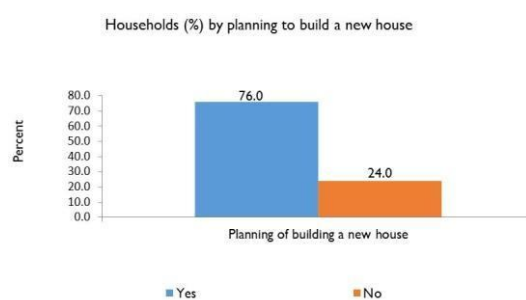
The people mostly involved in the rescue operations were family members, neighbours and community people. The majority of respondents (82.8%) stated that they did not receive help from outside their community, with the proportion being higher (88.8%) in crisis-hit areas compared to the Kathmandu valley (74.5%) and the severely hit areas (83.0%). The rescuers identified were Nepali volunteers both from governmental and non-governmental organizations, political parties and their affiliates. A key role was played by social groups such as Gumba, cooperatives and community-based users' groups.

Living Status in Shelter/Camp



About 5 percent of the households surveyed were still living in shelter camps. Two-thirds (65%) of the households in the camp did not have adequate and appropriate places for accommodation.

Planning to Build a New House



Over three-quarters (76%) of the households expressed their desire to build a new house with a large majority (81.2%) from severely hit districts followed by three-quarters (73.9%) in crisis-hit and two-thirds (65%) in the Kathmandu valley. Six out of 10 households expressed that they would want to build a new house in a new place if government support was available. However, a large majority (87.3%) stated that they wished to build their house in their original place. Nearly half (48.9%) wished to build a new house in an area suitable for agricultural cultivation and livestock rearing.

Views on Reconstruction

Nearly two-fifths (37.7%) of the people interviewed stated that it would be good if the new house could be built with "all kinds of facilities provided", while almost one third (29.8%) preferred to "build a house with construction material being provided." Almost the same percentage (29.1%) stated that they wanted to be consulted on the reconstruction work of their communities.

"We have heard that Nepal government has decided to provide NPR 200,000 to those whose houses have collapsed but we wonder when we will receive it."

- Communities from Gorkha, Okhaldhunga, Sindhupalchowk, Makawanpur and Rasuwa

Current Situation of Household Assets

A change in toilet facilities was observed, with over 16 percent reporting that they had toilet facilities before the earthquake but no longer thereafter. These respondents were higher (22.1%) in the severely hit areas. Similarly, over 9 percent reported having no longer access to drinking water after the earthquake. Eight percent reported that electricity had been cut off.

Conclusion

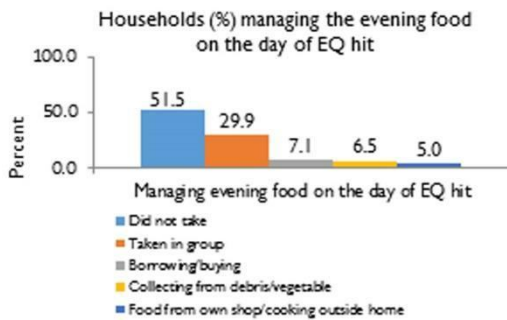
The majority of immediate rescue was provided by family members but several community volunteers were also involved in the rescue works. Lack of adequate and appropriate living conditions was mostly felt as a need. Community members stated their strong desire and preparedness to build houses with monetary support from the government so that they could manage the materials by themselves. Changes have been observed in household utilities and public facilities as a consequence of the earthquake.

Policy Actions

- Given that the early responders to the disaster were community members themselves, especially in remote crisis-hit areas, build the capacity of communities for disaster preparedness and rescue operations, ensuring the optimum participation of women and youth.
- Ensure that there are provisions at the community level, particularly in urban centers, for adequate open spaces and community housing and storage facilities where displaced community members can be temporarily housed and relief packages stored respectively as part of preparedness and response during an emergency.
- Acknowledging the preference expressed by the majority of the affected households in severely hit areas, consider providing a combination of monetary, technical, and skill-building support so they can build their houses and communities back better. As far as possible give priority to their original place of residence.

Social Impacts of the Earthquake

Impact on Livelihood



Half of the households (51.5%) reported not having any food in the evening of 25 April. The reduced food intake was higher for residents of severely hit and rural areas, for household headed by young people and other hill Janajatis and Dalits.

Impact on Cultural Practices

The main religious events and festivals include Dashain/Tihar, Lshosar, Christmas and Mhapuja. However, following the earthquake most of the earthquake affected communities stated that they celebrated these events merely as rituals.

A common Deity, known as Namrung, which is worshiped at Gorkha Municipality-4, Faslang, Gorkha was destroyed along with 36 houses of Magar community. The Temple receives a huge religious pilgrimage every year to be observed for three days.

Communities seem to be accommodating towards observing some of their rituals

"The roles of the traditional organizations like Dharma Kirti Bihar during the rescue, relief distribution and rehabilitation were good."

- FGD participants of Kathmandu

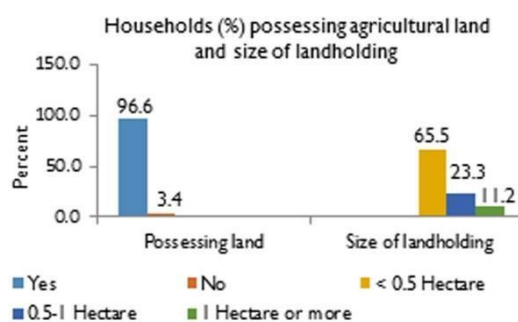
"We are worried about the extinction of our Guthis"

- FGD participants from Satun

"We are worried on how we can resume worshipping the Namrung-Mai Deity. We lost our Ghatu Nach [dance observed for more than three months during spring] due to the earthquake and resumed it just for two days in the aftermath of the earthquake."

- A key informant from Laprak, Gorkha

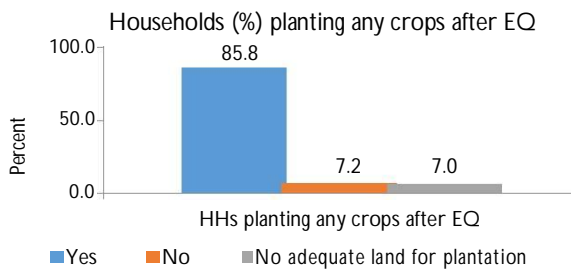
Impact on Land Endowment



Almost all households (96.6%) surveyed owned agricultural land. Relatively landless households were higher in Kathmandu valley (9%) compared to other areas. Seven percent of the households in urban areas did not have land. Nearly two-thirds of the households owned less than 0.5 hectares, with only 11 percent owning one hectare or more. The average land size of a household was 0.45 hectare.

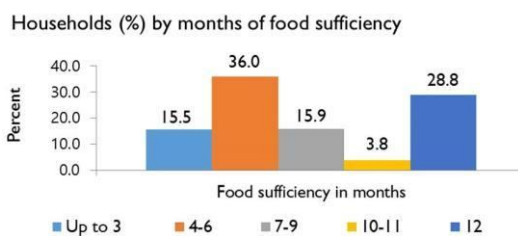
Female headed families owned less than 0.4 hectares of land. The size of the damaged land accounted for over one-third of the total arable land which implies that land based economy was affected by the earthquake.

Impact on Agriculture



About 86 percent of the households cultivated their land despite the earthquake. The major crops were paddy (60.1%), followed by maize (52.8%), and millet (45.3%). The major reasons for not cultivating included land damages and no interest to work in the field.

Impact on Food Security



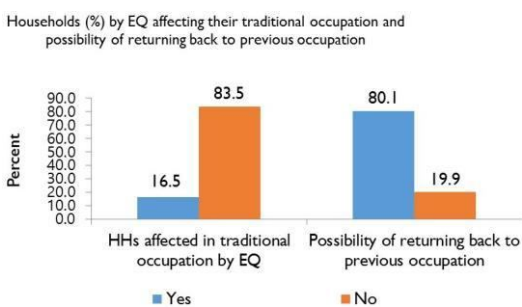
Nearly one-third of the households (28.8%) reported to have all year-round food sufficiency from their own agricultural production. This was more pronounced in rural areas, male headed households, and households with older age structure and for families with a higher level of education. The situation was better for Brahman families followed by Chhetri/Thakuri and Tamang. Highly food-insecure families were from female headed households, families with a young age structure, families with all illiterate adults (15 years+) and those of Hill Dalits.

"We have observed a decrease in food production in our communities. We have lost interest in cultivating our crops now."

- FGD participants from Dhading

Buying and borrowing were the major strategies used by households that did not have enough food during the crisis period.

Impact on Labour, Employment and Occupation



Three percent of the 12,870 household members aged 10 years and above had changed their usual occupation after the earthquake. The study found that about 17 percent of the households' traditional occupation was affected. Eighty percent of the people interviewed reported resuming their usual occupation.

Conclusion

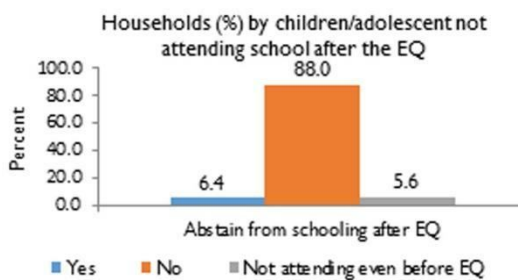
On the very day of the earthquake half of the families did not have food and were fearful with psycho-physiological stress and appetite loss. Agriculture continued to be the major source of livelihood despite the effects of the earthquake. There was no enthusiasm or joy to celebrate festivals given the poor living arrangements, and often there was no separate place to perform the family rituals and worships. There have been changes on food security, labour, employment and occupation with variation by social groups, educational status, and place of residence.

Policy Actions

- Given that the majority of communities across all affected areas depend on agriculture, strengthen this sector so it provides adequate food security and support micro-economic activities as a form of agricultural value chain in order to generate the cash income needed to sustain the daily lives of the affected populations.
- Considering that the majority of the affected populations belonged to communities that rely on traditional occupations and indigenous skills, conduct an in-depth study to assess the impact of community reconstruction and rehabilitation efforts on the preservation of such occupations and skills.

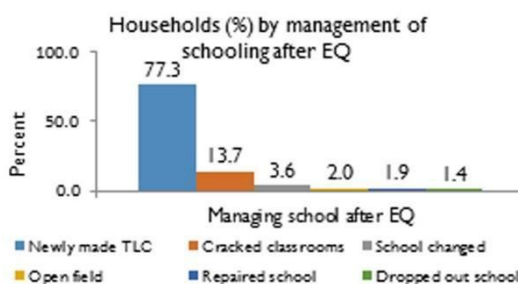
Impact on Education, Health and Elderly Care

Access to Schools



Over six percent households with school aged children and adolescents reported that their children's education was completely affected in the aftermath of the earthquake. Among them, the highest proportion was from the Kathmandu valley (15.2%). The main reasons for not attending school were: fear of aftershocks and damage of school building (46.1% each respectively). The major educational impact to the children as per the responses received related to damages of schools and houses.

Alternate Management of School System



"We are still afraid of sending our children to these almost collapsed school buildings. Both the teachers and the students are scared."

- FGD participants from Nuwakot

Over 77 percent households reported that their children, were kept in temporarily built learning centres (TLCs) followed by 14 percent who reported that their children had been kept in damaged/cracked classrooms in the school. TLCs were more common in severely hit and in rural areas. Nearly two-thirds of children who changed school had moved to schools in the district headquarters (65%), with 35 percent in nearby cities with safe accommodations. Forty-five percent of the households changed school for the boys compared to 18 percent for the girls.

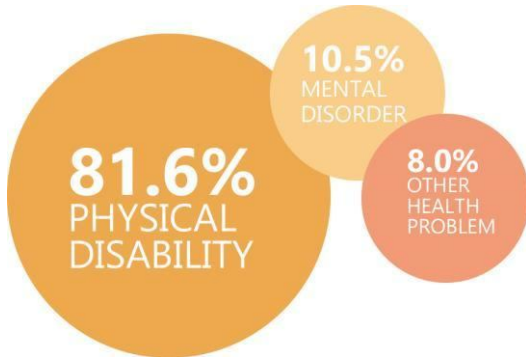
According to the participants of FGDs, children's education was affected for at least two months after the earthquake. Even after they were re-opened, the situation had not gone back to normal.

Problems in TLCs

Children reported that since TLCs had no separate classrooms, there was a lot of noise coming from other classes. School teachers, parents and community people were of the view that children's learning attitude and cognitive development as well as their mental state was not yet conducive to better academic achievements.

Earthquake Induced Health Problems and Treatment

Households (%) by EQ induced health problem to family members



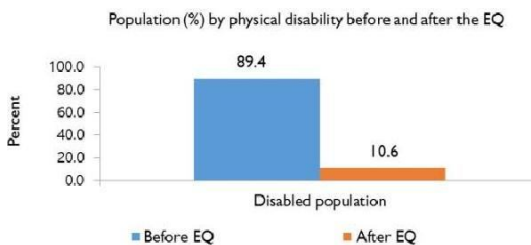
A total of 276 persons from 95 households had health problems following the earthquake with a higher percentage among Newar and Dalit families (4.7% and 4.4% respectively) compared to other social groups. Of them, 82 percent had physical disabilities, another 11 percent suffered from mental disorders and 8 percent had other health problems. Among them, 94 percent reported to have had medical treatment, with the majority of them (73.5%) in district headquarters. The cost of the treatment was borne by family and relatives (62.8%) followed by the government (31.9%).

"There was no immediate support forthcoming from the local health service organizations."

- FGD participants from Khiji Phalate, Okhaldhunga

According to the participants of FGDs and KIIs, earthquake survivors faced threats of disease outbreaks due to severe shortages of clean drinking water and toilets. With many people living out in open spaces, there was an increased risk of spreading diseases like diarrhea, respiratory diseases and measles outbreak.

Disability



About two percent of the households included members with physical disabilities. Eighty-nine percent of these pre-dated the earthquake with 11 percent being disabled following the earthquake.

Child Immunization

A main disruption in services was observed in children's immunization. Coverage of child immunisation was reported to have decreased by 58 percent.

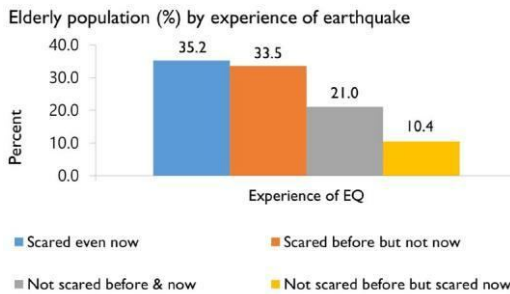
Psycho-physiological Impact

The survey also highlighted the psycho-physiological impact and disruption of services among family members. This affected in particular antenatal care with irregularities in pregnancy check-up and challenges in supplying nutritional food for pregnant women and children.

Chronic Illnesses and Infections

The survey found persons living with HIV in three households, kidney patients in 38 households, cancer patients in 31 households, persons with chronic mental health problems in 77 households, chronic asthmatic patients in 284 households and persons with other chronic health problems in 134 households.

Impact on Elderly Citizens



About six percent of elderly people out of 1,565 were reported to have sustained injuries. Forty-two percent of them received treatment with family support, 26 percent did not require it, and 17 percent received treatment which was paid through government subsidies. Over 35 percent of the elderly were still scared by the trembling experienced during and after the earthquake, while over one-third were very scared by the earthquake when it first struck. The elderly were very worried about the survival status and overall condition of their son/daughters and grandchildren. They were worried about their vulnerability in case of loss of their caregiver sons/daughters. The major source of income and livelihood for the elderly consisted of social security allowances (42.9%) followed by agriculture and livestock income (26.9%) and family support (20.7%).

Conclusion

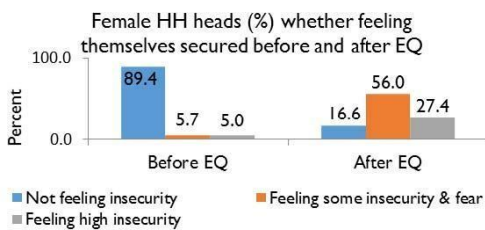
The earthquake affected the regular attendance of school going children because of fear of aftershocks and school damages, resulting in school drop outs. House and school damages caused a decline in students' motivation for learning and reading. While TLCs were identified as an alternative, there were problems in learning due to a lack of a conducive environment. The study also found some cases of earthquake-induced health problems, most of which were treated at the district headquarters. The study also highlighted a psycho-physiological impact among family members. A large number of elderly citizens were also affected.

Policy Actions

- Noting the long disruption of educational services in the affected areas, restore a safe and learning environment with appropriate motivational activities to ensure regular school attendance, especially by girl students.
- Acknowledging that a disaster such as the earthquake has a significant effect on maternal, child, and mental health services, ensure that these services are an integral part, even priority area, of future health-sector disaster and response planning.
- Noting that senior citizens and people with disabilities suffered more physical injuries than other groups because of their limited mobility, ensure that the reconstruction and rehabilitation efforts prioritize infrastructures that are disability- and elderly-friendly.

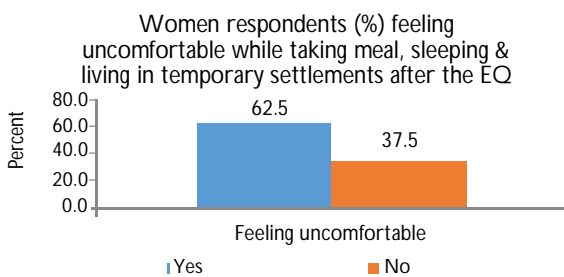
Impact on Vulnerable Populations

Impact on Women



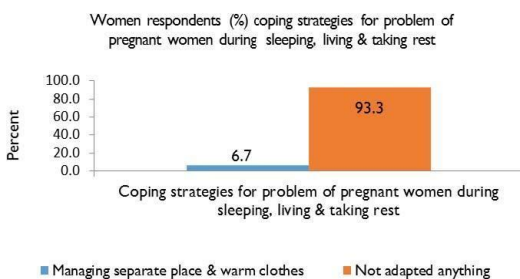
Nine in every 10 female respondents had no feeling of insecurity before the earthquake. The feeling of some insecurity and fear had however, changed significantly as evidenced from the study whereby it had increased 10 times among female-headed households following the earthquake. Among them, women who were wage workers were more insecure compared to other women. By educational level, females with secondary level education felt more secure than others.

Problems in Temporary Settlements



Female respondents strongly reported the difficult situation they had faced after the earthquake. Three out of five (62.5%) female respondents stated the discomfort they had experienced while taking meal, sleeping and living in a temporary place, a shelter/camp and in their own cracked house. They reported that they had problems during menstruation (32.3%) and while changing clothes (34.6%).

Pregnancy



A total of 126 pregnant women were asked how they were coping with sleeping, living and resting. Only 8 of them (6.7%) stated that they had managed to find a separate place and warm clothes.

According to the FGD and KIs participants, during the time of continued aftershocks, many pregnant women could not go for follow up checkups to the nearby health facilities. Most of the communities interviewed pointed out that they took some pregnant women to the nearby cattle sheds for delivery on dry hay grass.

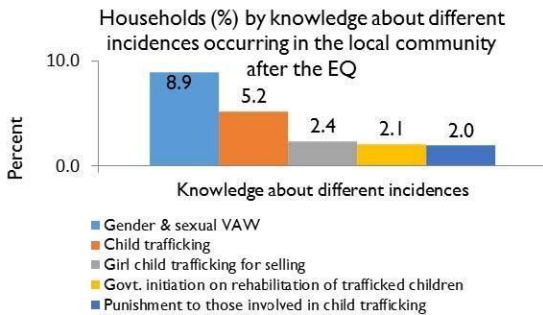
"We could not give nutritious and hygienic food to eat when they [pregnant and women in delivery] were in acute need. We had to give them biscuits, noodles and water – nothing more."

- FGD participants from Kavre

Problems of Toilet

The earthquake compounded additional risk factors for girls and women. Most of the toilet facilities could no longer be used given the damages to private and public buildings. The majority (63.1%) of the respondents reported that they had not found alternative solutions.

Violence against Women, Girls and Children



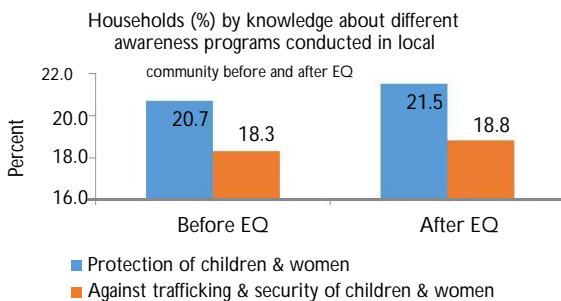
Out of total 3,000 households, 9.4 percent reported incidences of gender based violence before the earthquake which was a bit lower (8.9%) afterwards (based on the information collected). Reports of sexual violence were higher in the severely hit and the crisis-hit districts than Kathmandu valley before the earthquake. There were more reports of gender and sexual violence in severely hit and crisis-hit districts than Kathmandu Valley both before and after the earthquake.

"If they had been established before, girls trafficking in the past could have been reduced."

- Key informants in Makawanpur

Despite the hardship faced, earthquake-affected people such as in Makawanpur initiated women and child friendly spaces, putting the value of children first, as an example of increased socialization and participation. Other initiatives included the formation of women's watch groups.

Knowledge about Awareness Programmes



"During the crisis, people have been found to be more united and fought against the immediate problems that surfaced."

- Jirel community from Dolakha

One-fifth of the respondents reported that they knew about programmes conducted prior to the earthquake related to awareness on the need to provide protection to children and women. Similarly, there had been awareness programmes on trafficking and children's and women's security organized in their community (18.3%) before the earthquake. However, very few of the respondents knew about awareness programmes aimed at minimizing the adverse activities in their communities before the earthquake. Despite the awareness raising programmes that took place in the post-earthquake situation, there were only limited initiatives to minimize child trafficking and security of children and women. Almost a similar percentage of respondents mentioned that they knew about awareness programmes related to protection of children and women (21.5%) and trafficking and security of children and women (18.8%) after the earthquake.

Similarly, some positive changes due to earthquake have also been felt by the community people. As they responded,

Conclusion

The results of the study show that women, girls, children and some other caste/ethnic groups experienced various problems before and after the earthquake. Their needs are different from other groups of people. Special attention should therefore be paid to enhance women's capacity to manage risks, so as to reduce their vulnerability.

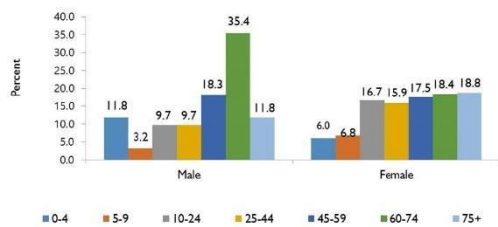
Policy Actions

- Recognizing the fact that girls and women, particularly pregnant women, faced special problems and additional burdens while living in temporary shelters, ensure the provision of child- and female-friendly spaces and supplies that protect the dignity of girls and women in post-disaster situations.
- Given that a large number of toilets were destroyed by the earthquake, ensure that new houses include toilet facilities.
- Any future humanitarian response must go beyond the immediate provision of food and shelter. Reproductive health, including family planning and safe motherhood, as well as prevention of and response to gender-based violence should be priority issues. It is imperative to protect the dignity of women and girls and focus on empowering them to play a role in rebuilding their lives and communities as well as restoring their physical health and wellbeing.

Impact on Mortality and Fertility

Incidence of Deaths

Population dead (%) by age and sex



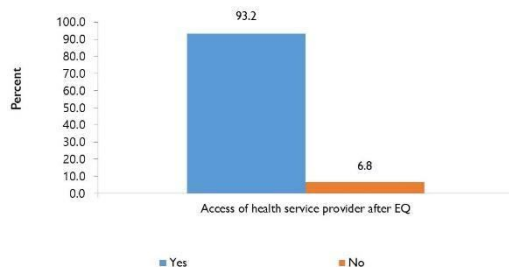
There were a total of 66 deaths due to earthquake in the sampled households. Of these, 29 percent were males while 71 percent were females. The age group of 60-74 accounted for 23 percent of the deaths followed by 18 percent for the group 45-59.

Maternal Deaths

Of the total 47 women dead on the earthquake, 3 were pregnant and 5 had died within 42 days following delivery.

Availability of Health Services

Married women (15-49) (%) by response on access to health service providers after the EQ



Out of the total 2,203 married women in the age group 15- 49, only 149 (6.8%) reported that there was a gap in availability of health services. The health service provision was better in crisis-hit districts (87.9%) compared to Kathmandu Valley (79.2%). In total 93 percent of the respondents expressed that they were satisfied with the available health services, while 80 percent reported that they had access to information related to family planning, reproductive health and women health issues.

ANC Visits

Before EQ



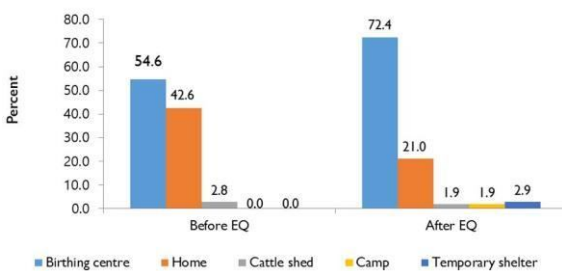
After EQ



The percentage of women with regular ANC visits decreased by 7 percent following the earthquake. Reduction in ANC visits was higher (13.3 percentage points) in the Kathmandu valley compared to crisis-hit areas (5.7 percentage points).

Place of Delivery

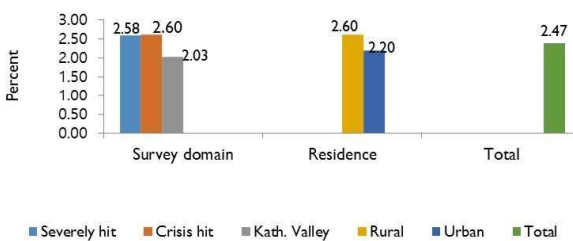
Married women (15-49) (%) by place of birth delivery



More deliveries took place in birthing centres after the earthquake. Before the earthquake the percentage of women who had delivered in a birthing centre was 55 in total, while the percentage increased to 72 after the earthquake. Home deliveries decreased from 43 to 21 percent which could be due to the destruction of homes forcing women to deliver elsewhere.

Number of Children Ever Born

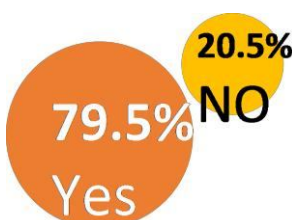
Average CEB by 3 survey domains and rural-urban residence



The average number of children ever born (CEB) in the sample household was 2.5, slightly lower than the national average (2.7). Kathmandu valley accounted for 2.0 and the crisis-hit and the severely hit for 2.6 each respectively.

Willing to Have Another Child

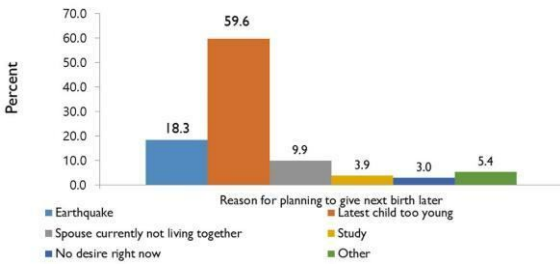
Married women (15-49) (%) willing to give birth to another child



One in five (20.5%) married women of reproductive age were willing to have another child but wanted to wait between one to more than five years.

Reasons for Postponement of Birth

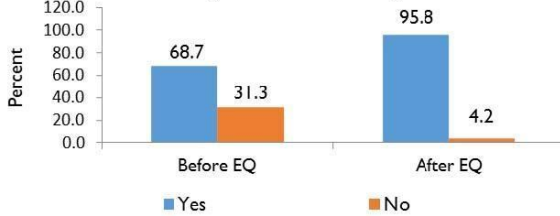
Married women (15-49) (%) by reasons for delaying the next pregnancy



Nearly one in five (18.3%) married woman of reproductive age reported that they were planning to postpone the next birth by at least one year due to the earthquake.

Earthquake and Breastfeeding

Married women (15-49) (%) by regular breastfeeding to latest child of 2 years or below



There was an increase by almost 27 percent in breastfeeding mothers, that is, from slightly over two-thirds (68.7%) before the earthquake to 96 percent thereafter. The reasons for increased breastfeeding ranged from less involvement in activities outside the home to school closure.

Earthquake and Loss of Pregnancy

Married women (15-49) (%) having experienced any pregnancy loss

Before EQ



After EQ



Altogether 115 women had experienced a pregnancy loss in the year before the earthquake while there were another 14 such losses after the earthquake. Only 6 cases were directly related to the earthquake.

Participants from the Danuwar community added that pregnant women had given birth before the due date. The Pahari community from Lalitpur highlighted some challenges brought out by the earthquake as during the delivery period women had to live in tents or out of the house in the cold winter. As such, it was very difficult and challenging for them to protect both the mother and the child, particularly their timely treatment, delivery care and support and care for the newborns.

"They [pregnant women] have severely suffered from the growing cold during winter and were badly affected by the common cold".

- Hayu community

"Some of the children were born during the time the earthquake was occurring and their timely care has been one of the most serious problems we have ever had in life."

- Pahari community from Lalitpur

Conclusion

More women than men died due to earthquake as they were at home and often attempted to save their children over their lives implying greater vulnerability to women due to their gender roles. There were evident gaps observed in the availability of health services. There was also a gap in ANC after the earthquake which could have adverse effects on women's reproductive health and childbirth. Increased institutional delivery, especially in birthing centres, was primarily due to lack of conducive environment for delivery at home. The children ever born (CEB) was slightly lower than the national average.

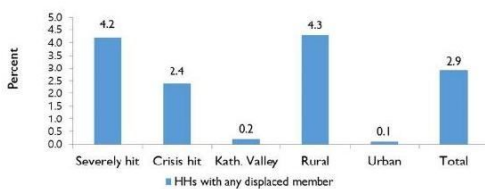
Policy Actions

- Recognising that the number of antenatal care (ANC) visits made by pregnant women decreased after the earthquake in remote areas of the affected districts and that institutional delivery increased, integrate reproductive health services in the health service delivery through mobile health camps as part of preparedness and at the onset of any emergency and strengthen the capacity of birthing centres to manage emergency obstetric care services and referrals in disaster-affected areas.
- Disseminate information on the importance of antenatal care through FHCVs, radio and other communication channels.
- Given that married women of reproductive age in the affected districts expressed a desire to postpone their next pregnancy due to the earthquake, ensure that health-sector response and recovery programmes in disaster settings offer family planning services and raise awareness about the different contraceptive methods available.

Earthquake and Population Mobility

Displacement

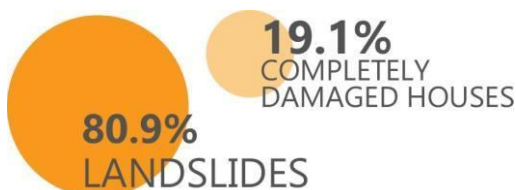
Households (%) with any displaced member



Out of 3,000 households, about 3 percent (87 households) reported that their family members had been displaced due to the earthquake. The majority of households (4.2%, 67 households) were from severely hit districts. Similarly, 4.3 percent each from rural areas and nuclear families were displaced.

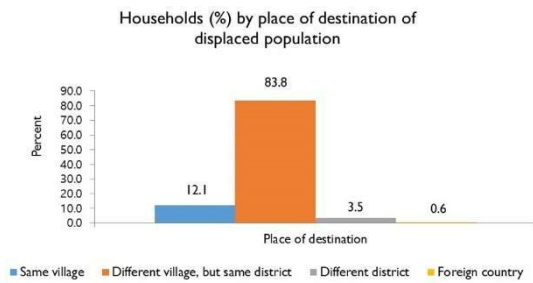
Reasons for Displacement

Households (%) by main reason for displacement of population



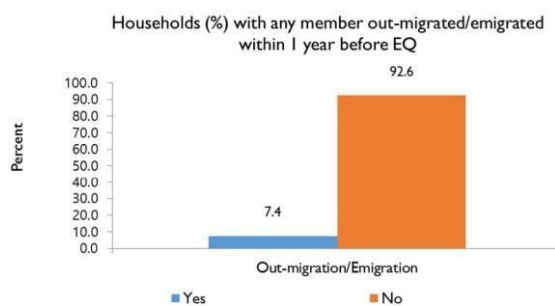
A total of 340 members from 87 households were displaced in the study area due to the earthquake. There were two reasons for the displacement. Over 80 percent reported as main reason that their residence was unsuitable to live in due to landslides followed by nearly one-fifth (19.1%) due to their houses being completely damaged.

Place of Destination



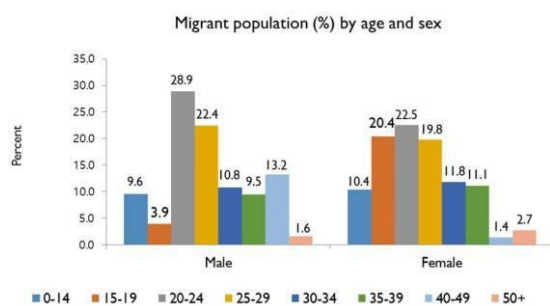
About 84 percent of displaced people moved from their place of origin to different villages followed by the same village or location (12%). The percentage of people displaced to different villages in the same district was more pronounced in severely hit districts.

Migration before the Earthquake



A total of 221 households (7.4%) out of 3,000 reported that at least one member of their family had migrated during the last year before the earthquake and had not returned even once after the earthquake. About 9 percent households each from rural areas and joint or extended families had at least one member who out-migrated or emigrated. Similarly, 15 percent from female-headed households, 8.2 percent households with agriculture as main occupation and 10 percent households with member attending only primary education as highest educational attainment, that is, up to grade 5, had at least one member who out-migrated or emigrated.

Age and Sex of the Migrant Population



A total of 301 persons from 221 households had migrated from their households during the last year before the earthquake. Males outnumbered females (80.7% and 19.3% respectively). By age group, almost half of the migrants (49.6%) were in the age group 20-29 years, and 11 percent in the age group 30-44. The number of migrant population was higher among males than females across all age groups except for the 15-19 age group (20.4% for females and 3.9% for males).

"We have observed households sending members abroad by taking loans from the banks."

- FGD participants from Nuwakot, Sindhuli, Kathmandu, and Sindhupalchowk.

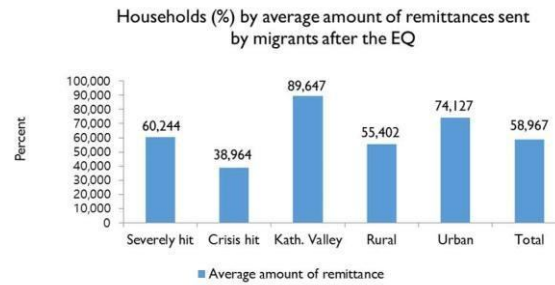
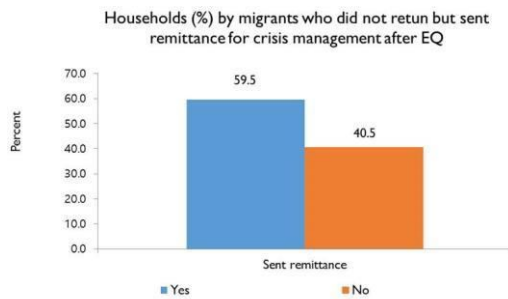
The trend of labour migration overseas in search for better work after the earthquake was highlighted by FGD participants from Nuwakot, Sindhuli, Kathmandu, and Sindhupalchowk.

"Many people went abroad; they have taken a loan of NPR 80 -100 thousand."

- FGD participants from Sindhupalchowk, Makawanpur and Rasuwa

The Dalit community from Dhading said that almost all the households in their communities were poor and thus they had no option but to migrate for foreign labour aftermath the earthquake.

Remittances Sent by Migrants



About 60 percent of the households with migrant population reported that the members of their households that had migrated sent remittances to manage the crisis they were facing in their households following the earthquake. The average remittance was NPR 58,967. The highest amounts were in the Kathmandu Valley (NPR 89,647) and the lowest in other crisis-hit districts (NPR 38,964). The majority of households received remittances between NPR 25,001 to 50,000. In crisis-hit districts the majority of the households (45.5%) received remittances in an amount up to NPR 25,000.

Conclusion

The earthquake had a direct impact on population displaced due to fear of physical harm. Some indirect impact was also observed by those who had left their house for other livelihood opportunities. Moving to a safer place was priority for the displaced. Remittances constituted an important mean to manage the crisis for the affected households.

Policy Actions

- Recognising the fact that a significant number of people in the affected districts were displaced due to physical damage and landslides caused by the earthquake, formulate and implement an appropriate resettlement policy (returning to place of origin, rehabilitation in the current place of residence, or resettlement in a third place) to address the needs of the displaced population based on informed choice.
- Noting that the migrant members of affected households sent home a significant amount of remittances immediately after the earthquake, ensure that the government's reconstruction programme leverages household remittances to jointly fund "building back better" initiatives.



Minister for Population and Environment and other collaborating partners listening to the sharing of the highlights of the study at the Ministry of Population and Environment