

# Migration and the 2015 Gorkha Earthquake in Nepal – Effect on Rescue and Relief Processes and Lessons for the Future



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This series is based on the work of the Himalayan Adaptation, Water and Resilience (HI-AWARE) consortium under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA) with financial support from the UK Government's Department for International Development and the International Development Research Centre, Ottawa, Canada. CARIAA aims to build the resilience of vulnerable populations and their livelihoods in three climate change hot spots in Africa and Asia. The programme supports collaborative research to inform adaptation policy and practice.

HI-AWARE aims to enhance the adaptive capacities and climate resilience of the poor and vulnerable women, men, and children living in the mountains and flood plains of the Indus, Ganges, and Brahmaputra river basins. It seeks to do this through the development of robust evidence to inform people-centred and gender-inclusive climate change adaptation policies and practices for improving livelihoods.

The HI-AWARE consortium is led by the International Centre for Integrated Mountain Development (ICIMOD). The other consortium members are the Bangladesh Centre for Advanced Studies (BCAS), The Energy and Resources Institute (TERI), the Climate Change, Alternative Energy, and Water Resources Institute of the Pakistan Agricultural Research Council (CAEWRI-PARC) and Alterra-Wageningen University and Research Centre (Alterra-WUR). For more details see [www.hi-aware.org](http://www.hi-aware.org).

Titles in this series are intended to share initial findings and lessons from research studies commissioned by HI-AWARE. Papers are intended to foster exchange and dialogue within science and policy circles concerned with climate change adaptation in vulnerability hotspots. As an interim output of the HI-AWARE consortium, they have only undergone an internal review process.

Feedback is welcomed as a means to strengthen these works: some may later be revised for peer-reviewed publication.

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# Migration and the 2015 Gorkha Earthquake in Nepal – Effect on rescue and relief processes and lessons for the future

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# Acronyms and Abbreviations

CBS	Central Bureau of Statistics
CDO	Chief District Officer
DoFE	Department of Foreign Employment
ICIMOD	International Centre for Integrated Mountain Development
MoFE	Ministry of Foreign Employment
NGO	Non-government organizations
NRNA	Non Resident Nepali Association
VDC	Village Development Committee

## Currency exchange rate

1 US dollar = 99 Nepalese rupees (2013/14, 2014/15) > 2016: 100 NRS?

1 US dollar = 75 Nepalese rupees (2010/11)

1 US dollar = 54 Nepalese rupees (1995/96)

1 Indian rupee = 1.6 Nepalese rupees

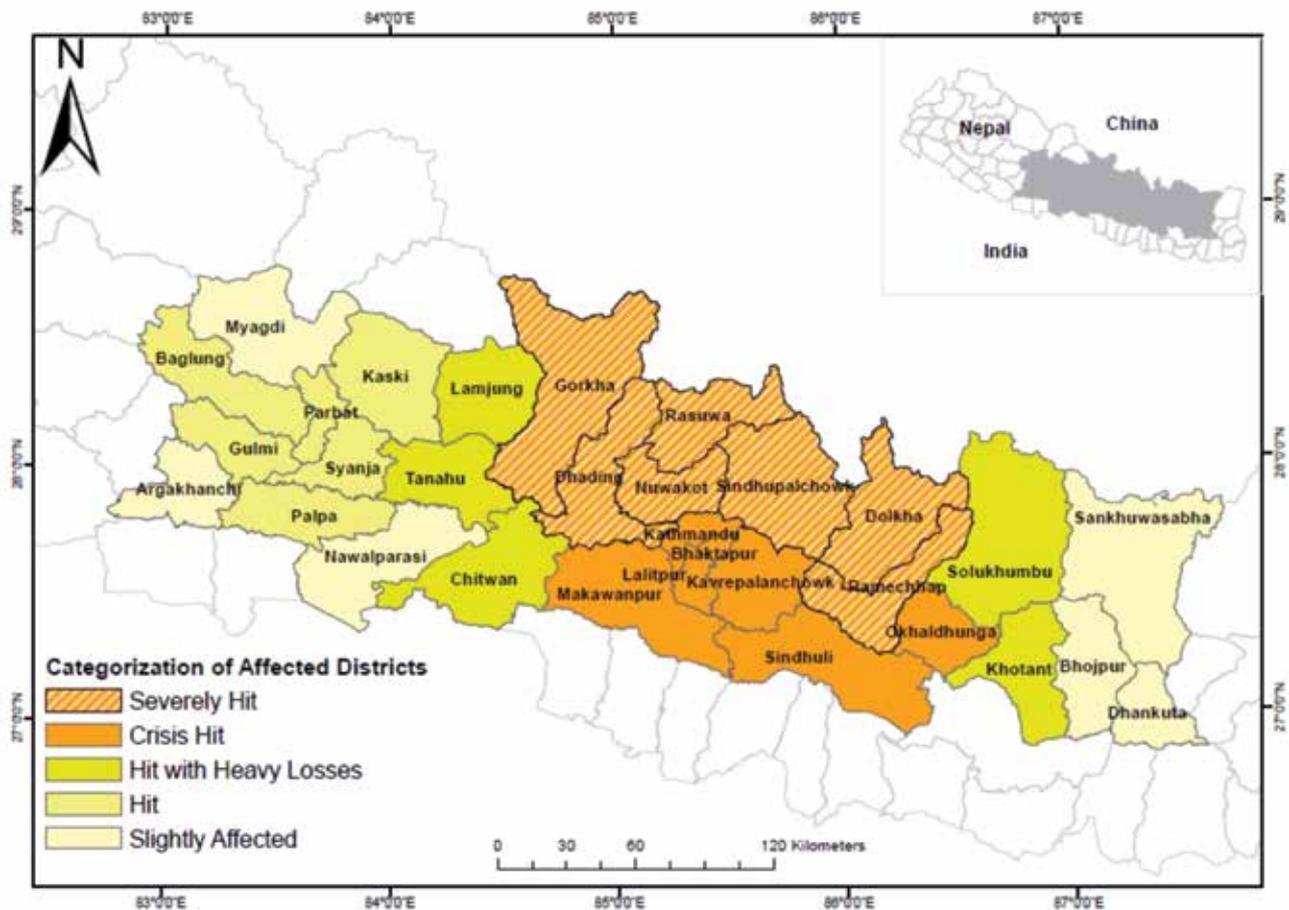
# Introduction

## The Gorkha earthquake and response

On 25 April 2015, a 7.8 magnitude earthquake hit central Nepal, followed by more than 300 aftershocks including one of 6.8 magnitude (Kargel et al, 2015). A second earthquake of 6.8 magnitude struck on 12 May, this time with its epicentre in Sindhupalchowk, also in central Nepal. This was one of the worst natural disasters in the country's history, causing about 9,000 deaths and over 22,000 injuries. According to a post-disaster need assessment report (NPC 2015), the earthquake had caused damage to about half a million private and public buildings, apart from damage to other physical and economic infrastructures including schools, hospitals, roads, irrigation canals, and markets. It was estimated that it had caused losses up to USD 7 billion, equivalent to about a third of Nepal's gross domestic product (ibid.). In addition to the immediate loss of life and property, the earthquake had affected the lives of 8 million people (ibid.).

A total of 31 of Nepal's 75 districts were affected by the earthquake, of which 6 districts were categorized as 'severely hit' (Gorkha, Dhading, Nuwakot, Rasuwa, Sindhupalchowk, and Dolakha) and 8 districts (Kavrepalanchok, Ramechhap, Okhaldunga, Makwanpur, Sindhuli, Kathmandu, Bhaktapur, and Lalitpur) as 'crisis hit'. Another 17 neighbouring districts were categorized as 'hit with heavy losses', 'hit' and 'slightly affected' (see Map 1 for details).

Map 1: Categories of earthquake affected districts



Source: (NPC 2015)

The first response to the earthquake came from local people in the villages themselves. The Government of Nepal mobilized defence personnel (army, police, and armed police forces) immediately after the disaster for search and rescue operations, followed by relief distribution. The government declared a state of emergency in the 14 most-affected districts and requested international assistance.

Altogether 76 international search and rescue teams, and 87 international medical teams were involved in search and rescue operations (Ministry of Home Affairs 2015). In addition, more than 300 international organizations working in various sectors (including health, shelter, water and sanitation, early recovery, protection, education, child care) were actively providing relief support in the 14 most-affected districts (ICIMOD 2015).

These efforts were complemented by those of the private sector and the local population, particularly youth groups, who were working voluntarily and on an ad-hoc basis through informal networks. In fact, private individuals and groups reached some areas much faster than international or national organizations. Support was also provided by the Nepali diaspora, either by directly participating in relief efforts or through financial contributions to private individuals and organizations working in Nepal.

## Study rationale and questions

Labour migration has turned out to be an important livelihood strategy for households in the 'crisis-hit' districts. It would be interesting to study the effect of labour migration on post-earthquake response and reconstruction plans. Theoretically, it is believed that migration and remittances help increasing the resilience of households coping with disasters (Le De et al. 2013). But media coverage was conflicting about the effect of migration on post-earthquake response.

Migrants responded to the earthquake in a variety of ways, including sending remittances and returning home (Nepali Times 2015). The earthquake caused some potential migrants to cancel migration plans, while it prompted others to migrate (DW 2015, The Kathmandu Post 2015a, and Travel News Nepal 2015). The capacity to respond to the post-earthquake situation differed between migrant and non-migrant households due to differences in human and financial resources. So, an assessment of the effect of migration on the differential experiences and abilities of households and communities in relation to rescue and relief processes and recovery plans would provide valuable learning, not only for recovery strategies being planned by communities, the government, and organizations, but also for a better information base of our response to future disaster situations.

Accordingly, this study looked at how migration has affected post-earthquake rescue and relief phases, and how it will affect the recovery phase. It focused on three main questions:

- What effect did the migration of young men and women from the villages have on post-earthquake rescue and relief processes?
- What will be the demand for labour in the recovery process and what effect will it have on the domestic labour market and on (further?) migration?
- What are the thoughts and plans of households and communities in relation to rebuilding their lost assets and livelihoods?

## Methodology

The study used a rapid appraisal method for the analysis instead of more systematic and accurate assessment methods. Since data collection was done in June-July 2015, when the aftershocks were frequent and there were no hotels available, it was not feasible to stay too long in the villages conducting in-depth interviews. The paths to the villages were littered with debris of landslides and people were still coping with the trauma of the earthquake. So, immediately after such a devastating event in which people had lost loved ones and property, it was considered inappropriate to burden households with interviews. Therefore this study is based on primary information collected through focus group discussions and interviews with key informants. Some individual interviews were conducted with persons willing to share their experience to support the analysis.

To obtain different views, care was taken to interview both women (including single women) and men (including migrant returnees) as well as people from different age groups (students, youths, adults, and elderly people). The study relies heavily on the experiences rather than hard facts, as also on people's thoughts and plans for recovery and rebuilding. In the absence of hard data, the study uses narratives and case studies to illustrate the impressions from the field.

Extreme care was taken not to offend the people in local communities while gathering information. Accordingly, instead of conducting 'formal' interviews, the study team asked people to 'share their experiences'. Because members of the study team had also experienced the earthquake and its trauma, focus group discussions were used to exchange such experiences. In addition, the study has drawn on available secondary information.

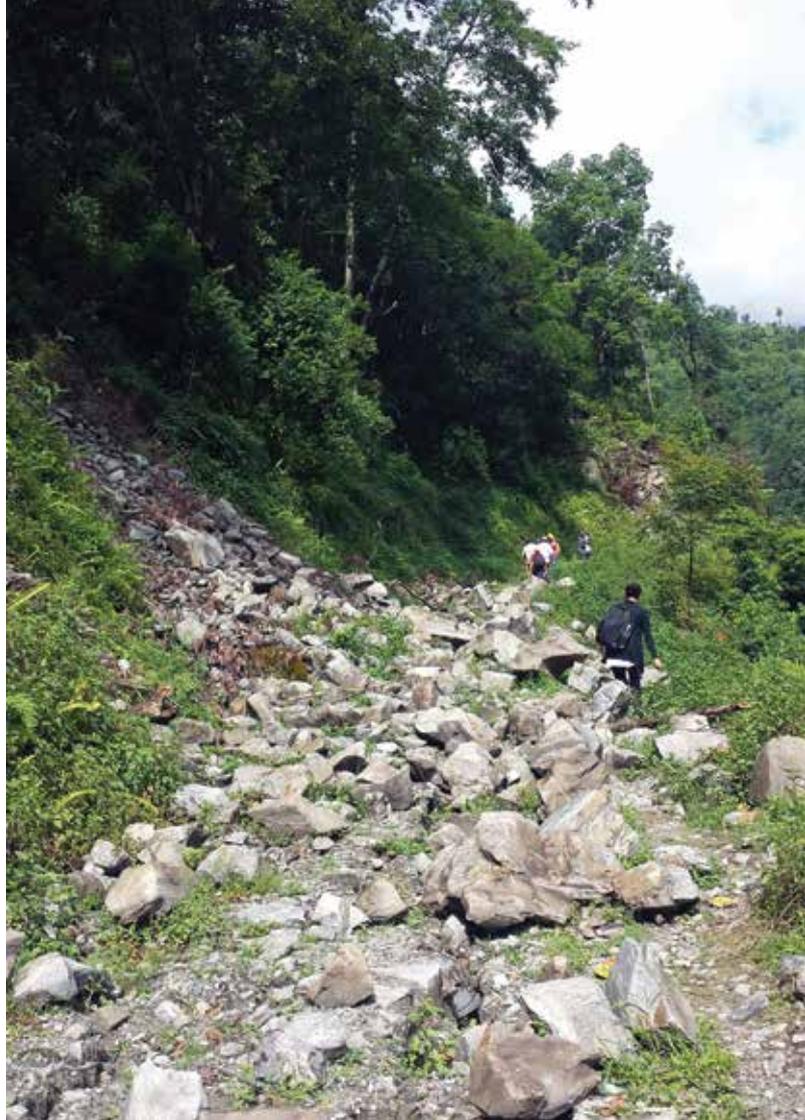
The focus was mainly on international migration – cross-border to India as well as other destinations abroad. At the same time, information was collected on internal migration when feasible.

Gathering information in VDCs with a high rate of female migration (such as Ichok village in Sindhupalchowk) posed many challenges. The most important was that people were not inclined to share information about it as a result of the stigma attached to women's migration. The aversion of people to any information gathering is illustrated by an incident reported in Box 1.

Information on women migrating independently to India to work either as domestic workers or sex workers was not sought. We were keeping in mind the sensitivity attached to the topic as much as the thin rapport the team had managed to build in the short time allowed for fieldwork. Any research focusing on this topic would need to spend a significant amount of time with the communities building trust. Also it would need to show a strong and tangible benefit to the women migrants themselves.

## Study districts

Nuwakot and Sindhupalchowk districts were selected for this study, based on two criteria: the extent of damage caused by the earthquake and the intensity and diversity of migration patterns. Both districts fall under the severely-hit category of earthquake



**Falling rocks blocking a road in Sindhupalchowk**

### Box 1: Stigmatizing women's migration

In Ichok village, Mr Bire Tamang, chairperson of the local school committee, was supposed to assist the study team in the field survey. But when we reached the village, everybody we asked, including an old man of about 70 years, said that there was no person of this name in the village. So we decided to seek the help of local school teachers and headed towards the school. After sometime Mr Tamang himself came to the school to meet us and we found out that the old man whom we had approached earlier, was his father. Mr Tamang Senior later explained that he had not wanted to identify his son to an outsider, particularly after hearing the purpose of the visit.

Initially, all villagers insisted there were no migrants, particularly female migrants, in the village. But, after an hour of talking and rapport building, people started to open up and provide us with information about the migration situation in the village. They said they do not tell people that their daughters have migrated (instead saying that they had gone to Kathmandu), for they want to erase a stigma that had become attached to the whole village due to media coverage about the village being a hub for women working in brothels in India.

Map 2: Study districts and VDCs



damage (NPC 2015). Although the level of migration is average there (compared to national figures), the districts are characterized by diverse migration patterns and high female migration (about 34% of total migrants in Sindhupalchowk and 13% in Nuwakot as against approximately 12% nationally) (CBS 2012; DoFE 2014).

Sindhupalchowk district was the hardest hit by the earthquake. Although the epicentre of the main 7.8 shock on 25 April was in Gorkha district, Sindhupalchowk was the epicentre of several huge aftershocks, including the one of 6.8 magnitude on 12 May 2015. The district recorded the highest number of fatalities and injuries and had the most damage to houses and infrastructure.

Nuwakot was the next hardest hit in terms of damage to life and property (ICIMOD 2015). The losses of life, property, and livestock are given in Tables 1 and 2.

Apart from infrastructure and livestock, the earthquake has significantly damaged trade and tourism (domestic and

Table 1: Loss of life and infrastructure in study districts

District	Fatalities		Injured	Infrastructure				
	Men	Women		Total houses (Census 2011)	Private houses	Government buildings	Health facility	Affected schools
					Fully/partially damaged	Fully/partially damaged	Fully/partially damaged	
Sindhupalchowk	1,559	1,998	1,569	60,042	63,885/2,751	710/37	74/23	546
Nuwakot	466	643	1,050	55,456	75,562/4,200	15/14	55/44	485

Source: CBS 2012; ICIMOD 2015

**Table 2: Total economic loss and loss of livestock in study districts**

District	Total economic loss (billion NPR)	Livestock		
		Big	Small	Birds
Sindhupalchowk	appr. 5	6,118	15,893	105,693
Nuwakot	appr. 2	2,405	4,770	18,271

Source: ICIMOD 2015

attraction for domestic tourists.

## Study VDCs

Five village development committees (VDCs) were selected for the field survey: two from Sindhupalchowk (Ichok and Mahankal) and three from Nuwakot (Tupche, Manakamana, and Taruka). Selection of the VDCs was based on migration prevalence using absentee population data of the Population and Housing Census 2011 (CBS 2012).

Since the field study was conducted during the monsoon, many rural areas were not accessible by car and the study team had to walk to reach villages. This was not always possible due to time constraints. Moreover, landslide risk made targeted villages in Tupche difficult to reach, so Manegaun village in Manakamana VDC was visited, instead of Wards 4 and 5 of Tupche VDC.

An effort was made to select VDCs with high male and female migration to analyse their differential effects. As indicated earlier, reaching high female migration VDCs proved difficult, because of the stigma attached to women's migration. Ichok was the only high female migration VDC we could study as a consequence. Some information on the population and absent (migrating) population in the selected VDCs is given in Table 3.

As Table 3 shows, Ichok has the highest level of female migration, and about 10% of the total female population of the VDC. In Ichok it is even quite common to find households in which more than one woman has migrated. For example, one respondent shared that three of his six sisters had migrated abroad. In all other VDCs, female migration accounted for less than 10% of total migrants and less than 2% of the total female population in the VDC.

**Table 3: Total population and absent population in study VDCs**

VDC	Total households	Absent households		Population			Absent population			
		No.	% of total	Total	Male	Female	Total	Male	Female	Female % of total
<b>Sindhupalchowk</b>										
Ichok	1,270	366	28.8	5,387	2,630	2,757	559	299	260	46.5
Mahankal	1,024	294	28.7	4,843	2,280	2,563	280	238	42	15
<b>Nuwakot</b>										
Tupche	1,279	316	24.7	5,286	2,401	2,885	426	387	39	9.1
Taruka	1,127	391	34.7	5,233	2,335	2,898	573	516	57	9.9
Manakamana	789	323	40.9	3,321	1,537	1,784	419	384	35	8.3

Source: CBS 2012

international) in both study districts. The road to Tatopani (a major Nepal-China trade route) in Sindhupalchowk was one of the most severely affected with many land-slides in the rocky hills blocking the roads.

The earthquake had also caused significant damage to historical monuments such as the Saat Tale Durbar in Nuwakot, which is a prominent

**Saat Tale Durbar in Nuwakot after the earthquake**

In the selected VDCs, based on secondary data and information given by key informants, 1 to 2 wards with high migration were selected for interviews and discussions with local people. The wards visited were: Ichok (Ward 6), Mahankal (Wards 4 and 5), Tupche (Wards 1 and 3), and Taruka (Ward 6). The study team walked to reach these wards, while interviews were held with people from other villages along the way. People participating in group discussions were often from more than one ward, because people interviewed related more to their village (of which some were divided into 2 or more wards) than their ward.

# Migration and Remittances Situation in Nepal and the Study Districts

Migration provides remittances, which are counter-cyclical and generally increase or remain stable after natural disasters and during economic crises and armed conflicts (Clarke and Wallsten 2003; Mahapatra et al. 2009). They are an important adaptive strategy for households during disasters. But migration also reduces the labour force needed to recover from such disasters, such as the Gorkha earthquake. Although there is an increasing body of work focusing on remittances and crisis, there is little understanding of the effect of the loss of labour, as a result of migration, on emergency and recovery needs.

## Migration in Nepal: Flows and destinations

Until the early 1980s, labour migration from Nepal was more or less restricted to India. From the late 1980s, the destination diversified, with Nepalese migrants migrating in significant numbers eastward to Southeast Asia and the Far East and, from the mid-1990s, westward to Gulf countries. The proportion of migrants leaving for India reduced from 90% in 1981 to 77% in 2001 and 37% in 2011 (Kansakar 2003; CBS 2012). On average, more than 1,500 people leave Nepal each day to work in overseas destinations. About 25% of the total households in the country have at least one absent member (CBS 2012).

India, the Gulf countries, and Malaysia are the main destinations for Nepalese migrant workers. Migration to other areas (Europe including the UK, USA, Japan, Australia, Canada, etc.) is very limited; most of such migrants go as students. Figure 1 shows the trend in international migration. It does not cover migration to India, since there is no system of data collection on account of an open-border policy with freedom of mobility of people between the two countries.

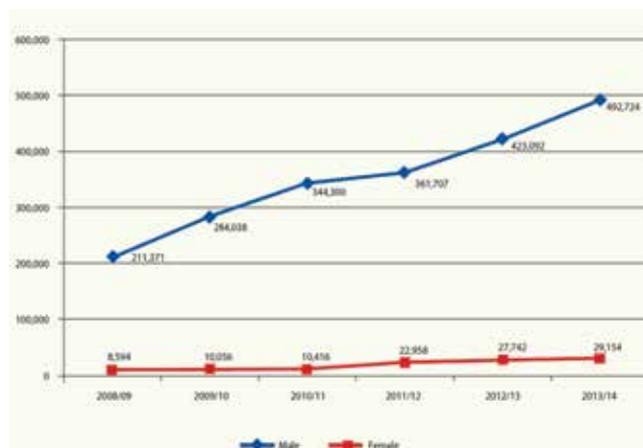
Although, in absolute numbers, international labour migration in Nepal does not attract global attention, it is ranked third globally for its remittance share of GDP (World Bank 2015). Migration is also highly gender-biased, with only 13% of total international migrants being women (DoFE 2014). In recent years, international labour migration of women has been on the rise.

While cross-border migration to India may be individual or family-based, almost all other international migrants go individually leaving their families behind, including their spouse and children (Pun 2013). Cross-border migration may be seasonal or annual, but other international migration is generally for a period of 2–3 years. The majority of Nepali migrant workers is doing low-skilled work, with some working in semi-skilled jobs such as plumbers, electricians, scaffolders, and drivers. (World Bank 2011; Wasti 2012).

## Remittance trends and uses

With the increase in migration and diversity of destination, remittances have also increased over the years, as shown in Figure 2. The country received NPR 1.49 billion (USD 15 million) daily in remittances in 2013/14 (My Republica

Figure 1: **International labour migration from Nepal: 1993-2013**



Note: The figures do not include migration to India  
Source: (DoFE 2014)

2014). The share of remittance income of the country's GDP has increased from 11% in 2003/04 to 28% in 2014/15 (ADB 2015).

These figures only include transfers through formal channel; a significant amount is transferred informally (through 'Hundi'), and so is difficult to calculate. Cross-border migrants mostly transmit remittance through informal channels (carrying in person). So, in reality, the contribution of remittances is far higher than the numbers given in Figure 2.

The percentage of households receiving remittances increased from about 23% in 1995/96 to about 56% in 2010/11. The average remittance per recipient household increased from NPR 15,160 (USD 280, which is 27% of the total household income) to NPR 80,436 (USD 1072, which is 31% of the total household income) during the same period (CBS 2011). This clearly illustrates the importance of migration and remittances, not only for the national economy, but also for the welfare of receiving households.

In most cases, the remittance amount is not large enough to enable investments in large enterprises; remittances are mostly used to meet daily household-consumption needs (about 79%) and to repay debts (7%). Other uses are: to acquire household property (5%), for education (4%), capital formation (2%), and other purposes (3%) (CBS 2011).

## Effect of migration on gender roles

Since migration is male dominated, it has implications for gender roles and responsibilities at community level. Migration in Nepal depends greatly on social networks (Maharjan 2010). Once migration begins in a community, it grows over time with the strengthening of migrant social networks. As a result, population dynamics within communities with more male outmigration become increasingly skewed. For migration brings about changes in existing gender-based divisions of labour and responsibilities with respect to workload and decision-making.

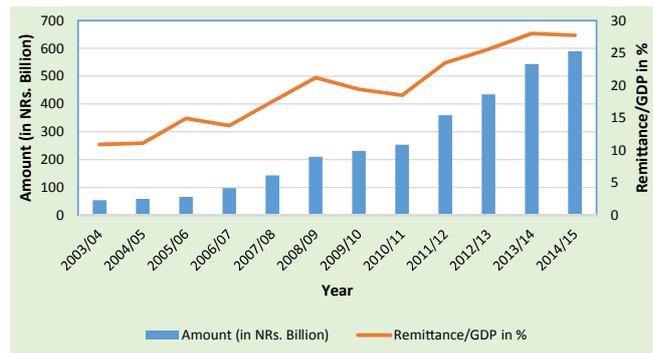
On the one hand, there is now more work and responsibility for the women left home. On the other, as most studies show, this increase in workload and responsibilities has been without a corresponding increase in control over resources and assets (Adhikary and Holey 2011; Kollmair and Hoermann 2011; Nellesmann et al. 2011; Maharjan et al. 2012; Khadka et al. 2014; Sugden et al. 2014).

This is also expected to have an effect on the capacities of households to cope and adapt to the effects of the recent earthquakes.

## Migration and remittances in the study districts

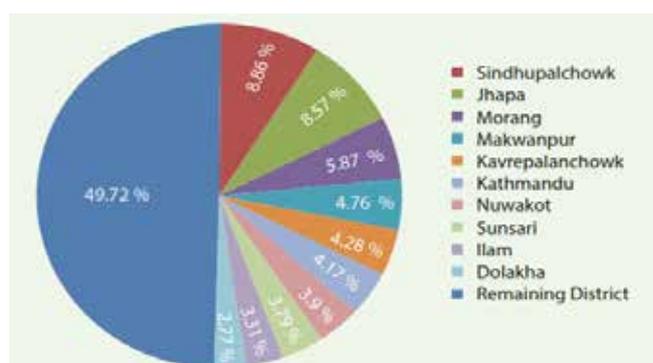
According to the Population Census 2011, about 19% of households in Nuwakot and 21% in Sindhupalchowk have at least one absentee (migrant) member. Both these figures are lower than the national average of 25%. The proportion of women in the absentee population in both districts is higher than the national average (12%), at 13% in Nuwakot and 34% in Sindhupalchowk (CBS 2012). The latter is the origin district with the highest female overseas migration in Nepal (DoFE 2014, see Figure 3).

Figure 2: Remittance trends: 2003/04–2014/15



Note: Figures for 2014/15 are for the first 8 months only  
Source: (MoF 2015)

Figure 3: Proportion of female labour migrants from top ten origin districts: 2008/09–2013/14



Source: (DoFE 2014)

Although there are no data for overall migration, the figures for migration overseas (to countries other than India) - based on labour permits issued by the Department of Foreign Employment - indicate a tremendous growth in migration in the districts since 2011. (This was the year of the last census). So it may be assumed that migration, particularly overseas, and corresponding remittances have gained importance as a livelihood strategy in both study districts as well. In 2014, for example, the estimated total amount of remittances received in Nuwakot was USD 86.4 million and in Sindhupalchowk USD 94.4 million.

The destinations for migrants from these two districts are given in Table 4. The main destinations are India, and Middle-eastern and ASEAN countries (like Malaysia).

**Table 4: Absent population in study districts by sex and migration destination**

District	Sex	Total absent population	India	Middle East	ASEAN countries
Sindhupalchowk	<b>Total</b>	<b>19,712</b>	<b>4,877 (25)</b>	<b>9,164 (46)</b>	<b>4,008 (20)</b>
	Male	13,035	3,443 (26)	4,763 (37)	3,785 (29)
	Female	6,677	1,434 (21)	4,401 (66)	223 (3)
Nuwakot	<b>Total</b>	<b>14,311</b>	<b>3,232 (23)</b>	<b>6,801 (48)</b>	<b>2,675 (19)</b>
	Male	12,466	2,621 (21)	6,048 (49)	2,580 (21)
	Female	1,844	611 (33)	752 (41)	95 (5)

Note: Figure in brackets is percentage of total absent population  
Source: CBS 2012

## Migration in the study VDCs

While choosing the wards in Mahankal and Ichok VDCs, the study team referred to a Water Use Master Plan developed by the VDC office. This document reported that in Mahankal Ward no. 5 there were no overseas migrants. But during the field visit and interactions with key informants (the head teacher of the local school and the local priest), the migration scenario was found to be very different from that reported in the Master Plan. Villagers mentioned a total of 55 migrants (including 20 women) and said that the most popular migration destinations were the Gulf and Malaysia.

**Table 5: Extent of migration and main migration destinations in study villages**

VDC	Ward	Village/ tole	Total households	Number of migrants			Major destinations	
				Total	Male	Female	Men	Women
Mahankal	5	Kharbhujje	36	55	35	20	Gulf countries, Malaysia, India	
Mahankal	4	Chitre	31	30	25	5	2 India, 23 Gulf	2 South Korea, 3 Cyprus
Mahankal	4	Pipse	34	10	6	4	Malaysia and India	
Ichok	7	Kot Gaun	22	10	8	2	Malaysia, Gulf	
Ichok	3	Lama Tole <sup>1</sup>	46		NA	NA	7 in Malaysia & Dubai	7 Kuwait
Ichok	5	Gairi Thok <sup>1</sup>	48		NA	NA	Gulf and Malaysia	
Tupche	3	Chhaphthok	41	19	19	-	Gulf and Malaysia	
Tupche	1	Dandathok	32	13	12	1	Gulf and Malaysia	Japan
Manakamana	2, 3	Manegaun <sup>2</sup>	1,36 <sup>3</sup>				Gulf, Malaysia, Afghanistan, Iraq	Gulf countries, Turkistan, Israel, Cyprus
Taruka	2	Thulpokhare	30	27	25	2	12 India, 15 Gulf countries	1 Israel, 1 Kuwait
Taruka	5, 6							

Notes:

<sup>1</sup> Except for a few households without able-bodied persons, all other households have 1–5 members who have migrated to India, e.g., in Lama Tole only 4 households did not have a migrant

<sup>2</sup> Almost 75–80% of households have at least one migrant overseas

[http://manegaun.blogspot.com/2015/05/nepalnuwakotmanakamanamanegaunearthquake\\_16.html](http://manegaun.blogspot.com/2015/05/nepalnuwakotmanakamanamanegaunearthquake_16.html)

Source: Field survey

This disparity in data could be due to several factors including the reluctance of people to give migration-related information, enumerators not asking the right questions or probing incorrectly or insufficiently, and a lack of trust between enumerators and local people. The extent of migration and the main migration destinations in the villages visited are given in Table 5.

The study found that migration patterns in the study villages are diverse and differ with the altitude of a village. Lower-altitude villages (near the river) had less international migration, whereas the incidence of migration increased gradually with higher altitude.

The office assistant at Ichok VDC gave the following reason for it:

*In the river base there are irrigation facilities, which makes growing three crops a year possible, so there is no economic compulsion to go for migration. In the upper areas there is no irrigation and so only two rainfed crops are grown. Also, because of climatic conditions, crops take longer to grow in higher altitude areas. This makes sustaining livelihoods based on agriculture alone almost impossible in the upper areas of the VDC and people are forced to migrate.*

Migration patterns in the study sites were also found to differ according to the ethnic composition of a village, with migration more prevalent among the Tamang and Lama than Brahmin and Chhetri. Ethnicity also differed with altitude. In lower-altitude villages, the majority of people belong to Brahmin and Chhetri ethnic groups, whereas higher up people are mostly from the Tamang and Lama groups. This pattern was observed in both study districts. A possible reason for higher migration among the Tamang and Lama is that most of the more fertile land at lower altitudes is held by so-called high-caste groups or ruling groups (i.e., Brahmin and/or Chhetris).

In addition, an inverse relationship was observed between productivity of land (and availability of irrigation) and migration. The productivity of land decreases gradually from lower to higher altitudes, while the incidence of migration increases. Establishing this relationship would require further investigation.

There was also a diversity in migration destinations among the study villages. In Ichok Wards 3 and 5 and Taruka Wards 5 and 6, migration was predominantly cross-border to India. In other villages studied, it was chiefly overseas to Gulf countries and Malaysia. It is not clear why this disparity in migration destination exists and seeks further study.

The migration destination also varies according to ethnic group and social background of the community. For example, while Brahmin/Chhetri/Newars prefer migration to India (Taruka) or the global North (USA, UK, mainland Europe, Japan – Tupche) and internal migration to Kathmandu (Mahankal), Tamang/Lama prefer to migrate to Gulf countries and Malaysia (Mahankal, Taruka, Manakamana, Tupche). In Ichok, even Tamang mostly migrated to India.

The destination choice seems to be based on the traditional social background of the community. Since Brahmin/Chhetri/Newars come from the more privileged or ruling classes, which are generally economically better off, they can afford to go to the global North or to better paying jobs and businesses in Kathmandu. But people from the Tamang community do not enjoy this advantage and tend to migrate to the Gulf. Ichok, thanks to its historical migration trend to India, continues this trend even today.

The study also found that migration to India is diverse in terms of destination choice, time spent, and sector of work. For example, while migration from Ichok is mostly seasonal, in Taruka it is year round. This is due to the seasonality of work and the weather conditions in the migration destination. Migrants from Ichok mostly migrate to Ladakh, Jaskar, and Jammu and Kashmir to work in the construction sector (roads, houses) and to Himachal Pradesh to work at apple farms. Both these types of work are seasonal in nature. From Taruka, people migrate to cities such as Delhi, Bangalore, Pune, and Goa, to work in the hospitality industry (hotels, restaurants, small roadside food stalls). These are year-round jobs.

With respect to female migration, the study found it had remained the same in core origin areas, only the destination had diversified. For example, in Manegaun, it was communicated in a focus group discussion that

women from the village had started migrating to Kurdistan (potentially referring to a region in the northern part of Iraq) and Cyprus, to work as domestic . Participants in the discussion mentioned that, so far, the experience had been positive (no exploitation) and the earnings much better than in more common destinations such as Kuwait, Dubai, and the Lebanon.

The destination for male migrants had also changed: there was a tendency for men from the study villages to graduate from cross-border migration to India to overseas destinations. Again, the reason cited for this change was the potential to earn a higher income.

# The Effect of Migration on Rescue and Relief Processes, and Recovery Plans

This section is divided into three sub-sections, which provides answers to the three research questions:

- What is the effect of migration on post-earthquake rescue and relief processes?
- What will be the demand for labour in the recovery process and what are the implications for migration?
- What are the thoughts and plans of the people to rebuild assets and livelihoods?

## Post-earthquake rescue and relief processes

### Rescue

Immediately after the earthquake, the first priority of people was to rescue any persons trapped inside collapsed buildings, followed by the rescue of livestock and other assets. For rapid rescue, the higher the number of able-bodied people, the quicker the rescue and the better the chances of survival of those trapped. So, the availability of youth in a village is crucial during the rescue phase.

This was particularly so in the study villages, since most houses had been made of stone, so, a complex technology would not be required to remove rubble. But many high-migration villages in the earthquake-affected districts suffered from a lack of youth, particularly young men. This did hamper activities such as rescuing people from rubble, carrying the sick to hospital, and carrying the dead to the cremation grounds. So the first research question came down to: How has the absence of young men and women from the study villages affected post-earthquake rescue efforts?

Immediately after the disaster, migrant households (particularly those with fewer able-bodied members) were more vulnerable than non-migrant households because of the absence of able bodied men in the house. However, no indication in any of the villages studied was given of differential experiences of migrant households, women-headed households, or households with fewer working-age persons in rescuing trapped people.

Apart from presence or absence of able bodied members, several other factors played an important role in the rescue efforts such as the proportion of people in the village who were trapped versus those safe, the ability of communities to organize themselves into groups to commence rescue work, the isolation of households from the main village cluster, and so forth.

In order to cope with reduced labour availability and large scale of damage, people in many villages used a group approach to rescuing. Formation of groups was based on various forms of affinity, such as people who had migrated together, people belonging to an extended family, and youth who were participating in a group sport. Despite, self-organization, houses away from the main village faced the most difficulty as the rescue efforts were more focused in the clusters.

### Rescue of household assets

In the rescue of animals and other household assets, the experience of families with and without sufficient able-bodied members differed significantly. Since recovering household assets was both time consuming and less

important than rescuing human life, families with less able-bodied members – migrant households, households with only older people and children, households with disabled persons – suffered higher losses than other families.

This situation is illustrated by the case of an elderly couple, Mr and Mrs Paudyal from Dandathok village in Tupche, presented in Case Study 1.

Households with only women, old people, and children were forced to take desperate measures including breaking gender-based taboos, as illustrated in Case Study 2.

### Case Study 1: **Losing everything in old age**

Mr D. Paudyal is 76 years old and his wife Mrs P.K. Paudyal 71 years. All their children (3 sons and 2 daughters) are married with their own families. They live by themselves, in a house next to their youngest son. In their long lives, Mr and Mrs Paudyal had already experienced many painful events such as the death of their eldest son and daughter. Their remaining two sons also do not live in the village, for they had migrated to Dubai for work. The eldest grandson (aged 23), the first born of their eldest son, had joined his uncles in Dubai to support the study of his brother and sister.

When the earthquake hit, the entire family had only women, old people, and children in the house. The couple tried to rescue a few things from the rubble but it was too much of an effort for old hands. The only able-bodied person with them was their daughter-in-law, who was already struggling taking care of her small children. So the couple lost almost everything, including even a change of clothes.

Mr and Mrs Paudyal's sons returned 10 and 15 days after the earthquake and helped the couple by building a temporary shelter. Both sons have now returned to Dubai. Losing everything in this old age was difficult, for they were already heavily dependent on support from their children. The earthquake had not only taken their assets, but also their freedom to live life their own way, for now they are even more dependent on their children for survival. 'It is painful to be a burden on your children at this age after a long life of living independently.'

### Case Study 2: **Breaking gender-based taboos out of desperation**

Bimala lives with her parents-in-law, sister-in-law, and two children (aged 1 and 3 years). Her husband works in Malaysia. When the earthquake happened, luckily, all of Bimala's family were outside. Her house was damaged, although it did not completely collapse. Because she had built the cow shed outside, the livestock was also spared. Without able-bodied male family members, it was not possible to rescue anything from the house. All her neighbours were busy rescuing their own belongings, so there was no point seeking their help. She lost a large amount of stored food grains.

When it started to rain at night, finding dry shelter for her family, particularly her two small children, was a challenge. Out of desperation, she and her sister-in-law had to climb among the debris of the old house to take out galvanized iron sheets from the roof. This is a taboo, according to Hindu culture, but she had no other option to keep her family dry and safe.

Finally, after almost a month, Bimala got some help from her brothers to recover usable stuff from the rubble. She is now building a temporary shelter using hired labour.

Bimala is very stressed since the earthquake, both physically and emotionally. The added responsibility and the trauma of the earthquake are too much for her to handle and she wishes her husband would return home. He also wants to return, but has been unable to get permission from his employer.

## Relief

Literature indicates that during and after a disaster, remittances play an important role in meeting emergency and recovery needs of people (Fagen 2006; Wu 2006). Although there is growing evidence of the importance of remittances in the recovery phase, their importance immediately after the disaster (1–7 days after the event) during the relief phase is difficult to ascertain. The experience in other countries has been mixed.

In Samoa in a tsunami disaster of 2009, 90% of disaster-affected households received remittances and, of these, 17.5% accessed remittances on the same day and 30% between 2–7 days later (Le De et al. 2015). In Pakistan, after the 2005 earthquake, for a short period both remittance recipient and non-recipient households were equally vulnerable and dependent on external food aid (Suleri and Savage 2006). In Nepal, as the markets remained closed for 7–10 days after the earthquake, access to remittances was not possible. Also, because of continuous aftershocks, people were not willing to venture out of the village to collect that money. So, similar to the experience of Pakistan, at least for a short period of time, both migrant and non-migrant households were equally vulnerable immediately after the earthquake.

Suleri and Savage (2006) also report that after the 2005 earthquake in Pakistan, remittances were important in accessing relief distributed by government and non-government organizations, since they covered transportation costs to reach the distribution centres. So, to better understand the process followed in the distribution of relief materials and money, and the ease of access of various groups to support, the study team interviewed key persons who had either been involved in the distribution or played an important role in the decision process. The study team also participated in some relief distribution (of hygiene kits, seed bags, and tarpaulins) by Oxfam International in Rautbesi VDC, Nuwakot, to understand the process and to see if there were houses left out.

### Access to government relief support

The study found that access to government relief support had been hindered by a lack of official documents. The government had twice announced cash relief support to households in the affected districts. The first amount was NPR 7,000 to meet basic needs and the second was NPR 15,000 to support the building of temporary shelters. To collect the government relief money, a valid document such as a citizenship card is mandatory. As the Assistant CDO of Nuwakot, Mr Ghimire, pointed out, there were a number of challenges involved in presenting such documents, though, including loss by the CDO's office of documents in the rubble, loss of documents by households, and discrepancies in data between the 2011 census and people's claims, and so on. As a result, many vulnerable households were unable to produce the relevant documents and were left out of this government relief support, including the migrant households. Some migrant households shared that their husband had not left the relevant documents and so they were unable to access the Government relief support.

### Access to other relief support

Many national and international organizations were also providing communities with support such as food grains, seed storage bags, safe drinking water, sanitation, hygiene kits, and tarpaulins. The coverage of these organizations was much larger than initiatives by private citizens or the diaspora. Their relief support was also much more organized. All the same, even international organizations had their limitations, and their efforts were generally concentrated in areas where they already had some interventions. So this formal network also played an important role in providing access to resources.

Even in areas selected for relief support by international organizations, some challenges had to be faced. In the relief distribution by Oxfam International in Rautbesi VDC, 94.77% of the listed households were present to collect the materials. Interestingly, their team revealed, they had a case in another VDC where almost 15% of the households had not come to receive relief materials.

Households that had been usually left out of relief support were:

- Houses away from the main village cluster, which were often missed or received delayed communication about the distribution of relief support
- Houses without young people to carry the relief support (particularly heavy stuff like bags of rice and galvanized iron sheets) and, so, often unable to collect relief materials
- Since migrant households often have fewer able-bodied persons (due to migration), they were among the households left out of relief support.

### Migrant social networks – a lifeline for access to relief support

Private individuals, youth groups, and the Nepali diaspora played an important role in providing relief support immediately after the earthquake. In many instances they were the first groups to reach the villages. The extent of such support was determined by the social networks (interpersonal ties linking kin, friends, and community members in their places of origin and destinations) that the village enjoyed, both national and transnational. The stronger and wider such social ties, the quicker and better the access to relief support.

Migration is also a co-insurance strategy for households, because the migrant and the household insure each other against various risks (Stark 2001). So, at household level, remittances are expected to play an important role in coping after disasters. Our study revealed that benefits of migrant social networks go beyond migrant households, though.

In some cases, not only immediate neighbours, but the entire VDC had benefitted from a migrant social network. Some cases, as shared in the focus group discussion in Manegaun village in Nuwakot (Box 2), clearly show that, more than financial remittances, migrant social networks play an important role in access to relief support in times of disaster.

## Box 2: How a migrant social network helped the community access relief

### Internal social networks

Mr U. Lama runs a travel agency in Kathmandu. He migrated there from Manegaun village more than a decade ago. When he heard about the destruction in his village caused by the earthquake, he used his strong networks in Malaysia to collect funds to help people in his village with essentials such as tarpaulins and blankets. He even organized two health camps for those who had sustained injuries during the earthquake.

In another case, a villager who worked at the Manang and Marsyangdi Club in Kathmandu, used his connections to support his village with a stack of galvanized iron sheets for each household.

### Transnational networks

Ms M. Kumari's son works in Qatar as a bus driver. He started his migration journey as a labourer in Saudi Arabia, where he worked for seven years. After that he went to Qatar, where he has been working for the last six years. When he learnt about the destruction that the earthquake had wrought in his beloved village, he sent NPR 70,000 home to purchase basic food for the entire village. Each household was provided with 15 kg of rice, half a litre of oil, and some lentils (to make the regular staple food 'daal bhat'). Ms Kumari feels proud of the contribution her son had made, not only to her house, but to their entire village.

Ms M. Lama is the daughter of a villager and married to a Nepali working in the British Army. She has settled in the United Kingdom with her husband. When she heard about the destruction caused by the earthquake in her home village, she wanted to help. She distributed 1,000 rupees per household to her 'maiti' (maiden village).

Ms M. Tamang, a migrant in South Korea, supported the entire Tupche VDC (1,296 households) with a sack of rice. To her own village she provided extra supplies such as oil and salt.

Mr S. Akshya, a student in the USA, supported 83 households in his village with a stack of galvanized iron sheets to build temporary shelters.

Source: Field survey

## Role of Nepali diaspora in relief support

Diasporas generally share a very strong emotional, familial, and cultural bond with their country of origin. So, in disasters, they tend to take a very proactive role in support of the affected communities, as seen in the Philippines (Typhoon Haiyan in 2013), Pakistan (earthquake in 2005), Sri Lanka (tsunami in 2004), Bangladesh (flood in 1998), and Jamaica (Hurricane Gilbert in 1988), to name a few. The globally-dispersed Nepali diaspora also actively participated by fund raising and contributing their own funds for relief and recovery after the earthquake. Such funds were transferred either through personal contacts, local NGOs, or international humanitarian organizations such as the Red Cross.

Some diaspora organizations have also been directly involved in relief support. For example, the Non Resident Nepali Association (NRNA) collected NPR 267 million (USD 2.69 million) for earthquake relief and reconstruction; actively participated in relief work by mobilizing more than 300 volunteers (doctors and nurses among them); and pledged to rebuild 1,000 disaster resilient houses. One of the study villages, Ichok, also received support from the Nepali diaspora in the United Kingdom (The Kathmandu Post 2015b).

## Demand for labour in the recovery process and its implications for migration

The damage to physical infrastructure, particularly private houses, is expected to create a huge demand for labour in the construction sector in the near future. It is difficult to estimate this demand, as it will depend on the capacity of households to rebuild their houses. New migrant trends indicate that migration is unlikely to slow down, unless the anticipated labour demand materializes in the short term.

Migration itself also brings new skilled labour into the market. Financial remittances are not the only benefit of migration. The earthquake has created new opportunities for some people in specific sectors and with specific skills. The daily wage rates for workers in both the agriculture and construction sectors have increased in the last few years, and this has been accelerated by the earthquake. Ever since, the daily wage rate for skilled construction workers, for instance, increased from NPR 500 (USD 5) to NPR 800 (USD 8).

The demand for labour in the construction sector has increased significantly since the earthquake, particularly for skilled labourers such as carpenters and masons. This has created a market for skilled returnees who have either completed their migration cycle or are towards the end of the cycle. This increased demand could be a potential reintegration strategy for returnees, as brought out in Case Study 3.

Migration from Nepal has the tag of being mostly of unskilled workers. We found during the field visit, though, that many migrants from Sindhupalchowk who work in construction in India, have the skills

### Case Study 3: The earthquake has also opened up opportunities

Mr Sitaram B.K. is a returnee migrant. He worked as a fencing carpenter in a company in South Africa about 5 years ago. He put in less than a year before having to return home, for the company went bankrupt. His monthly salary had been USD 1,000, plus free food and accommodation. So he was able to keep some savings after paying back the loan he took to finance his migration. With these savings he started his own workshop in the village together with his partner Mr Raj Kumar B.K. He invested NPR 150,000 of his own and took a loan of NPR 150,000 from the Youth and Small Entrepreneurs Self Employment Fund. His business was doing well and growing, but the earthquake destroyed his workshop.

He is not disheartened though, for the earthquake had also created demand for his work. Since the disaster, he has been extremely busy constructing temporary shelters for people who have lost their houses. Now, he is brainstorming with his partner to construct a sample house that is earthquake resistant and uses local materials. If he could construct such a house for his own use, then perhaps others would want one. He believes that for semi-skilled persons in the construction sector, the job market is not that bad at the moment, even in rural areas.

to construct a house back home. They usually work in small groups and are entirely responsible for the whole construction.

This clearly indicates the availability of huge labour resources, which could be readily utilized in the reconstruction process. Since many of these potential migrants to India had to stay behind in Nepal due to increased landslide risks after the earthquake, the new opportunities in the country will help provide their families with food security. These households typically depend on their own production to meet their food needs for about six months and remittance income for the remaining six months. So, employment of this group of people would meet the immediate need for construction labour in the aftermath of the earthquake, and benefit themselves as well. How the market will connect demand and supply of such labour is a challenge, nevertheless.

Although still in the early stages, with aftershocks continuing till date, the overall impression is that this earthquake will increase migration from the affected areas. International experience after huge natural disasters also suggests that there will be an increase in migration, such as seen in Jamaica after Hurricane Gilbert in 1989 (Wisner 2003) and in Haiti after the earthquake in 2010 (Le De et. al. 2015). But, if the new opportunities in Nepal itself, particularly in the construction sector give sufficiently high earnings (that is to say, are not significantly different from potential earnings from migration), then the earthquake might reduce migration to some extent, particularly cross-border migration to India.

Very few respondents knew about the government support for returnee migrants who have lost a family member in the earthquake. Yet, it is interesting to note that almost all, particularly youth, knew about the new low-cost migration policy of the government (with free visa and free tickets to seven countries) and its date of operationalization. The study team was frequently asked if this policy would really be implemented and how they could benefit from it. There were also some respondents who were sceptical of the successful implementation of such a policy, but, in general, people were positive towards this policy of the government. Because they had lost so many assets in the disaster, financing migration would be an even bigger challenge than before the earthquake. That is why there was much positive feedback about this policy.

## Plans for rebuilding assets and livelihoods

As pointed out earlier, the earthquake had caused severe damage to assets and livelihoods of households in the two study districts. Their recovery would be a long-term task. As a women interviewee remarked: 'It will take us at least a decade to build back to our earlier situation.'

In all study VDCs, farming is the main occupation. People lost not only their food grains and livestock, but also their seeds and agricultural equipment. Because the destruction was so massive, it took people some time to return to normal life after the earthquake. This also affected intercultural operations (operations performed in the field after sowing but before harvesting) for standing crops, particularly for maize, and caused delays in the planting of new crops (paddy). Another immediate problem faced by households was the storage of rescued and harvested crops. Many houses had been completely destroyed and households did not have sufficient space to store their food grains. All these factors have reduced the overall food production and storage of households, compounding the damage caused by the earthquake.

The ability of households to recover and rebuild resilient livelihoods will depend on their present economic situation, the diversity of their incomes, and remittance earnings now and in the future, among other factors. Accordingly, rebuilding plans of migrant and non-migrant households are expected to differ.

## Migrant households

At the time of the field study, people were still struggling with the trauma of the earthquake, but had started to think about how to build back what they had lost. Considering the level of destruction, this would not be an easy task for any household to undertake. Many respondents were clueless about how to build back assets destroyed in the earthquake. The priority of most was to rebuild a house that would be earthquake and disaster resilient. Surprisingly,

there were very low expectations of the government, except for the provision of technical knowhow about disaster resilient housing. This is an important opening for the Government of Nepal to plan for such houses in rural areas.

When asked how they would finance the rebuilding of their livelihoods, responses varied significantly among respondents. Households with multiple remittance earners or with high remittance earners were more positive about rebuilding their livelihoods within a short period of time (one to two years). They were planning not only to rebuild, but to build back better, since they could afford to do so financially, thanks to their multiple sources of income, as illustrated by Case Study 4.

Even among migrant households, those involved in overseas migration with jobs and wages as promised, are more likely to rebuild their livelihoods quickly and better than cross-border migrants and overseas migrants with limited earnings. For such households to rebuild their destroyed houses and asset base will be a long-term goal. Yet for migrants who are towards the end of their migration cycle, the earthquake has posed a dilemma whether or not to return home or prolong their migration (Case Study 5). In many cases, the older generation is looking to the younger generation to recover lost livelihoods.

Some returnees (who came back more than a year ago) were now thinking of going abroad again to earn, to rebuild their lost assets and livelihoods. For example, Ashok Tamang, who had returned home two years ago after spending seven years in Malaysia, was now considering migrating again. He explained:

*How long can you live in a temporary shed?  
One has to build a small house at least. You cannot save enough here to finance building a new house. So now I have no option but to go back once again.*

None of the migrant households or migrants had considered ending their migration cycle; instead, the earthquake had created more and severe desperation among migrant households to continue migration. All those who participated in the study were of the opinion that, with the local-level destruction, it was even more crucial to have an additional, lucrative, and diversified source of income to rebuild lost assets and livelihoods.

#### Case Study 4: **Multiple migrants means multiple earnings and quicker recovery**

Bijay Tamang and Biraj Tamang both have siblings in foreign employment. Bijay's brother is working in Malaysia and his sister in Dubai. Similarly, Biraj Tamang has three sisters working in Kuwait and Jordan. None of their siblings have returned home for they want to rebuild their destroyed house, for which a significant amount of money would be required. So they decided to continue working abroad.

Bijay's father plans to build a new house after the main festival in November, while Biraj's father plans to wait a year or two. Both plan to build an earthquake resistant house, using reinforced concrete.

#### Case Study 5: **Return or stay back – the dilemma of older migrants**

Mr Rajendra Adhikary is now 45 years old. He has been living and working in Saudi Arabia for a decade now. He started his career there as a labourer, but now works as a driver. He has a wife and three children back home (studying in classes 9, 10, and 12). His monthly salary is about NPR 30,000, with which he is able to support his children to study. When the earthquake hit his village, his house was completely destroyed. Now he has a dilemma: how can he rebuild his destroyed house, support his children's studies, and meet other household needs? He now suffers from high blood pressure and is on a special diet, which is difficult to follow when he has to eat in the canteen. He wishes to be back home, but cannot afford to do so in the absence of another source of income. For now, the family plan is to live in a temporary shelter (for 3–4 years) and invest the remittances in the schooling of the children, so that they can then migrate and earn to rebuild their house.

In some of the communities visited, migration is not only a household livelihood strategy, but a community strategy to maintain basic necessities, as illustrated in Box 3. The vulnerability of these communities has been increased by the earthquake, which make migration options even more important for them.

### Non-migrant households

In the study sites, agriculture is the main source of livelihood and income for families. But agriculture is mostly subsistent in nature or, at best, done on a small commercial scale. So savings from farm income to build earthquake resilient houses and livelihoods is a difficult task. Rebuilding assets and livelihoods will be particularly difficult for households with limited landholdings and limited off-farm income opportunities, and for daily-wage workers.

To make farming profitable, significant improvement of structural bottlenecks (irrigation, agricultural inputs, and market access) would be necessary. That is why even non-migrant households are looking at migration options since the earthquake. As one of the key informants, Mr Bhim Karky, resource person at the District Education Office, shared:

*Those households that have businesses, remittances, or salaried jobs can rebuild their house in a couple of years, but those without an income source other than farming will have no option but to migrate themselves or wait for their children to migrate to rebuild their livelihoods.*

Even before the disaster, to maintain a comfortable livelihood status required multiple sources of income. After the disaster, how to organize additional funds for the recovery of lost assets has become the big question on the minds of the affected households (Case Study 6). Houses without remittance earnings were even less optimistic about building back their livelihoods.

In rural areas, the market for non-farm income generation is generally small. The earthquake had also damaged private business assets and production systems. This had reduced the purchasing power of the villagers, which would further reduce local markets. The lack of sufficient income opportunities would likely increase migration. The case of Mr Bharat Karky in Case Study 7 illustrates this situation.

But the extent of migration as a livelihood option is also influenced by the generation of new work in local areas in the construction sector and the rapidity of recovery of the local economic situation. With respect to the latter, again, migration and remittances can play an important role.

### Box 3: Migration, a community survival strategy

Ichok village in Sindhupalchowk has a long history of migration to India. Lama Gaun in this village is a cluster of 46 households, of which each has at least one member who has migrated to India for work. In addition, 6–7 women have migrated to Kuwait and 6–7 men to Malaysia and Dubai. But overseas migration is relatively new (starting 6–7 years ago); earlier women also went to India to work as a domestic help and in brothels.

The main reason for the high level of migration is the lack of sufficient economic opportunities in the village itself. Agriculture is the only economic activity, but the village is located at a high altitude with steep sloping land that is not very fertile. In addition, there is no irrigation. So, farming is limited to two crops (maize and millet), the production of which is dependent on rainfall. The villagers also have a small amount of paddy fields in the lower lands and keep a few livestock to supplement their incomes. Large herds are not possible due to limited finances, fodder, and water resources.

The village now has a road connection, but it is only a fair weather road, making cultivation of perishable cash crops unsuitable. It is impossible for the entire village to survive on the resources available to the villagers at the moment. As a result, seasonal migration to India is used to supplement household incomes for survival. Some families migrate to India for longer periods of time. Year-round migrants to India and families with members in overseas employment forgo farming and let their fellow villagers use the land resources to supplement production at zero rent. This helps the more vulnerable families with no member suitable to migrate a way of supporting them to survive. Without an introduction of other sources of income, it would be impossible for people in the village to sustain livelihoods, and so, migration is a community survival strategy for Lama Gaun and many other villages in Ichok and neighbouring VDCs, such as Sursing and Pating.

### Case Study 6: **The woes of non-migrant households**

Mr K. Paudyal is a 42 year-old primary teacher at Dandathok village in Tupche. His monthly salary is NPR 19,900. He is married and has three daughters and a son. His wife, Mrs A. Paudyal, runs a small grocery shop in the village to supplement the household income. They also have some land, which they farm. Together they were making enough to live a normal life in the village, but with limited savings. Then the earthquake destroyed their house and other assets completely. Since their income is only sufficient to meet the basic needs of the family, Mr Paudyal is at a loss how to build a small home. He believes that it will take him at least 8–10 years before he can even begin to plan to build a house.

### Case Study 7: **Entrepreneurs suffer heavy losses**

Mr B. Karky was working as the head teacher of a local school and also owned a fresh water trout farm together with some partners. The earthquake had caused landslides in many places, which had made the river water muddy. Fresh water trout needs clear water, but due to the sediment in the water, the farm lost about 20,000 out of 25,000 fish. Because they did not have an insurance cover, it would be very difficult to recover this loss. Mr Karky now feels that, rather than investing in reviving the farm, he would finance his son to work in some European country, so that he could build a new house and have a comfortable life with the son's remittances.

## Role of women

In high male outmigration communities, the role of women in household activities, farming, and community work is already much more complex, and the load much more. Women had to shoulder the major burden of work involved in rescue and accessing relief support after the disaster. And they certainly would have to play a central role in the recovery process as well. Spouses of male migrants had to struggle to take care of the entire household, while also dealing with their own trauma after the earthquake. This had not been an easy time for these women, who were missing the support of their husbands. As Mrs B. Tamang shared:

*I miss my husband terribly since the earthquake. I am so tired of looking after my children, old parents-in-law, crops, and livestock. When everybody is crying for their loss of livestock, at times I wish that mine had died in the earthquake. It is just too much of a stress for me to take care of all of it. I wish my husband could come, but he can't, despite trying to persuade his employers to send him back.*

Considering the high workload and responsibility of women from migrant households, the study team asked the focus group discussion with women: 'How will the reconstruction take place in the absence of able-bodied men in the village?' The response from women in the discussion was that:

*Given the opportunity and vocational skills, we are more than willing to make the necessary contribution to reconstruction. There is no reason why women should not work as masons and carpenters, and construct their own houses and those of others. This would be a good income earning opportunity for us women. Why should we wait for our men to return?*

This shows the willingness of women to take up new roles and new earning opportunities, which will be important in the reconstruction of houses and livelihoods.

## Lessons for disaster preparedness and post-disaster response

People in the study areas were generally aware of the high possibility of a large earthquake striking Nepal. Despite such knowledge, there had been little preparedness to face such an event. This was the first earthquake of such a large magnitude in eight decades. So, this event should also be seen as an opportunity to learn lessons for possible

future disaster events and a preparedness to build more resilient communities. These are some important lessons that communities at the study sites have taken from this earthquake for future preparedness:

- The biggest lesson has been the loss of almost all livelihood assets in the earthquake and the need to spread the risks associated with various assets. For example, most livestock kept in sheds built outside the main house survived. Such sheds are generally more lightly built than the main house. So, even in the event of a shed collapsing, livestock survived, compared to those kept inside the main house, which were buried under debris when the house collapsed.
- It is common knowledge among migration academics and practitioners that a significant proportion of remittances is used for renovating or constructing houses. One of the first investments in a house is usually to replace a thatched roof with a galvanized iron roof. This change in roofing materials proved to be very useful in constructing shelters post-earthquake, because the earthquake had been followed by rain.
- A house is not only a basic necessity (shelter), but also a status symbol. So, prior to the earthquake, many remittances had been invested in the construction of a house or addition of a storey. The earthquake has provided a good lesson on the need to diversify the investment of remittances. Almost all migrant households and returnees regretted investing such a high proportion of their earnings in their houses, as most collapsed completely during the earthquake. As Mr R. Khadka said: 'I had invested NPR 1,500,000 in the construction of my new house, which I have not even had the chance to look at, let alone enjoy. When I rebuild I am not going to spend such a large amount of money on my house.' In some cases, the entire remittance was invested in the house as illustrated in Case Study 8.
- Remittances are also largely responsible for the rapid spread of mobile telecommunication in rural Nepal. Mobile phones were considered a luxury item before, but as a result of increased household income, thanks to remittance earnings, they have become affordable. The earthquake showed the importance of mobile phones to stay connected with the outside world and obtain necessary support.
- Households that had stored their food grains in traditional storage systems ('bhakari') found it difficult to rescue their grains from the rubble, particularly rice, wheat, and millet, because they became mixed with the mud and were hard to separate. On the other hand, households that had stored their grains in sacks, were able to rescue them easily. This is an important lesson for future resilience activities.
- Most migrant households did not have even a copy of the legal documents required (regarding citizenship). This had made it difficult to access relief support. So, it is important to generate awareness about the safe keeping of legal documents (or copies thereof) for easy access in the event of disasters. The digitization of legal documents could be considered an alternative effort for disaster preparedness.

### Case Study 8: Destruction of five years of hard work abroad

Ms Sangita Pandit is a resident of Ichok VDC. Her family consists of her father and mother, younger brother, and younger sister. As the eldest child, Sangita decided to work abroad to support her family to improve its livelihood situation. In her first migration journey, she went to the Maldives to work in a canned fish factory, where she cleaned the steamed fish for two years. In her second journey, she went to Lebanon as a domestic worker, where she worked for three years. While her friends from the village who had gone to Lebanon, had invested in a small grocery shop in the village and bought land, she invested her remittances in paying off debts and constructing an additional floor in her house. The earthquake completely destroyed her house. Sangita is at a loss when she looks at the rubble that represents the five years of hard work she did abroad to improve her family's situation.

# Conclusion

The study, which was conducted in two of the most heavily earthquake-affected districts, found that the migration from the villages had both positive and negative effects at different stages after the disaster. Immediately after the earthquake (during the rescue phase), migrant households were more vulnerable than non-migrant households, since they had fewer able-bodied men and had more women, children and elderly people among them.

In the relief phase, migrant households were slightly more vulnerable than non-migrant households in assessing relief support provided by governmental and non-governmental organizations. To access government support, the lack of legal documents proved a major obstacle. People who had lost their houses, also lost their citizenship and other documents along with them. It was very difficult for them to retrieve or replace these and access government relief schemes. For non-governmental support, migrant households were more vulnerable than non-migrant households due to a lack of able-bodied members to collect support materials. But high-migration communities managed to overcome some of these challenges by taking a group approach.

Not only financial remittances, but also migrant social networks have played an important role in accessing relief support by entire migrant communities. In the medium and long-term, migration and remittances may actually reduce the vulnerability of migrant households and make it easier for them to recover from this disaster.

To validate these impressions, further study needs to be conducted. Nevertheless, the following implications may be drawn for policy makers and development stakeholders:

- **Low-cost earthquake-resistant housing technology:** Migration and remittances play an important role in helping families and communities to meet basic needs and invest. A significant proportion of remittances have already been invested in house construction. As a matter of fact, a major regret of most migrant households was that they had invested too heavily in their houses, which had got lost in the earthquake.

Promotion of low-cost, earthquake-resistant houses would have prevented this loss, had the technology been available. Also having a house insurance would have reduced the risks. The government may think of a group house-insurance policy, where the premium could be shared between the government and households.

- **Ease of remittance transfer:** Remittance is important for financial resilience, especially at a time of disaster. During the Gorkha earthquake, it had proved to be an important instrument to access immediate relief support. At the time, remitter companies had waived transfer charges, which was a welcome step.

This step had been prompted by a humanitarian crisis and was a philanthropic gesture. But the government could consider this as part of standard operating procedures during major disasters.

- **Identification and recognition of skills:** The study also found that the acquired skills of migrants and returnees, particularly in the construction sector, could be leveraged for quicker recovery post a disaster. Identification and mobilization of such skills would reduce the time and resources required to train new persons. The government could have an information system in place to record the skills of migrant returnees as well as a system for providing certificates based on recognition of prior learning (RPL system).
- **Low-cost migration policy:** In view of the setback to the local economy as a result of the earthquake, many migrant as well as non-migrant households are planning to send a family member to work abroad as a strategy to recover their lost assets and livelihoods. These households might not be able to bear the cost of migration, though, in the present context. So, a low-cost migration policy could be promoted, because it has the potential to be highly beneficial for earthquake-affected households as well as for a rapid recovery of the local economy.
- **Assessment of labour demand and place based skills training:** The earthquake has also created demand for local labour. The extent of such demand will be dependent on the government's programme for reconstruction as well as the financial capacities of households to rebuild their lost houses. A proper assessment of labour

demand and supply (also in terms of skills required) will be needed to ensure that the required labour force for reconstruction is available. To fill the gaps in labour demand and supply, skill enhancement should be place based rather than class-room based training.

- **Gender considerations in disaster preparedness:** Gender is seldom considered in disaster preparedness. The study showed that in places with high male out-migration, the population is highly skewed. So, disaster preparedness has to consider such population dynamics, and provide more roles and training for women. As a matter of fact, many women at the study sites were positive that, given sufficient training, they could also help in the reconstruction process.

This means gender needs to be considered as an integrated component in reconstruction. This involves thinking out of the box, promoting women in non-conventional roles, and equipping them with the necessary skills. This would also be an empowering process for women and could give them economic returns as well as personal confidence.

# References

- ADB (2015) *Asian development outlook 2015. Financing Asia's future growth*. Asian Development Bank, Philippines
- CBS (2011) *Nepal living standards survey 2010/11*. Statistical Report (Vol. 02). Kathmandu: Central Bureau of Statistics, National Planning Commission, Government of Nepal
- CBS (2012) *National population and housing census 2011*. (Vol. 01). Kathmandu: Central Bureau of Statistics, National Planning Commission, Government of Nepal. Available at <http://cbs.gov.np/?p=2017>
- Clarke, ; Wallsten, (2003) *Do Remittances Act Like Insurance? Evidence from a Natural Disaster in Jamaica*. Working paper. Development Research Group, The World Bank
- Deshingkar, P; Aheeyar, MMM (2006) *Remittances in Crisis. Sri Lanka after the tsunami*. Humanitarian Policy Group background paper. Overseas Development Institute, United Kingdom
- DoFE (2014) *Labour migration for employment, a status report for Nepal: 2013/2014*. Kathmandu: Department of Foreign Employment, Government of Nepal
- DW (2015) *Nepal quake likely to trigger greater migration*. Available at <http://dw.de/p/1FKqP> (accessed 6 May 2015)
- Fagen, P (2006) *Remittances in crises. A Haiti case study*. Humanitarian Policy Group background paper, Overseas Development Institute, United Kingdom.
- ICIMOD (2015) *Nepal Earthquake 2015: Country profile* [online]. Available at <http://apps.geoportal.icimod.org/ndrrip/profile?id=Country&Lang=en> (accessed 5 December 2015)
- Kansakar, VBS (2003) International migration and citizenship in Nepal. *Population Monograph of Nepal 2003*, Volume II (pp. 85–119). Kathmandu: Central Bureau of Statistics, National Planning Commission Secretariat, Government of Nepal
- Kargel et al.(2015) *Geomorphic and geologic controls of geohazards induced by Nepal's 2015 Gorkha earthquake*. Scienceexpress, December 2015
- Kathmandu Post (2015a) *Women have little access to relief – Report*. The Kathmandu Post, 31 July 2015. Available at <http://www.ekantipur.com/2015/07/31/national/women-have-little-access-to-relief-report/408699.html> (accessed 2 August 2015)
- Kathmandu Post (2015b) *Help comes to Ichok*. The Kathmandu Post, 1 June 2015. Available at <http://www.ekantipur.com/the-kathmandu-post/2015/05/31/earthquake-relief/help-comes-to-ichok/276822.html> (accessed 11 December 2015)
- Khadka, M; Rasul, G; Bennett, L; Wahid, S; Gerlitz, J-Y (2014) *Gender and social equity in climate change adaptation in the Koshi basin: An analysis for action*. Handbook of climate change adaptation. Berlin Heidelberg: Springer-Verlag. DOI 10.1007/978-3-642-40455-9\_78-1
- Kollmair, M; Hoermann, B (2011) *Labour migration: Opportunities and challenges for mountain livelihoods. Sustainable Mountain Development*, No. 59, Summer 2011. Kathmandu: ICIMOD, pp. 3 –8
- Le De, L; Gaillard, JC; Friesen, W (2013) 'Remittances and disaster: a review'. *International Journal of Disaster Risk Reduction*, 4, pp. 34–43
- Le De, L; Gaillard, JC; Friesen, W (2015) 'Remittances and disaster. Policy implications for disaster risk management'. *Migration, environment and climate change: Policy Brief Series*, Issue 2, Volume 1, March 2015
- Mahapatra, S; Joseph, G; Ratha, D (2009) *Remittances and Natural disaster. Ex-post response and contribution to Ex-ante preparedness*. Policy Research Working Paper 4972, The World Bank

- Maharjan, A (2010) *Labour out migration and its affect on farm families in the mid hills of Nepal*. (Doppler, W and Bauer, S; eds.), Vol. 113. Weikersheim: Margraf Publishers. Available at [https://www.google.com np/search?q=maharjan+margraf&oq=maharjan+margraf&aqs=chrome..69i57.2742j0j8&sourceid=chrome&es\\_sm=93&ie=UTF-8](https://www.google.com np/search?q=maharjan+margraf&oq=maharjan+margraf&aqs=chrome..69i57.2742j0j8&sourceid=chrome&es_sm=93&ie=UTF-8)
- Maharjan, A; Bauer, S; Knerr, B (2012) 'Do rural women who stay behind benefit from male out-migration? A Case study in the hills of Nepal. *Gender, Technology and Development*, 16: 95–123
- Manegaun, (2015) *Nepal/Nuwakot/manakamana/manegaun/earthquake*. Available at [http://manegaun.blogspot.com/2015/05/nepalnuwakotmanakamanamanegaunearthquake\\_16.html](http://manegaun.blogspot.com/2015/05/nepalnuwakotmanakamanamanegaunearthquake_16.html) (Accessed 24 December 2015)
- Ministry of Finance (2015) *Economic survey. Fiscal year 2014/15*. Kathmandu: Ministry of Finance, Government of Nepal
- Ministry of Home Affairs (2015) *Nepal Earthquake 2072: Situation update as of 11th May* [pdf]. Available at <http://drrportal.gov.np/uploads/document/14.pdf> (accessed 5 December 2015)
- My Republica (2014) Country receiving Rs 1.49b in remittances daily. My Republica, 25 August 2014. Available at [http://www.myrepublica.com/portal/index.php?action=news\\_details&news\\_id=81667](http://www.myrepublica.com/portal/index.php?action=news_details&news_id=81667) (accessed 23 December 2014)
- Nellemann, C; Verma, R; Hislop, L (eds) (2011) *Women at the frontline of climate change: Gender risks and hopes. A rapid response assessment*. United Nations Environment Programme, GRID-Arendal
- Nepali Times (2015) Migrants Inbound – Many Nepalis working overseas are returning to help rebuild lives and homes. Nepali Times, 15-21 May 2015. Available at <http://nepalitimes.com/article/nation/migrants-return-home-after-earthquake,2241> (accessed 23 May 2015)
- NPC (2015) *Nepal Earthquake 2015. Post Disaster Needs Assessment Vol. A : Key Findings*. National Planning Commission, Government of Nepal
- NRNA (undated) *NRNA earthquake disaster support* [website]. [http://nrna.org.np/article-NRNA\\_disaster\\_support](http://nrna.org.np/article-NRNA_disaster_support) (accessed 30 June 2015)
- Pun, R (2013) *Social and psychological costs of labor migration on rural areas of Nepal*. MSc Thesis, Asian Institute of Technology, Thailand
- Seddon, D (2005) *Nepal's dependence on exporting labour*. Country Profile, Migration Information Source. Available at <http://www.migrationinformation.org/Feature/display.cfm?id=277>
- Stark, O (1991) *The migration of labour*. Cambridge: Basil Blackwell
- Sugden, F; de Silva, S; Clement, F; Maskey-Amatya, N; Ramesh, V; Philip, A; Bharati, L (2014) *A framework to understand gender and structural vulnerability to climate change in the Ganges River Basin: Lessons from Bangladesh, India and Nepal*. Colombo, Sri Lanka: International
- Suleri, AQ; Savage, K (2006) *Remittances in crises: a case study from Pakistan*. A Humanitarian Policy Group Background Paper, Overseas Development Institute, United Kingdom
- Travel News Nepal (2015) 'Labour migration after Gorkha Earthquake: Some leave for foreign jobs while others come home for reconstruction'. *Travel News Nepal*, 27 May 2015. Available at <http://travelnewsnepal.com/feature/labour-migration-after-gorkha-earthquake-some-leave-for-foreign-jobs-while-others-come-home-for-reconstruction/> (accessed 3 June 2015)
- Wasti, K (2012) *Status and Use of Remittances in the Mountains of Nepal*. Unpublished MSc Thesis, Asian Institute of Technology, Thailand
- Wisner, B (2003) Sustainable suffering? Reflection on development and disaster vulnerability in the Post-Johannesburg World. *Regional Development Dialogue*, 24 (1): 135-48
- World Bank (2011) *Large scale migration and remittance in Nepal: Issues, challenges, and opportunities*. Washington, DC: World Bank

World Bank (2015) *Migration and remittances: Recent Development and Outlooks. Special Topic: Financing for Development*. Migration and Development Brief 24. Washington, DC: World Bank

Wu, T (2006) *The role of remittances in crisis. An Aceh Research study*. Humanitarian Policy Group background paper, Overseas Development Institute, United Kingdom



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