

# Role of Social Networks in Sampling Hard to Reach Population

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**Abstract:** *Most research on forced migration acknowledges the fact that acquiring accurate data on refugees and internally displaced persons (IDPs) is challenging, if not impossible. With the help of a national human rights organization, embedded in communities across Nepal, I employed a weighted multi-stage cluster sampling technique to survey over 1800 individuals from 56 village development committees (VDCs) drawn from 11 of the 75 districts of Nepal to study individual coping behaviors during a decade-long civil war in Nepal. This national sample represents districts that were hard-hit during the conflict, all three topographical regions, all five development regions, and both rural and urban parts of Nepal. Data gathered from the survey are being used in understanding why some individuals flee from their homes while others stay, what are the coping strategies employed by those who chose to stay in their villages, and finally what leads some individuals to return home and others to relocate.*

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Forced migrants typically include two types of individuals, refugees who cross an international border and internally displaced persons (IDPs) who flee their homes but do not cross the border into another country (UNHCR 1951; 1998).<sup>2</sup> Scholars in the field acknowledge that it is extremely difficult to obtain accurate data on forced migration caused by conflict (Crisp 1999). This research provides an account of this issue with a description of the problems one faces in enumerating conflict-induced displacement in Nepal. Despite the difficulty in sampling this hard to reach population, I was able to survey over 1800 individuals with the help of social networks such as Non-Governmental Organizations (NGOs) and community level organizations operating at the grassroots level. In the following section, I provide a brief account of the Maoist insurgency in Nepal followed by a

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<sup>2</sup> Davenport et al. (2003) developed the value-free phrase "forced migrant" to describe both refugees and IDPs. I follow their example.

discussion on challenges one faces in enumerating forced migrants, the role of social networks in reaching to the hard-to-reach population and the sampling method used in the present survey.

### **The Maoist Insurgency in Nepal and Challenges of Identifying Forced Migrants**

Nepal went through a decade of Maoist insurgency beginning in 1996, in which over 13,000 people were killed, thousands displaced and many more disappeared. Existing research on the causes of the conflict makes two main arguments. One set of literature argues that opportunities such as rough terrain and weak state apparatus generated low enough cost for the Maoists to rebel against the Nepali state (Bohara et al. 2006; Do and Iyer 2010). Others argue that caste-ethnic-and-wealth-based discrimination generated grievances that led to the onset and spread of violence across the country (Murshed and Gates 2006; Nepal et al. 2011; Adhikari and Samford 2012). While causes of the conflict are still being debated, the Nepali government continues to battle for the return of thousands of individuals displaced during the war, which is the focus of the present study. Data gathered from this survey are being used in understanding why some individuals flee from their homes while others stay (Adhikari 2012b), what are the coping strategies employed by those who chose to stay in their villages, and finally what leads some individuals to return home and others to relocate.

Most researchers on forced migration acknowledge the fact that acquiring accurate data on forced migration is challenging, if not impossible; Nepal is no exception to this. The United Nations High Commissioner for Refugees (UNHCR) estimates that only around 2,600 Nepalis had sought official refugee status by the end of 2006 (UNHCR 2007). This figure does not include individuals who went to India for reasons discussed below. Individuals displaced to India are not considered refugees. An open border, established in a 1950 Treaty of Peace and Friendship between Nepal and India, makes it easy for Nepalis to cross the border into India and difficult for them to be tracked. Citizens of the two countries are treated on par with each other, no travel documents are needed to cross the border, and citizens crossing the border are well tolerated. Although many Nepalis are reported to have fled to India, no refugee camps were established for displaced Nepalis and no systematic documentation was carried out by either side. The government established only one small IDP camp in western town of Nepalgunj during the conflict. However, many IDPs refused to live in the camp either due to a fear of social stigma attached to refugee populations or for fear of being targeted by the warring parties. They chose to live with families and friend in cities and towns, further complicating the problem of identifying the displaced (INSEC 2004).

Similar to other conflict situations, figures on displacement during the Maoist insurgency in Nepal vary dramatically. For example, according to a study by the Norwegian Refugee Council (NRC 2005), between 100,000 and 200,000 people had been displaced in Nepal by the end of 2004. NRC derived this

estimate from figures generated by different governmental and non-governmental organizations operating in the country. Sources cited by the NRC include: the Indian Embassy in Kathmandu, which estimated that some 120,000 Nepalis crossed the border in January 2003 alone; the Asian Development Bank, which estimated the IDP figure to be between 300,000 and 400,000; the Finance Ministry of the Government of Nepal issued estimates between 300,000 and 600,000; the United Nations Development Program (UNDP) which cited a figure of 80,000, and so on. The politics behind displacement estimates as well as the 1700 kilometer-long open border between Nepal and India further confound the issue.

### **Role of Social Networks<sup>3</sup>**

Only one organization, namely the Informal Sector Service Center (INSEC), a national human rights organization operating throughout Nepal since 1988, made a concerted effort to document and verify displacement figures. Their work was conducted on a sub-national, district by district basis. According to INSEC, 50,356 people were displaced from across the 75 districts by the end of 2004. There is strong reason to believe that the data collected by INSEC is the most reliable and accurate representation of relative displacement across the 75 districts of Nepal for a number of reasons. Because INSEC operates in all 75 districts of Nepal, the data collected by their district offices are more reliable than the national estimates cited above. INSEC was the only organization to collect data on displacements at the level of the village development committee (VDC), the smallest administrative unit in Nepal. The number of VDCs per district range between 13 and 115 with an average of 52 villages. In most cases, INSEC recorded not just a count of displaced but also the names of the persons affected by the conflict — displaced, killed or abducted. In addition, INSEC made a concerted effort to track individuals displaced within the country and later assist them in their return.

INSEC's primary focus was to document internal displacement. Because of the open border with India, it became very easy for individuals, especially those living in the districts along the border, to flee across the border for short periods of time to temporarily escape impending violence. The much larger figures on displacement cited by various organizations during the war likely included these temporary displacements across the border. While these figures are important to acknowledge, INSEC's data is likely the most accurate in terms of capturing the lasting impact of the war on displacement and the relative impact across districts.

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<sup>3</sup> For the purpose of the present study, organizations that are deeply rooted in communities and help societies cope with situations such as insurgency are defined as social networks. They may range from national human rights organizations operating at the village level to traditional community level organizations such as consumers groups or mothers groups.

## **Sampling Frame and Method**

The sampling frame used in this study is INSEC's list of people displaced from each district. INSEC made every attempt to include and document all individuals that were displaced from each district between 1996 and 2006 due to conflict. While INSEC was most interested in documenting incidents of human rights violations and focused on tracking displaced persons with the intention of protecting their rights and assisting them in their return, ambiguity remains as to the destination of some individuals listed by INSEC.

Given the long open border with India, some individuals crossed the border, temporarily or permanently, and some may have gone on to a third country. While discrepancies exist as to the precise number of people displaced by the war in Nepal, and politics likely played a role in the estimates produced, especially by the government, a number of national and international organizations credited INSEC with having had the most extensive monitoring network and the most systematic means of data collection and documentation. Furthermore, as a non-governmental human rights organization, INSEC had far better access to the villages throughout Nepal since government officials were openly targeted by the Maoists. Indeed, according to INSEC officials, the government often turned to INSEC when it needed data on human rights violations, including conflict-induced displacements (Adhikari 2012a, fn 9). In sum, the individual-level data collected on displacement by INSEC are believed to be the most accurate and the means of data collection used by INSEC was consistent across all 75 districts of the country.

Data for this study come from field research conducted in Nepal during the summer and fall of 2008. The full data set gathered in this study consists of a national sample of 1804 respondent households from 56 village development committees (VDCs) drawn from 11 districts of Nepal, plus the capital of Kathmandu. Households were selected from 226 sampling units, called wards, from across these 11 districts. The sample represents all five development regions (east, central, west, mid-west and far-west), three topographical zones (mountains, hills and plains), and both rural and urban parts of the country. The survey was also administered in Kathmandu where many of the internally displaced persons fled. A weighted multi-stage cluster sampling technique was used to go from region, to district, to VDC, to ward level and then two samples were randomly drawn — one of individuals at the ward level and another of displaced persons originating from those wards. Use of wards as the sampling units has the advantage of offering a paired design of individuals who decided to stay and those who decided to leave within the same contextual environment.

The sampling method involved multiple stages because I sought to ensure that the sample represented (a) districts that were hard-hit during the conflict, (b) all three topographical regions, (c) all five development regions, and (d) both rural and urban parts of the country. In addition, given resource and logistic constraints, the method aimed at ensuring that samples would be drawn from areas that produced displaced persons as a result of the conflict. In the first stage, all districts that had recorded at least 500 casualties or 500 displacements during the

conflict were selected. The selection criteria were based on secondary data provided by INSEC on the number of people killed and displaced from each district. A total of 19 districts met this threshold. Four of the five economic development regions contained exactly two districts that met the threshold, and varied topographically, so these eight were chosen. The remaining three districts were in the mid-western region where the fighting originated. One district was randomly chosen from each of the three topographical regions. This resulted in a total of 11 districts, plus Kathmandu, being retained for sampling.

Given resource constraints, the total number of interviewees was set at 1500 for the 11 districts, with a target of 1000 displaced and 500 non-displaced, with the remaining 304 interviewees coming from the capital. The number of displaced was further divided into two groups: 500 interviewees still displaced and 500 interviewees that had returned home by the time of the interview. In each of the 11 districts the target number of interviewees was determined by the proportion of displaced identified by INSEC in each district. This captures the dynamics of conflict as well as the economic and geographical variance in the country.

Each district is divided into VDCs, with each VDC further subdivided into nine wards. Only VDCs with ten or more displaced persons were used in the sampling of respondents. From each district, 5 VDCs meeting this threshold were randomly selected, and the targeted number of respondents was determined by the proportion of displaced in each of the VDCs. Next, the targeted number of respondents from each of the 5 VDCs were randomly sampled from the wards in proportion to the number of displaced in each ward. Displaced respondents, which included both males and females, were randomly selected from a list of all displaced persons originating from the wards. This list was maintained by INSEC at the ward level throughout the insurgency.

The 500 Non-displaced respondents were randomly selected from the same districts/VDCs/wards in which the displaced originated. During the survey, enumerators gathered a list of immediate non-displaced neighbor household from the IDP producing wards. Every third household in the list was chosen as a non-displaced respondent. In case of unavailability of the randomly chosen household to answer our survey, the next household in the list was interviewed. Target numbers of non-displaced from each ward were based on the same proportions used for sampling the displaced. Measures were also taken to ensure adequate representation of female respondents in the survey. While priority was given to a female if both male and female IDPs respondents were present during the interview, 1/3 of the non-displaced respondents were drawn from female population.

Prior to administering the survey, a two-day orientation was provided to the enumerators. INSEC has conducted numerous national surveys in the past and I employed their trained enumerators to assist me in administering the present survey. Besides being a mountainous country, Nepal is very poorly served by road networks. It can take several hours simply to walk between wards. INSEC's staff are stationed in all 75 districts of the country. INSEC's district representatives

were hired to supervise the enumerators whose perseverance and knowledge of the locality were critical to the success of the survey, given the challenges of resources and topography.

Table 1 lists the 11 districts identifying the economic development region and topographic zone where each is located, and the target number (and actual number) of displaced respondents based on the proportion of displaced originating in each of the districts out of the total number of displaced persons identified in the eleven districts. So, for example, Rolpa had 1,817 displaced out of the total 17,386 displacements in the 11 districts, resulting in a target number of 105 displaced interviewees, and 52 non-displaced. Rolpa is further broken down into the five randomly selected VDCs. Based on the proportion of actual displacement in each of the five VDCs, a target number of interviewees is given, along with the actual number of displaced persons interviewed and the number of non-displaced interviewed. The target and actual number of interviewees differs somewhat for each VDC because INSEC's and the Nepali government's identification and documentation of displaced persons as well as people injured, killed and disappeared was still on-going at the time the interviews were conducted, so the identification of conflict-induced displacement was still somewhat in flux. In addition, the monsoons were ongoing during part of the interview period. Farmers had begun to work in the fields by the time the first phase of the survey was conducted and many displaced persons working to earn a living had to be located and enumerators had to accommodate their work schedules. Given the distance one has to travel on foot to get from one village to the other in Nepal and the difficulty of locating the IDPs, the enumerators were often forced to stay in remote villages.

The survey includes responses to questions about different types of threats individuals experienced during the conflict, specific reasons behind their decisions to flee from their villages or not, whether or not they were physically assaulted by either the rebels or the state army, the party responsible for displacing them and so on. It also includes information on the economic conditions of the village, demography and socio-economic conditions of the individual and households.<sup>4</sup> While some of the randomly selected individuals for the sample refused to be interviewed, others halted in the middle of the survey, and still others could not be found. The response rate of 86.3%, with only .44% of the responses coming from proxy respondents, resulted in an overall sample of 1804.

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<sup>4</sup> Questionnaire available from author upon request.

**Table 1: Eleven Districts Selected for Sampling with Target (and Actual) Number of Respondents Interviewed**

Economic Development Regions						
Topographic Zones		Far West	Mid-West	Western	Central	East
	Mountains	Bajura: 84 (70)	Kalikot: 203(218)			Taplejung: 44(50)
	Hills		Rolpa: 105(96)	Lamjung: 49(47)	Ramechhap : 73(88)	
			<i>Thawang</i>			
			<i>Kureli</i>			
			<i>Uwa</i>			
			<i>Mirul</i>			
			<i>Bhawang</i>			
	Plains	Kailali: 118(124)	Bardiya: 94(108)	Kapilbastu: 152(151)	Chitwan: 48(43)	Jhapa: 30(17)

#### **Rolpa as an Example of the Sampling Process**

VDCs	Proportion of actual displacement in five randomly selected VDCs	Target Number of Interviewees	Actual Number interviewed	Actual Non-displaced interviewed
Thawang	0.27	28	19	28
Kureli	0.26	27	37	12
Uwa	0.23	24	20	11
Mirul	0.20	21	15	7
Bhawang	0.03	3	5	2
<b>Total</b>	<b>100%</b>	<b>105</b>	<b>96</b>	<b>60</b>

There are a total 51 VDCs in Rolpa. The five VDCs listed in Table 1 were randomly chosen from among a list of VDCs that produced 10 or more IDPs. Total 363 people were displaced from these 5 VDCs with 99 coming from Thawang, 94 from Kureli, 85 from Uwa, 74 from Mirul and 11 from Bhawang. The targeted number of respondents from each of the 5 VDCs was determined by the proportion of displaced in each of the VDCs (e.g. Thawang:  $99/363 \times 105 = 28$ ). Next, the targeted numbers of respondents from each of the 5 VDCs were randomly sampled from the wards in proportion to the number of displaced in each ward.

#### **Conclusion**

This study reveals a number of interesting and useful lessons for future research in the field. Despite the challenges one faces in enumerating the hard-to-reach population of forced migrants and physical challenges posed by rough

terrain, one can reach to the respondents with careful planning and thoughtful strategy.

First, it was important to pre-test my survey instrument before I actually administered it to the respondents. This gave me the opportunity not only to revise my survey instrument, but also to gauge the accessibility of the respondent population. For example, when I went to Nepal during the spring of 2008 for pretesting my instrument, the war had just ended and many of the former rebels were still armed. Given the situation, I was very skeptical about the possibility that I would have access to the respondents. Many roads were still blocked, bridges damaged, former rebels were still training combatants, and places where the IDPs lived were still under rebel control. However, when I reached the location with help from INSEC, I was well received from the former rebels and they even invited me to talk to their cadres and take pictures. This experience enabled me to plan for the actual survey without having to worry about inaccessibility.

Second, it is vital that researchers become familiar with local geography and local language and culture, so my being from Nepal was an asset. For example, during the course of my survey, the enumerators would often call me with questions and problems that were related to distances, language, and cultural practices. I had to make decisions that someone without local knowledge would find hard to make.

Third, as a researcher I had to be sensitive to the war-time suffering and experiences of the respondents. During the course of my research in Nepal, I travelled to several districts and spoke to many villagers. I presented myself as someone who was keen to understand the trauma that they underwent during the war and interested in knowing about their experiences. To my surprise, many people were willing to tell me their stories even if that meant just to release the pain they had been enduring.

Finally one has also to be aware and familiar with local weather such as monsoon and harvesting season, especially when conducting research in developing countries like Nepal. I conducted most of my research during the summer and the monsoons arrived during my research. Most Nepalis are farmers and they return to their field with the onset of the monsoon season. This made it extremely challenging to find the respondents, further straining my already limited resources. If I had the opportunity to conduct another survey in Nepal or similar country, and were able to choose the time, this would probably be in the winter when villagers would be less busy.



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