

Innovation in the Study of International Migrants*

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ABSTRACT

This paper is motivated by the methodological challenges faced by investigations of international migration around the world. Studies of international migration are hampered by the difficulties of obtaining information about migrants, their origin communities, and their destination communities. Challenges in obtaining information about migrants and their origin and destination communities include getting a representative sample of migrants, acquiring contact information about them, finding them at their destinations, and securing their cooperation to answer questions within manageable costs. This paper reports on a research project that successfully interviewed 95 percent of respondents from a community in Nepal to the Gulf Cooperation Council countries. We discuss our innovations in sampling design, ways of interacting with people in the sending communities to obtain migrant contact information, the incorporation of new communication technologies such as cell phones, interviewer organizations and strategies, and the use of networking in destination areas to facilitate a high degree of interviewing success. Our new procedures and success in implementing them constitute a significant improvement in survey methods that permit the creation of unbiased data sets of migrants and allow them to be studied in conjunction with their origin communities. We discuss how our strategies would be appropriate for interviewing migrants anywhere in the world, of course, with adaptations for local conditions in both the sending and receiving locations.

Introduction

This paper reports on a research project designed to create and evaluate new innovative procedures for collecting data from a representative sample of individuals from one origin area who migrated across country boundaries to other places around the world and linking that information to their families and communities at the origin. The goal of our project was to make important innovations in sampling design, ways of interacting with people in the sending communities to obtain up-to-date contact information, the incorporation of new communication technologies such as cell phones, and the use of networking in destination areas that would be appropriate for interviewing people who had left their home countries and migrated anywhere in the world. Our new procedures and success in implementing them constitute a significant improvement in survey methods that permit the creation of unbiased data sets of international migrants and allow them to be studied in conjunction with their origin communities. Our methods substantially enhance research capabilities to study not only migration but other demographic behaviors such as marriage, childbearing, and health and well-being.

Our research project was motivated by the fact that international migration is one of the most difficult demographic behaviors to study. As Jasso et al (2000: 127) have stated, “[i]n perhaps no other area of demographic and social science research has there been such a persistently large gap between information needs and existing data. Consequently, many fundamental questions remain unanswered” (Jasso et al. 2000:127). Although the lack of sufficient and appropriate data for the study of migration has been lamented for several

decades (Bilsborrow et al. 1997; Durand and Massey 2006; Fawcett and Arnold 1987; Jasso et al. 2000; Levine et al. 1985; Massey 1987; Massey and Capoferro 2004), there have been few improvements in the measurement of migration, and even these are threatened by high costs and logistical difficulties that limit their effectiveness.

The inability to obtain and link information about international migrants with their families and communities of origin place many limitations on research. Such limitations are most apparent in studies of migration where researchers have historically had to rely on either studies of sending communities and the attributes of those who depart or studies of receiving communities and the people migrating to them. Both strategies suffer from the inability to link sending and receiving communities and families and result in threats to validity and in the inability to address certain migration topics. The validity of many research projects that focus on topics other than migration is also threatened by such limitations. This occurs because in many places there are significant migration streams out of communities, particularly of young adults. Much of their migration is temporary and many migrants are considered to be members of their home communities, plan to return home, and have significant influences on the social and economic circumstances of their families and home communities. Consequently, when researchers study virtually any topic—such as family, marriage, fertility, or health and well-being—in areas with high levels of migration, their research misses the many people who are temporarily away.

Our project created and tested new innovative procedures to address these methodological and substantive issues. Although we were interested in procedures that would be useful for interviewing migrants from any origin area to any location around the world, our

implementation was more limited, although still ambitious. We implemented our methods in one origin area in Nepal, a place with extensive out-migration, and interviewed migrants from this area to the six Gulf Cooperation Council (GCC) countries of the Persian Gulf -Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. Our procedures also accomplished the goal of including in the same project both non-migrants and migrants.

As we discuss later, we successfully interviewed 95 percent of our sample migrants to the Persian Gulf. In this paper we describe our key strategies and methods that we used to ensure this high response rate. These strategies include methods for securing a representative sample, tailoring contact procedures and protocols to changing respondent and interviewer circumstances to acquire contact information and locate respondents, securing cooperation for interviews, and utilizing the recent improvements in communication technology to gather information in our survey of Nepali migrants to the Gulf.

Of course, restricting our project to this one migration stream limits the generalizability of our procedures and results. There are important historical, cultural, sociopolitical, and economic differences among sending countries and among receiving countries, and methodological challenges faced by migration studies vary by both origin and destination country.

However, our experience in our origin study site in Nepal offers useful information for research in other parts of the world. This is because the population of Nepal lives in social, cultural, political, and economic conditions similar to those of many other parts of the world with low levels of education and income. In addition, many aspects of culture and economics in Nepal are very similar to most other parts of South Asia, including India, Pakistan, and

Bangladesh—major migrant-sending countries. South Asia is home to a large, young, and fast-growing population with a substantial proportion living in poverty, with many attracted by opportunities and earning prospects in parts of the world that are better off economically. Thus, the strategies we have created to successfully interview a representative sample of international migrants has substantial relevance for studies of other migration-sending countries.

We also recognize that the destination countries in this project—the countries of the Persian Gulf—have unique attributes that separate them from other migration-receiving countries. They are ethnically Arabic, largely Muslim, dependent on energy extraction, wealthy, and highly controlled. Nevertheless, like other migrant-destination countries, they have attractive economic opportunities that have generated significant migration streams. In addition, we expect that the conditions in these countries for interviewing migrants are not easier and may be more difficult than in other migration-destination countries. We believe that our strategies in approaching each challenge are flexible enough to be adopted in other migrant-receiving settings and therefore make a substantial contribution to the study of other migration streams.

We now turn to a discussion of the methodological problems facing migration studies and then discuss existing strategies for migration research. We then discuss Nepal and its historical background of migration. In the following section we focus on our approaches to success and then end with our conclusions and a discussion of the generalizability of these methods.

Methodological Problems facing Migration Studies

A major difficulty for studies of migration is that migration involves at least two places, the origin and the destination for each migrant. This means that a thorough study of international migrants requires information about people living in the origin area as well as the migrants who have dispersed to many different places all over the world. Of course, a study of out-migration could estimate out-migration rates by focusing only on the origin site and the exits from the area. However, without information about the migrant after she/he leaves the origin area, such a study would find it impossible to take into account the fact that migration is not a single event, but a process that occurs over time and can involve migration and permanent settlement, return to the original community, multiple migrations and return cycles, or a series of moves to different places. During this dynamic process of migration, individual experiences, behaviors, and intentions can change over time (Fawcett and Arnold 1987; Massey 1987). These issues are made even more complex by the fact that migration out of a community can include an infinite number of destinations, as migrants can move anywhere in the world. In addition, migrants are likely to be mobile and change their residence or employer frequently, making them an especially hard to reach population.

A study of the assimilation of migrants into a destination site could focus only on migrants at the destination site, but that would ignore the fact that migrants bring with them to their new home a personal history, behaviors and beliefs that are rooted in their socialization in their home communities and families. Migrants' destination behaviors and beliefs might be a replication of 'normal' behaviors at origin or an adaptation to the circumstances, norms, and values at the destination (Parrado, Flippen and McQuiston 2004). In addition, migrants today

almost always maintain ties with their origin communities through communications, financial exchanges, including remittances, and trips back to their origin homes. Thus, destination studies of migrant assimilation and adaptation of behaviors, values, and beliefs must include information on the origin as well as the destination communities (Bilsborrow, Hugo, Oberai and Zlotnik 1997; Fawcett and Arnold 1987; Massey 1987; Parrado, McQuiston, and Flippen 2005).

Linking information about international migrants at destination with information about them and their families and communities at origins opens up the possibility to study many theoretically important and policy relevant subjects that have long been of interest to scholars, but which have been hampered by insufficient data. One example is the study of migration and return migration based on the changing characteristics of the migrant, their families, and communities. Another example is the study of behavioral and ideational changes that stem from migration, including such changes in migrants and their origin families and communities. This includes how families of migrants invest in the education of the migrants' siblings and how migration might affect the marriage and childbearing behavior of the migrants' siblings. Such information is also integral to answering key questions on health behaviors of migrants, such as stress, health care use, and sexual risk behaviors (Parrado, Flippen and McQuiston 2004; Parrado, McQuiston and Flippen 2005; Antecol and Bedard 2006; Brockerhoff and Biddlecom 1998; Jasso, Massey, Rosenzweig, and Smith 2004; Jochelson, Mothibeli and Leger 1991; McDonald and Kennedy 2004; Palloni and Arias 2003). Such information opens up the possibility of studying selective return migration, for example, returning home when the migrant becomes ill. It also allows for the study of how remittances change over time and how remittances influence behavior and well-being back home. Thus, an ideal study should follow

migrants over time to measure the dynamic processes of migration and the social, economic, and ideational adaptations that migrants experience and share with their families and communities in the origin site.

We mentioned earlier that the inability of researchers to include people who migrate out of an area threatens the validity of research on other substantive topics, such as marriage, fertility, and health. This unfortunate and seldom recognized problem produces sample biases because such studies routinely exclude non-resident individuals, even if those migrants are very much members of the resident households and are only temporarily away. These migrants are likely selective of young adults, and their exclusion produces a truncated sample that poses a threat to the validity of the conclusions of these studies, especially those focused on decisionmaking and behaviors occurring among young adults (Massey 1987). This is because migrants are usually young, more educated and skilled and more achievement oriented (Todaro1980). We also note that the inability to follow migrants is a major source of difficulty for panel studies. This is because panel studies often suffer from significant attrition, with one source of this attrition being out-migration (Rindfuss et al. 2007).

The impact of these selectivity and attrition problems is dependent upon the proportion of a population that is absent at any time. This causes substantial validity problems for research in many parts of the world where migration is a common strategy. For example, a study in Mexico found that 28% of respondents had ever migrated to the U.S. and 15% within Mexico (Massey et al. 1994), a study in Nepal found that 59% had ever migrated and that during just two years 46% had migrated away (Williams 2009), and a study in Sichuan China found that 9% migrated each year (Zhao 1999).

Existing Strategies for Migration Research

Scholars have worked hard to design approaches to provide the necessary information for studying questions about migration, but all of these have important deficiencies. One approach uses retrospective surveys to ascertain the history of migration of people living in a specific area. As prominent examples, this strategy is used by the Mexican Migration Project, the Latin American Migration Project, the Nang Rong Project in Thailand, and the Chitwan Valley Family Study in Nepal, as well as other classic studies of migration (Stark and Taylor 1989, 1991; Stark, Taylor, and Yitzaki 1986; Massey and Espinosa 1997). This methodology allows investigators to address selectivity in out-migration and some aspects of the dynamic nature of the migration process through the inclusion of individuals who never migrated, and those who migrated and subsequently returned. However, these samples cannot include those who migrated and never returned to be included in the survey.

Another strategy is to use a prospective panel design that follows individuals across multiple waves of interviews, as has been done in the Chitwan Valley Family Study, the Mexican Family Study, the Nang Rong Project, and the Mexican Migration Project. This strategy is valuable in obtaining a representative sample of the origin community and allows identification of both stayers and movers from that community, thereby permitting investigation of the factors influencing out-migration. Yet, even this methodology does not provide the ability to follow migrants while they are away, preventing the study of migrant experiences and adaptations, linkages between migrants and the home community, and the dynamics of chain migration.

Another possible approach is to sample migrants in their destination communities, which also has serious problems. The first problem is obtaining a representative group of migrants, a relatively rare group in any population (Bilsborrow et al. 1997; McKenzie and Mistiaen 2007). The second problem is collecting the necessary information about the attributes of migrants and their families and home communities before migration. Destination country census data provide researchers with a representative group of migrants, but insufficient information for social science research (Appleyard 1982; Bilsborrow et al. 1997; Borjas 1987; Fawcett and Arnold 1987; Massey 1987; Jasso and Rosenzweig 1990; Jasso, et al. 2004). Specialized surveys are able to collect detailed information about migrants at their destination, but sample representativeness is usually problematic.

Common strategies for obtaining quasi-representative samples of migrants at destinations include snowball sampling, sampling at strategic intercept points, and targeted random sampling at areas of high immigrant concentration (Massey and Singer 1995; McKenzie and Mistiaen 2007; Parrado et al. 2005; Stepick and Stepick 1990; Wasserman et al. 2005). However, concerns remain that this approach under-samples undocumented migrants and those who are less connected to their ethnic groups (McKenzie and Mistiaen 2007; Parrado et al. 2005) and that they do not address conditions in immigrants' origin communities. More recently, the New Immigrant Survey in the U.S. used Immigration and Naturalization Service (INS) records of new legal immigrants to construct a truly representative sampling frame. From this, the project conducted a longitudinal series of survey interviews with migrants (Jasso et al. 2000). Unfortunately, the New Immigrant Survey is restricted to legal migrants and is unable to connect migrants to their origin families and communities.

These problems have led to calls for multiplicity sampling strategies in which researchers begin with representative samples of individuals from one geographic area (Massey 1987; Massey and Capoferro 2004; McKenzie and Mistiaen 2007). Interviews with these individuals provide the necessary information on these communities and their current residents. Respondents are also asked to identify members of their households who are not currently resident. Investigators then track and interview the migrants at their current location. This method is ideal in that it provides a representative sample of migrants that is connected to information from their families and communities of origin, but, unfortunately, to date, cost and logistical and technological difficulties have substantially reduced its effectiveness in practice and it has seldom been used.

One study that has partially used multiplicity sampling is the Mexican Migration Project which surveys communities in Mexico and identifies from these surveys migrants from those communities (Massey 1987). This project then attempts to conduct face-to-face interviews with a sample of migrants in the U.S. Even this study, which is among the most comprehensive efforts at multiplicity sampling, is limited to one destination country and to a subset of destination communities within this country, uses some non-random sampling techniques, and is limited to relatively small sample sizes due to cost constraints. Furthermore, the researchers have not attempted to re-contact migrants at their destinations for a panel study.

The Mexican Family Life Survey has also implemented some, but not all, elements of the multiplicity approach (Rubalcava et al. 2009). The study started with a representative sample of Mexicans in Mexico in 2002 and then attempted to interview all respondents again in 2005, including migrants to the U.S. However, this study only obtained contact information for 59% of

the 2005 migrants, which seriously limited the sample's representativeness. This study was only able to focus on one destination country, the United States, but this drawback was ameliorated by the fact that the vast majority of Mexican migrants go to the United States.

A third project that has attempted to use elements of multiplicity sampling is the Migration between Africa and Europe project. This project identified and sampled individuals from communities in Dakar, Senegal and their family members who were resident in France, Italy, or Spain (Beachemin and Gonzalez Ferrer 2009). This project was limited to select migrant destinations, was able to obtain contact information for only 32% of migrants from sampled households, and this contact information was correct for only 52% of the cases.

Because of the inherent difficulties in tracking and interviewing international migrants, all contemporary studies on migratory behavior suffer from low response rates, and missing data are frequently an issue. We have already mentioned low response rates in several migration projects, and even the Nang Rong Project in Thailand, an Asian country known to enjoy very high levels of respondent cooperation in other social surveys, achieved only a 64% response rate (Rindfuss et al. 2007).

As with every other migration study, our study has also faced notable challenges. We outline our approaches to address these challenges. Before doing so, however, we briefly describe our study setting.

Nepal and Its Historical Background of Migration

Our study setting, the Western Chitwan Valley, lies in the south central part of Nepal. Nepal was kept in relative isolation from rest of the world and had very little exposure to the outside world until the mid-1950s. Nepal is the one of the lowest income countries in the world with a per capita income of only \$490 in 2010 (ADB 2012). Almost one third of the population lives below the absolute poverty line. The economy has been—and continues to be—characterized by dependence on agriculture, with over 85% of the population still involved in agriculture.

Beginning in the mid-1970s, Nepal started receiving a large portion of its budget in foreign aid from various countries, multi-national and bilateral organizations, and international non-governmental organizations and since that time has experienced dramatic social and economic change. This flow of international aid has been primarily targeted to the improvement in living conditions of the rural poor through education systems, health services and rural infrastructure. The result has been a dramatic spread of formal education, wage work, government services, transportation and communication infrastructure, and the mass media. Moreover, although Nepal is still predominantly a rural country, the process of urbanization has been gaining momentum in the last couple of decades.

Nepal has a long history of migration through trade routes between the Himalayan regions and the Indian plains. This was increased in 1815 with the recruitment of Nepali youth to the Gurkha Brigades—units of the British Army composed of Nepalese soldiers (Rathaur 2001; Gurung 1983). Because the country was kept in relative isolation from the rest of the

world until the 1950's, international labor migration was primarily limited to service in the British Army and to non-regulated migration across the border in India. Even though the country opened up to the rest of the world in the 1950's, it was not until the government of Nepal promulgated the Foreign Employment Act of 1989 that international labor migration to destinations other than India became a viable option. The 1989 Foreign Employment Act licensed non-governmental institutions to export Nepalese workers abroad and legitimized certain labor contracting organizations. This ignited large streams of international migration which had previously been restricted to India (Kollmair et al. 2006; Thieme and Wyss 2005). Recent data for 2009/2010 from the Department of Foreign Employment Promotion shows that Nepalis migrate to over 100 countries globally to work. Figure 1 presents the substantial increase in the number of international migrant departures over the last decade.

(Figure 1. about here)

Although India, Japan, Hong Kong, and other Asian countries were the major migration destinations until the late 1990's, in recent decades the booming economies and construction projects in the countries in the Middle East and the Gulf region has caused that area of the world to become a popular destination for Nepali migrants (Graner and Gurung 2003). In 2008, Bahrain, Cyprus, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, the United Arab Emirates (UAE), and Yemen together hosted a total of 206,572 documented Nepali migrant workers. Qatar, Saudi Arabia, and UAE were the most frequent destinations, with 91, 50, and 47 thousand migrant workers respectively (Nepal Migration Year Book 2008). However, India continues to be the most common migrant destination because of free

borders, low transportation costs, and shared culture (Graner and Gurung 2003; Seddon, Adhikari, and Gurung 2002).

Over the last two decades, Nepal has experienced significant economic and political instability, with a sustained period of armed conflict. Since the 2006 peace agreement improvements have been made in several socioeconomic and political aspects of Nepali life, yet ongoing bickering between political parties and various ethnic and minority movements have kept the country in a tenuous political and economic situation. The rapidly growing young population, faced with both rising expectations for a better standard of living and a lack of economic opportunities at home, has been lured to economies offering an augmented labor demand such as those found in the booming East Asian and GCC countries.

To study this recent but pervasive phenomenon of migration, we relied on the Chitwan Valley Family Study (CVFS) which provides an excellent setting to apply our innovative approach to collect international migrant survey data pertaining to migrant values, beliefs, behaviors and plans.

Our Approaches to Success

In order to design a successful study of migrants from Nepal to the countries of the Persian Gulf we relied on ideas and experiences from several bodies of research. The first is the extensive experience of migration projects in their efforts to successfully interview large fractions of their target populations (Beauchemin and González-Ferrrer 2011; Massey and Capoferro 2004; Massey 1987; Ortiz and Ballon 2007; Rindfuss et al. 2007). The second is the extensive experience of researchers in maintaining respondent cooperation and participation in domestic panel studies (Freedman, Thornton and Camburn 1980; Thornton, Freedman and

Camburn 1982). The third is our own experience in Nepal conducting a long-term panel study that has included in its sample, respondents who have migrated internally within Nepal (Axinn, Ghimire and Williams Forthcoming; Ghimire and Axinn 2010; Massey, Williams, Axinn and Ghimire 2010). For this current study, we built upon the knowledge and experience of others and our own extensive setting-specific knowledge of Nepal by adding several important innovations that resulted in a very successful study of Nepali migrants to the Persian Gulf, with 87 percent of our target respondents interviewed within six months and 95 percent within 26 months.

Our innovative package of strategies included a number of integrated elements: (1) building our migration study on an on-going panel study of Nepalis ; (2) relying on on-going contacts with the migrants' households at the place of origin; (3) utilizing multiple social networks at the places of origin and destination; (4) employing mixed-method multi-mode data collection approaches and state-of-the art technology; (5) conducting our data collection over an extended period of time; (6) exercising flexibility in study procedures; and (7) tailoring interview situations to fit the respondents' backgrounds. We now discuss each of these strategies in detail.

1. Building on a panel study

The research literature from prominent migration studies has documented several important advantages of designing or building a migrant study on an ongoing panel at the place of origin (Rindfuss et al. 2007). First, a well-designed panel study can serve as an invaluable source of information about migrants. Second, it can provide a sample of migrants from a representatively-selected group of households. Third, it offers setting-specific cultural

knowledge, research experience, and research protocols. Fourth, it can provide existing respondent trust of interviewers and the survey operation. Last but not least, an existing panel can provide a cadre of trained and experienced personnel who can apply their large body of knowledge and experience in locating and securing domestic respondents' cooperation to the more difficult tasks of conducting interviews internationally.

Our study of Nepali migrants was built directly on the Chitwan Valley Family Study (CVFS), a large-scale ongoing panel study of communities, households, and individuals from the western Chitwan Valley of Nepal (Barber et al 1997).¹ The CVFS was launched in 1996 with a census of households, followed by an extensive personal interview with household members. From 1997 through 2008, monthly follow-up interviews were conducted with sample households and individuals to collect additional information, especially concerning demographic events (Axinn, Ghimire and Williams, Forthcoming). If any original household or respondent moved out of the sample neighborhood but remained within Nepal, they were followed and interviewed at their new location. Individuals or households who moved outside of Nepal during this period were dropped from the study.

In 2008 we launched a new panel study, interviewing households and individuals living in the same sample neighborhoods. We followed these initial interviews with a series of follow-up interviews with households and individuals, with three interviews conducted each year. As in the 1966 to 2008 period, we interviewed during the subsequent period both households and individuals who stayed in Chitwan and households and individuals who moved outside of

¹ To learn more about the details of the data collection, please visit <http://perl.psc.isr.umich.edu>.

Chitwan but who stayed in Nepal. Also, as earlier, international migrants were dropped from further interviewing.

We began our current international migration project to study migrants from our sample areas in Nepal to the Persian Gulf in 2009. We built upon our previous work by using our 2008 sample of households to identify our sample of migrants. We utilized the definition of migrant most commonly used in migration studies: a family member of the sample household who was away from the household most of the time in the six months prior to the date of the household census. We asked the respondent in the household interview, who was an adult member of the household, to decide whether a person was a family member.

We asked about all family members of a CVFS sample household who were living away from the home at any Nepali or international location. This data collection resulted in the identification of 2,052 households with migrants in over 52 districts within Nepal (out of 75 total districts) and 40 countries around the world. The CVFS collected this information about all migrants irrespective of their destination because our ultimate goal was to employ our approach to collect information from all migrants around the world. The international migration study we describe in this paper refers only to respondents who migrated to the Gulf Cooperation Council (GCC) countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates), since the project sponsors required a focus on migrants to that area of the world.

As shown in Table 1, this interview with household informants in Nepal resulted in a sample of 460 individuals who were away from 400 sample households and were residing in one of the six GCC countries at the time of the 2008 household census. As the table shows,

most of our sample migrants were male and were concentrated in Qatar, Saudi Arabia, and the UAE. We believe that this strategy of building on an ongoing panel study made it possible to secure a representative sample of migrants at the place of origin.

(Table 1. about here)

2. Relying on migrants' households at the place of origin for contact information

An essential element for the successful completion of a migration project that relies on a sample generated from the place of origin is information about the location of the respondent and how to contact the respondent. Our first and most important source for this information was the migrant's household in Chitwan. Whenever the household interview revealed that a family member was living in some other place, our interviewer immediately asked for information about how to contact the migrant.

We had many reasons to anticipate that locating and contacting large numbers of Nepalis in the Persian Gulf would be very difficult. This led us to ascertain as much information as possible from the migrant's household about how to contact the migrant. During the household interview, if a household had a migrant, we administered a brief survey about each migrant to collect the necessary contact information. This included asking for addresses, telephone numbers, and email addresses. We also asked if the migrant was planning to be back in Nepal, either for a visit or permanently, in the next year.

Our efforts to collect residential addresses for migrants proved to be ineffective. In fact, we were not able to collect any useful addresses of migrants in the Gulf. A major impediment to obtaining useful addresses was that most of the Nepali migrants to the Gulf—particularly the

wage workers—resided in labor camps provided by their employers and did not have usable private residential addresses. Even if some of the migrants had a private address, postal systems in this part of the world often do not have adequate resources to keep updated records of residential addresses, meaning that the vast majority of migrant families in Nepal did not know the correct mailing address for their migrant family member. In addition, most of the migrants themselves did not know a mailing address for themselves, and even if they did, they knew that the chance of a letter actually being delivered to them at that address was very low.

Likewise, the use of email and the internet turned out to have little value to us. Very few of our migrants had a personal email account, and none of their households in Nepal had those email addresses.

Inasmuch as we were unable to use addresses, either physical or virtual, in locating respondents, we had to rely on either telephone contacts or wait until the respondents returned to Nepal for an interview. The latter option proved to be a useful resource, as the households in Nepal reported that slightly over 20% of migrants planned to return home within one year, either for a visit or permanently. However, the telephone became our primary mode of contact for most of the migrants.

3. Utilizing multiple social networks to obtain contact information

We found early on that the initial household interview was important, but it was insufficient to obtain the necessary telephone contact information. This led us to make special efforts to get this contact information by using multiple people in the migrant's social network, including other household members, non-household family members, other relatives, friends and coworkers at the place of origin, and family members, other relatives, friends, and

coworkers at the destination place. We approached the collection of these contact telephone number in four steps: (a) *CVFS regular household interview*, (b) *Household re-visits*, (c) *Other social networks*, and (d) *Ongoing tracking and panel follow-up*. We now discuss, in turn, each of these sources of information.

(a) *CVFS regular household interviews*. Although we expected that we would obtain the migrant's telephone number during our regular household interview, as shown in Table 2, we were able to collect telephone numbers only for 35% of migrants in this initial interview. This is partly because elderly household members, particularly parents of migrants, who are usually the respondents in the CVFS household interviews, are often illiterate and do not have contact numbers available.

(b) *Household revisits*. Because we were not able to obtain the telephone number for a large fraction (nearly two-thirds) of the migrants at the initial household interview, we revisited the household to talk to other household members who may have the information or the contact number. These household members generally included the spouses of the married migrants or the siblings of the unmarried migrants. Through such revisits to the household, we were able to collect contact numbers for another 29% of migrants.

(Table 2. about here)

(c) *Other social networks*. Although both the household respondent in the original household interview and other family members were important sources of telephone contact information for almost two thirds (64%) of the migrants, we were still unable to collect contact numbers and other information for a substantial portion (over one-third) of them. This led us to explore the migrants' wider social ties and networks both at the place of origin and at the

destination. The wider social networks at the place of origin mostly included close kin, friends, coworkers, and colleagues. Networks at the destination place, however, mostly included coworkers, and national-, regional-, and ethnicity-based welfare and social groups. The interviewer collected the information on these social networks from the members of the household at the place of origin and from members of the social groups who were also respondents in our migrant sample. Telephone contact information was obtained for 8 percent of our migrant sample through these networks.

(d) Ongoing tracking and panel follow-up. Of great importance is the fact that locating and interviewing migrants is an ongoing and dynamic process extending over time which requires efforts to update migrant location and contact information over time. Our ongoing panel study has been instrumental to keep track of any changes in migrant residence both in the destination countries and for migrants returning to Nepal. The CVFS interviewers regularly visit the sample households and update demographic events including the residential moves and residential locations of each family member. This information was crucial to track the migrants, update the contact information, locate and contact migrants, and to arrange interviews by telephone or in person if the migrant returned home for vacation or permanently.

As shown in Table 3, we were able to collect telephone contact information for 72% of migrants. Out of the remaining, that we could not obtain any contact information (28%), a majority (20%) planned to return home within a year. It was only for 8 % of the migrants for whom we could not get contact information. Out of the 20% (92 individuals) who planned to return within a year, 85% of them (78 individuals) actually returned and we were able to interview them face-to-face in Nepal. In addition, out of the 72% of respondents (331

individuals) for whom we had a contact number, about 24% of them (79 individuals) also returned home and we were able to interview 95% of them (79 individuals) face-to-face in Nepal. Finally, out of the remaining 8% (37 individuals) for whom we had no contact information and had no plans to return to Nepal within one year, one third of them (12 individuals) returned to Nepal and we were able to interview 10 of them back in Nepal. This resulted in 60% (267 individuals) of the completed interviews being telephone interviews and 40% being face-to-face interviews, with an overall 95% response rate.

(Table 3. about here)

(4) Employing mixed methods data collection and state-of-the art technology

To maximize the participation rate of our migrants, it was necessary to use a mixed-methods multi-mode data collection strategy. Because many of our migrants had access to telephones and were not planning to return to Nepal even for a vacation within the study period, we needed a telephone interviewing strategy for interviewing migrants in the Gulf. In addition, because many migrants had no telephone access in the Gulf, but were planning to return to their origin households, we needed a strategy for interviewing people face-to-face in their origin neighborhoods. In addition, a substantial number of the migrants returning to Nepal also settled outside of the Chitwan study area, requiring that we interview them through either telephone or face-to-face mode, as necessitated by location and telephone access considerations.

This multi-mode, multi-location strategy required that we structure our interviewing organization to cover all possibilities. For respondents who were interviewed in face-to-face interviews in Chitwan, we used the same procedures that we used for our ongoing CVFS panel

study. For migrants who were interviewed by telephone, we set up a telephone interviewing facility at our main office in Chitwan from which we called the migrants. For both the personal and telephone interviews, we used some of our most experienced and knowledgeable interviewers from the ongoing CVFS panel study. This procedure both allowed flexibility in interviewing and in coordinating decisions about the mode and place of interview.

The coordination and training of interviewers for this migration project was facilitated by the fact that we used the same basic questionnaire in the migrant interviews that we had used in the ongoing CVFS panel study. That content focused on such things as personal experiences, values and beliefs, and future plans. In addition, we administered a short module focusing on the respondent's migration experience.

Our ability to conduct a large number of telephone interviews from Nepal to the Persian Gulf required the use of the most effective communication technology, particularly wireless telephone and internet technology. This required considerations of both access and cost.

(a) Access to telephone technology. Most of the migrants from Nepal to the Gulf are labor migrants who are provided with residential facilities by their employers. These living quarters are generally maintained as confined group quarters and camps with limited interactions with the outside world. These residences (group quarters and camps) are not usually connected to landline communication facilities. Fortunately, wireless telephone technology has made it possible for many of these migrants to connect with the outside world. Access to wireless telephone technology is feasible for migrants because mobile phones can be easily purchased, do not require a permanent address or legal status as required for land lines, and are easily transferable. In addition, because migrants are generally housed in camps, with

four to five migrants sharing a single room, they frequently share many resources, including mobile phones. Therefore, even if only a small fraction of migrants have mobile phones, those phones are often available for use by others sharing the same living quarters. In our study over 95 % of the telephone interviews were completed using mobile telephones.

(b) Cost. Another frequently mentioned problem in the study of migrants is the cost of interviewing. However, current communication technology has reduced the cost in three important ways. First, with the improvements in wireless technology and market competition, the price of telephone service has been steadily declining. Second, with the increasing availability of high speed internet services for interviewers, telephone interviews can be completed at a fraction of what land line calls would cost. Finally, in the Persian Gulf, there are no charges for incoming calls. Therefore migrants can talk without charges to their telephone bills. This feature has been instrumental for obtaining respondent cooperation and keeping costs manageable.

Although the improvements in communication technologies have been highly instrumental for the success of our study, we still faced several challenges. First, we sometimes had to deal with such problems as getting connected, difficulty of the interviewer and migrant in understanding each other, and frequent dropped calls. Second, migrants' mobile telephones did not always have fully charged batteries, which prevented some interviews from being completed in a single call. As a result, as we discuss later, a large fraction of interviews had to be completed in multiple calls, increasing the burden and complexity of completing the interviews.

(5) Conducting data collection over an extended time period

We recognized at the beginning of our project that its complexity would likely require an extensive field period in order to locate and interview migrants by telephone or to allow them to return to Nepal for an interview. Although, as shown in Figure 2, we were able to interview 87 percent of the respondents within seven months, it took two years to reach our final completion rate of 95 percent. Note that most of the interviews completed after month seven were face-to-face interviews conducted in Nepal. Where the number interviewed by telephone had reached nearly 60 percent by month seven, it leveled off at just over 60 percent by the end of the study. However, face-to-face interviews of returning migrants continued to increase, resulting in a final overall response rate of 95% by the end of 26 months.

Note that while it took a field period of more than two years to reach the 95 percent mark, as already noted, we were at 87 percent in seven months, and at month twelve, we had already interviewed 90 percent of the migrants. Thus, even with a less extended field period, our response rate would have been excellent.

A long period of data collection is particularly useful to obtain interviews from those who do not have legal status at their destination and are afraid of talking about personal circumstances from that location. This window of time allowed those respondents to be back home and complete the interview.

(Figure 2. about here)

(6) Exercising flexibility in study procedures

In addition to allowing an appropriate window of time for the field period, it is crucial to provide flexibility in other aspects of the interviewing process. Often, non- participation in surveys is not due to disinterest in the study, but rather due to the respondent's personal circumstances. These personal circumstances may include (but are not limited to) odd work schedules, long working hours, restricted mobility, and legal status. Therefore, it is important to offer a flexible window of time to complete the interviews so that respondents can fit them into their schedules. This allows those who work long hours or have severe restrictions on mobility and communication to have sufficient time to manage their circumstances in order to participate in the study before the end of the interviewing period.

We exercised extensive flexibility to accommodate the respondent's schedule, preferences, and needs. Our interviewing staff was located in Nepal, a different time zone from our migrants in the Gulf. This required that interviewers keep the respondent's local time in mind, and they often needed to adjust their work hours to accomplish this. The vast majority of our interviews were conducted within a certain window of time during the day. As shown in Figure 3, over 89 percent of the interviews were conducted during the hours from 8 AM to 5 PM in Nepal, which was 9.45 AM to 7.45 PM in the Gulf.

(Figure 3. about here)

Also, the migrants' work schedules are likely to vary according to the sociopolitical and cultural context of the destination places and the type and nature of the migrants'

employment. For example, workers in GCC countries frequently have Fridays off, whereas in other countries the days off from work are generally Saturdays and Sundays. As a consequence, and as shown in Figure 4, nearly one third of the interviews were completed on Fridays.

(Figure 4. about here)

Likewise, it is important to have cultural knowledge of the destination places, as the long holidays in various places are often closely associated with religious and cultural practices—i.e., Christmas, Ramadan, Dashara, and Diwali. This affects migrants and their availability for interviews, even though the migrants may be from different cultural backgrounds that have little to do with these holidays at the destination location.

Respondents' availability also depends on the nature of the work they do. For example, a factory worker may have night work but be free for the rest of the day. For another example, the schedule for a domestic worker may be irregular, and the worker may not have any free time until late at night when all the household chores are taken care of and the members of the household go to bed. Moreover, migrants are often under financial pressure to earn as much income as possible, and therefore they may be especially willing to work overtime hours. Taking all of these complexities into account, we not only tailored interviewer schedules to the respondents' availability, but we also created a 24/7 telephone service center. In addition, we provided our service center's telephone numbers to the respondents so that they could call us back when they had time to make an appointment or to complete the interview.

To prepare for these possibilities, interviewers were trained and instructed to respect

the respondents' personal circumstances and stop the interview if circumstances required it and to resume the interview at a more convenient time if possible. As shown in Figure 5, a substantial fraction of the interviews were completed in two or more sessions.

(Figure 5. about here)

(7) Tailoring the interview situation to fit the respondent's background

As mentioned above, we staffed our interviewer pool with well-trained and experienced interviewers who had worked on the CVFS for several years. In some cases, the respondent had been a participant in the 1966-2008 CVFS (before their migration) and had personally met one or more members of the interviewing staff on previous occasions. This circumstance would have contributed substantially to the respondents' confidence in the interviewers' legitimacy. Some other migrant respondents had not participated in the 1996-2008 CVFS and had not met anyone from the interviewing staff previously. In such cases, interviewers would gather information about the respondent's household before the interview took place in order to have familiarity with the respondent's family. In addition, interviewers often relayed a message from the respondent's family members to the respondent. Interviewers were also instructed to reference cultural and current events in Nepal at the beginning of the conversation with the respondent. In addition, interviewers passed on any messages the respondent may have had for his/her family in Nepal. We believe that such familiarity with the migrants' households, combined with our interviewers' willingness to assist with communication between the migrants and their families, have been instrumental in building interviewer rapport and earning the respondents' trust.

We also recognized the importance of understanding cultural context and being sensitive to any social norms or practices. One example of this is that in Nepal social interactions are highly gendered. Even over the telephone, women generally prefer to talk to other women, and men prefer to talk to other men, unless there are some official or important issues. This leads to the cultural perception that women would not call someone unless it was an important matter. Because a large number of our migrant respondents are male, we staffed our interviewing team with over 85% female interviewers in order to communicate the message that our calls were important.

Successfully completing surveys of all types—cross-sectional surveys or domestic panel studies—requires careful attention to secure the respondent’s cooperation. This requires a host of methods to ensure that the respondent is properly introduced to the study, is convinced that the study is legitimate and worthwhile, and feels a rapport with the interviewer. Such efforts are even more important in surveys of international migration. It is particularly challenging to secure cooperation over the telephone from respondents who are away from home, who may be in a different time zone, or who may have conflicting work schedules or cultural obstacles. As one of the respondents mentioned during an interview, “Leaving your own motherland for work means to make money. When you are in a foreign country, why not work as hard as you can and make as much as you can?”

These considerations required us to be especially careful in persuading potential respondents of the merit and legitimacy of our research project. We found it relatively straightforward to break the ice with respondents who had previous knowledge of the CVFS panel study. In fact, for those respondents who had participated in the 1996-2008 panel study,

receiving a phone call from the same Nepali research staff member helped establish the study's significance as well as the importance of the respondent's participation. We found that most migrants appreciated receiving a call from their own countries, as it represented a tie with their home communities.

It is important to note that we achieved our 95 percent response rate despite one disadvantage of our study: a long interview. As we mentioned earlier, we used the same basic questionnaire with our migrants as we did with our regular CVFS participants. We did this so that we would have comparable information from migrants and stayers, permitting us to integrate the information across movers and stayers. In addition, we added a modest migration module to the migrant questionnaire. The result was that our migrant interview averaged 90 minutes, 81 minutes face-to-face and 101 minutes telephone interview. We would expect that such a long interview would have dampened response rates, but if that happened, the effect could not have been very large.

Conclusion and Discussion

This paper was motivated by the methodological challenges faced by studies of international migration. As we noted earlier, the difficulties of obtaining information from migrants about themselves, their origin communities, and their destination experiences produce limitations in studying both migration and a range of other topics. In the project reported in this paper we designed a set of new and innovative strategies and protocols for collecting data from a representative sample of individuals from one origin area who migrated across international boundaries and linking that information to their families and communities

at the origin. In this project, we focused on procedures for drawing a representative sample of migrants that could be interviewed, ways of interacting with people in the sending communities to obtain up-to-date contact information, the incorporation of new communication technologies such as cell phones, and the use of networking in destination areas that would be appropriate for interviewing migrants anywhere in the world.

The goal of our project was to study people who migrated from an area of Nepal to one of the six Gulf Cooperation Council countries. Our innovative package of strategies included several integrated elements: (1) building our migration study on an on-going panel study of Nepalis; (2) relying on on-going contacts with the migrants' households at the place of origin; (3) utilizing multiple social networks at the place of origin; (4) employing mixed-method multi-mode data collection approaches and state-of-the-art communication technology; (5) conducting our data collection over an extended period of time; (6) exercising extensive flexibility in study procedures; and (7) tailoring interview situations to fit the respondents' backgrounds.

We were able to successfully interview 90 percent of the migrants within twelve months and 95 percent by 26 months. We believe that cooperation rates of this kind will permit examination of many questions about migration that have previously been difficult, if not impossible, to address. They also permit overcoming certain biases due to out-migration in surveys of other topics such as health, marriage, and childbearing.

Of course, a crucial question concerns whether our strategies and protocols can be used successfully in a wide variety of origin and destination communities. Our study focused only on one origin area in Nepal and on receiving countries in the Gulf, hardly a representative sample

of migration streams around the world. As we discussed earlier, there are important historical, cultural, sociopolitical, and economic differences among sending countries and among receiving countries, and methodological challenges faced by migration studies vary by both origin and destination country.

These differences leave open the question of whether our strategies and protocols will be successful elsewhere. Our expectation is that the overall strategies and approaches that we have designed for studying Nepali migrants in the Gulf will have applicability elsewhere. For example, relying on an existing panel study to provide a representative sample of migrants and gain respondent trust and contact information is a standard survey procedure that should be applicable all over the world. Migrants from many countries around the world often have access to mobile phones. Employing mixed methods data collection and flexibility in study procedures, and tailoring the interview situation to fit the respondents' background should also be applicable regardless of migrants' destination or origin. However, success in other settings will require adaptation of these general approaches to fit the circumstances of both the sending and receiving places. Country-specific implementation of interviewing strategies and protocols is an essential element for success of any international migration study.

The success of our research in studying Nepali migrants to the Persian Gulf has laid the groundwork for expanding our research to studying Nepali migrants to other places. In this new research we are applying the same overall methods, with appropriate modifications, to study migrants from Nepal to wherever they may have moved any place in the world. This new study will allow us to evaluate whether our strategies for interviewing Nepali migrants to the Persian Gulf will work in numerous different settings. Of course, this study is based exclusively

on the origin country of Nepal, and other studies will be needed to evaluate success in studying migrants from other origin places.

References

- Antecol, H. and Bedard K. (2006). Unhealthy Assimilation: Why Do Immigrants Converge to American Health Status Levels? *Demography*, 43, 337-360.
- Appleyard, R.T. (1982). *Methods of Estimating and Analyzing International Migration*. National Migration Surveys, Manual X, Guidelines for Analysis, ESCAP, New York: United Nations.
- Asian Development Bank (ADB) (2012). *Basic Statistics 2012*. Economics and Research Department. Development Indicators and Policy Research Division. Asian Development Bank. <http://www.adb.org/sites/default/files/pub/2012/basic-statistics-2012.pdf> Retrieved on May 15, 2012.
- Axinn, William G., Dirgha J. Ghimire and Nathalie Williams. Forthcoming. Collecting Survey Data during Armed Conflict. *Journal of Official Statistics*.
- Barber, J., G. Shivakoti, W. G. Axinn, K. Gajurel. (1997). Sampling Strategies for Rural Settings: A Detailed Example from the Chitwan Valley Family Study Nepal. *Nepal Population Journal* 6(5): 193-203.
- Beauchemin, C. and González-Ferrer, A. (2009). Multi-Country Surveys on International Migration: An Assessment of Selection Biases in Destination Countries. Paper presented at the Annual Meeting of the Population Association of America, Detroit, MI.
- Beauchemin, C., and González-Ferrer, A. (2011). Sampling International Migrants with Origin-Based Snowballing Method: New Evidence on Biases and Limitations. *Demographic Research*, 25, 103-134.
- Bilsborrow, R.E., Hugo, G., Oberai, A.S., and Zlotnik, H. (1997). *International Migration Statistics: Guidelines for Improving Data Collection Systems*. Geneva: International Labour Office.
- Borjas, G.J. (1987). Self-Selection and the Earnings of Immigrants. *The American Economic Review*, 77, 531-553.
- Brockerhoff, M. and Biddlecom, A. (1998). Migration, Sexual Behavior and HIV Diffusion in Kenya. Policy Research Division Working Paper 111.
- Durand, J. and Massey, D.S. (2006). What We Learned from the Mexican Migration Project. *Crossing the Border: Research from the Mexican Migration Project*, J. Durand and D.S. Massey (eds), New York, NY: Russell Sage Foundation, 1-16.

- Fawcett, J.T. and Arnold, F. (1987). The Role of Surveys in the Study of International Migration: An Appraisal. *International Migration Review*, 21, 1523-1540.
- Freedman, D.S., Thornton, A., and Camburn, D. (1980). Maintaining Response Rates in Longitudinal Studies. *Sociological Methods and Research*, 9, 87-98.
- Ghimire, Dirgha J. and William G. Axinn. (2010). Community Context Social Organization, Land Use and the Hazard of First Birth. *Rural Sociology*, 75 (3): 478-513.
- Graner, E. and Gurung, G. (2003). Arab Ko Lahure: Looking at Nepali Labour Migrants to Arabian Countries. *Nepalese Studies*, 30, 295-325.
- Gurung, Harka Bahadur et al. 1983. Internal and International Migration in Nepal. Main report. 5 parts. [in Nepali]. Kathmandu: HMG Population Commission.
- Jasso, G. and Rosenzweig, M.R. (1990). Self-Selection and the Earnings of Immigrants: Comment. *The American Economic Review*, 80, 298-304.
- Jasso, G., Massey, D.S., Rosenzweig, M.R., and Smith, J.P. (2004). Immigrant Health: Selectivity and Acculturation. *Critical Perspectives on Racial and Ethnic Differences in Health in Late Life*, N.B. Anderson, R.A. Bulatao, and B. Cohen (eds), Washington DC: National Academies Press, 227-268.
- Jasso, G., Massey, D.S., Rosenzweig, M.R., and Smith, J.P. (2000). The New Immigrant Survey Pilot (NIS-P): Overview and Findings about U.S. Legal Immigrants at Admission, *Demography*, 37, 127-138.
- Jochelson, K., Mothibeli M., and Leger, J.P. (1991). Human Immuno-Deficiency Virus and Migrant Labor in South Africa. *International Journal of Health Services*, 21, 157-173.
- Kollmair, M., Manandhar, S., Subedi, B., and Thieme, S. (2006). New Figures for Old Stories: Migration and Remittance in Nepal. *Migration Letters*, 3, 151-160.
- Levine, D.B., Hill, K., and Warren, R. (eds). (1985). *Immigration Statistics: A Story of Neglect*. Washington DC: National Academy Press.
- Massey, Douglas S., Nathalie Williams, William G. Axinn, and Dirgha J. Ghimire . (2010) Community Services and Out-Migration. *International Migration*, 48(3):1-41
- Massey, D.S. (1987). Measuring International Migration: Theory and Practice. *International Migration Review*, 21, 1498-1522.

- Massey, D.S. and Capoferro, C. (2004). Measuring Undocumented Migration. *International Migration Review*, 38, 1075-1102.
- Massey, D.S. and Espinosa, K. (1997). What's Driving Mexico-U.S. Migration? A Theoretical, Empirical, and Policy Analysis. *The American Journal of Sociology*, 102, 939-999.
- Massey, D.S. and Singer, A. (1995). New Estimates of Undocumented Mexican Migration and the Probability of Apprehension. *Demography*, 32, 203-213.
- Massey, D.S., Goldring, L., and Durand, J. (1994). Continuities in Transnational Migration: An Analysis of Nineteen Mexican Communities. *The American Journal of Sociology*, 99, 1492-1533.
- McDonald, J.T. and Kennedy, S. (2004). Insights into the "Healthy Immigrant Effect": Health Status and Health Service Use of Immigrants to Canada. *Social Science and Medicine*, 59, 1613-1627.
- McKenzie, D. J. and Mistiaen, J. (2007). Surveying Migrant Households: A Comparison of Census-Based, Snowball, and Intercept Point Surveys. World Bank Policy Research Working Paper 4419.
- United Nations Development Programme (UNDP). 2004. Human Development Report 2004: Empowerment and Poverty Reduction. Jagadamba Press, Kathmandu Nepal
- Nepal Migration Year Book 2008. 2008. Nepal Institute of Development Studies (NIDS), Dillibazar, Kathmandu, Heidel Press.
- Ortiz, Vilma and Estela G. Ballon. 2007. Longitudinal Research at the Turn of the Century: Searching for the Mexican American People. *Sociological Methods Research* 36: 112-137.
- Palloni, A. and Arias, E. (2003). A Re-Examination of the Hispanic Mortality Paradox. CDE Working Paper 2003-01, University of Wisconsin-Madison.
- Parrado, E.A., Flippen, C.A., and McQuiston, C. (2004). Use of Commercial Sex Workers Among Migrant Hispanics in the Southeastern United States: Implications for the Diffusion of HIV. *Perspectives on Sexual and Reproductive Health*, 36, 150-156.
- Parrado, E.A., McQuiston, C., and Flippen, C.A. (2005). Participatory Survey Research: Integrating Community Collaboration and Quantitative Methods for the Study of Gender and HIV Risks among Hispanic Migrants. *Sociological Methods Research*, 34, 204-239.
- Rathaur, Kamal Raj Singh, "British Gurkha Recruitment: A Historical Perspective," *Voice of History*, 2001, 16(2), 19-24.

- Rindfuss, R.R., Kaneda, T., Chattopadhyay, A., and Sethaput, C. (2007). Panel Studies and Migration. *Social Science Research*, 36, 374-403.
- Rubalcava, L, Teruel, G., Arenas, E., and Herrera, C. (2009). Tracking Beyond Borders: Mexican Family Life Survey Experience. Paper presented at the Annual Meeting of the Population Association of America, Detroit, MI.
- Sheddon, D., Adhikari, J., and Gurung, G. (2002). Foreign Labor Migration and the Remittance Economy of Nepal. *Critical Asian Studies*, 34, 19-40.
- Stark, O. and Taylor, J.E. (1991). Migration Incentives, Migration Types: The Role of Relative Deprivation. *The Economic Journal*, 101, 1163-1178.
- Stark, O. and Taylor, J. E. (1989). Relative Deprivation and International Migration. *Demography*, 26, 1-14.
- Stark, O., Taylor, J.E., and Yitzhaki, S. (1986). Remittances and Inequality. *The Economic Journal*, 96, 722-740.
- Stepick, A. and Stepick, C.D. (1990). People in the Shadows: Survey Research among Haitians in Miami. *Human Organization*, 49, 64-77.
- Thieme, S. and Wyss, S. (2005) Migration Patterns and Remittance Transfer in Nepal: A Case Study of Sainik Basti in Western Nepal. *International Migration*, 43, 59–96.
- Thornton, A., Freedman, D. S. and Camburn, D. (1982). Obtaining Respondent Cooperation in Family Panel Studies. *Sociological Methods and Research*, 11, 33-51.
- Todaro, Michael. (1980). Internal Migration in developing countries. In Richard A. Esterlin (ed.), *Population and Economic Change in Developing Countries*. Chicago: University of Chicago Press, pp. 361-401
- Wasserman, M., Bender, D., Kalsbeek, W., Suchidran, C., and Mouw, T. (2005). A Church Based Sampling Design for Research with Latina Immigrant Women. *Population Research and Policy Review*, 24, 647-671.
- Williams, N. (2009). Betting on Life and Livelihoods: The Role of Employment and Assets in the Decision to Migrate During Armed Conflict. *PSC Research Report 09-679*.
- World Bank. 2009. *Nepal Migration Survey*, Kathmandu, World Bank.
- Zhao, Y. (1999). Leaving the Countryside: Rural-to-Urban Migration Decisions in China. *The American Economic Review*, 89, 281-286.

Table 1. Distribution of migrants by gender and destination country.

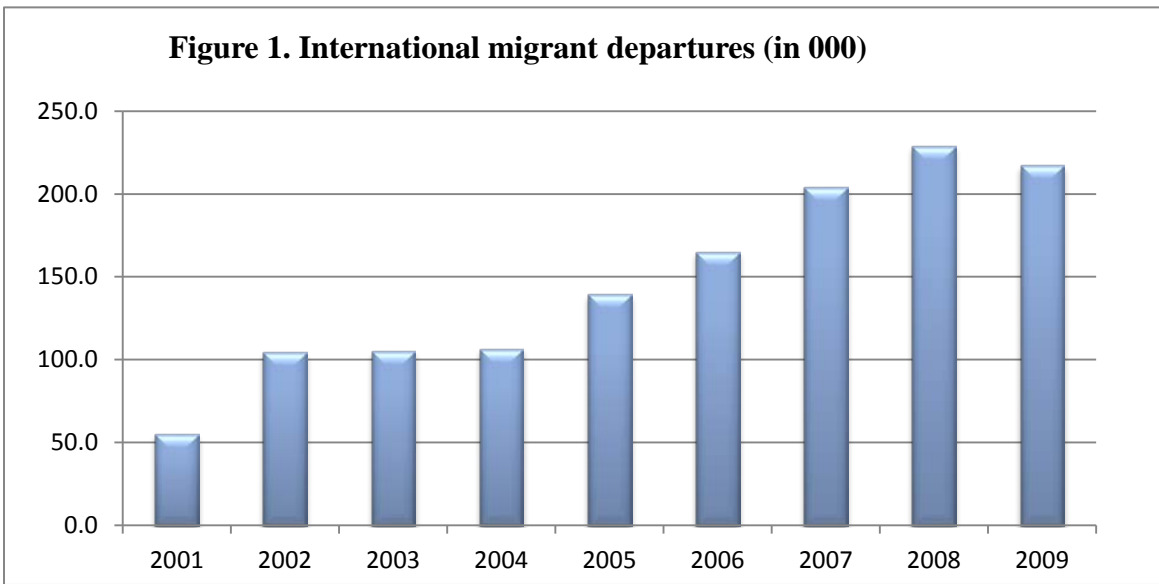
Destination Country	Male	Female	Total
1. Bahrain	2	0	2
2. Kuwait	13	8	21
3. Oman	5	0	5
4. Qatar	172	2	174
5. Saudi Arabia	122	15	137
6. The United Arab Emirates	120	1	121
Total	434	26	460

Table2. Distribution of source of obtaining contact telephone numbers

Source	Number	Percent
1. CVFS regular household interview Collection (First visit)	162	35.2%
2. Household revisit	130	29.3%
3. Other social networks at the place of origin	19	4.1%
4. Other social networks at the place of destination	20	4.3%
5. No contact number	129	28.1%
Total	460	100%

Table 3. Distribution of migrants' plans to return and contact information

Distribution	Number	Percent
1. Returning home within a year	92	20%
2. Contact telephone number	331	72%
3. No information	37	8%
Total	460	100%



Source: World Bank 2009

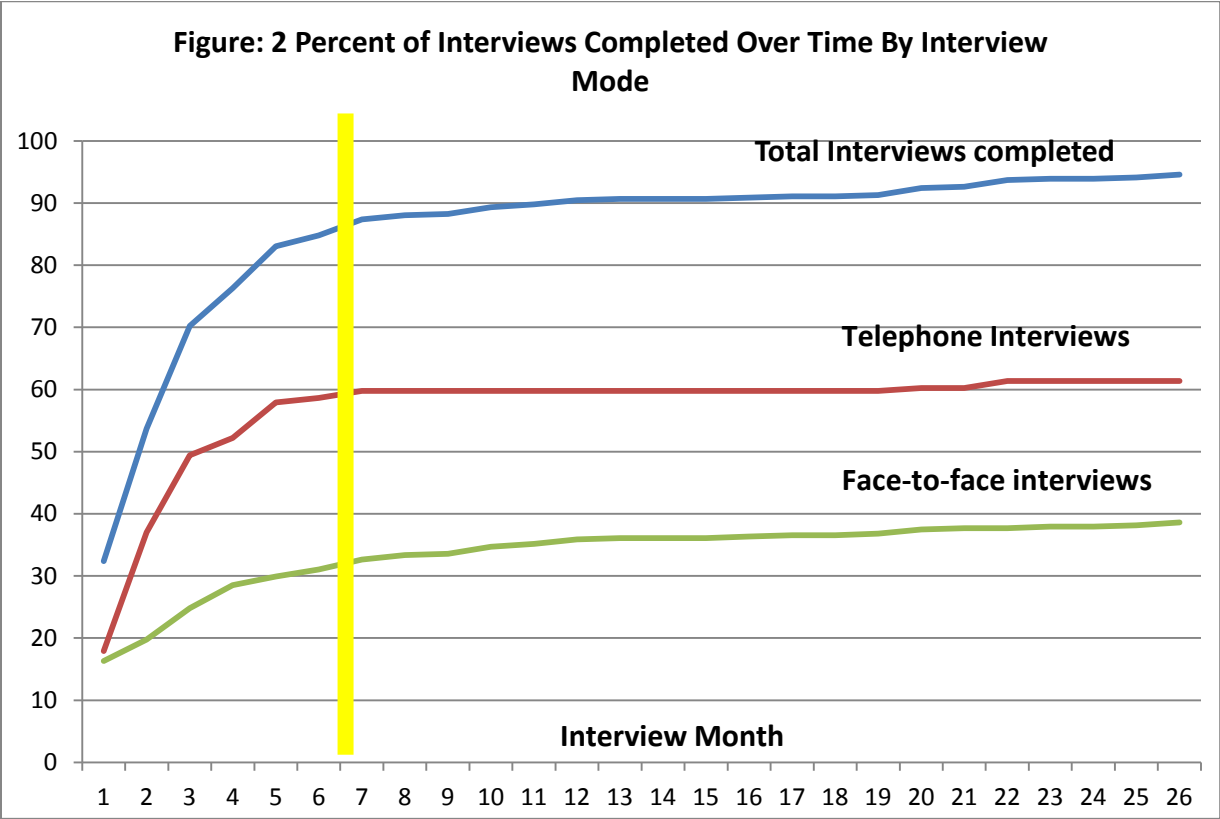


Figure: 3 Percent of Interviews Completed in GCC Countries by Time of the Day (Nepal Time)

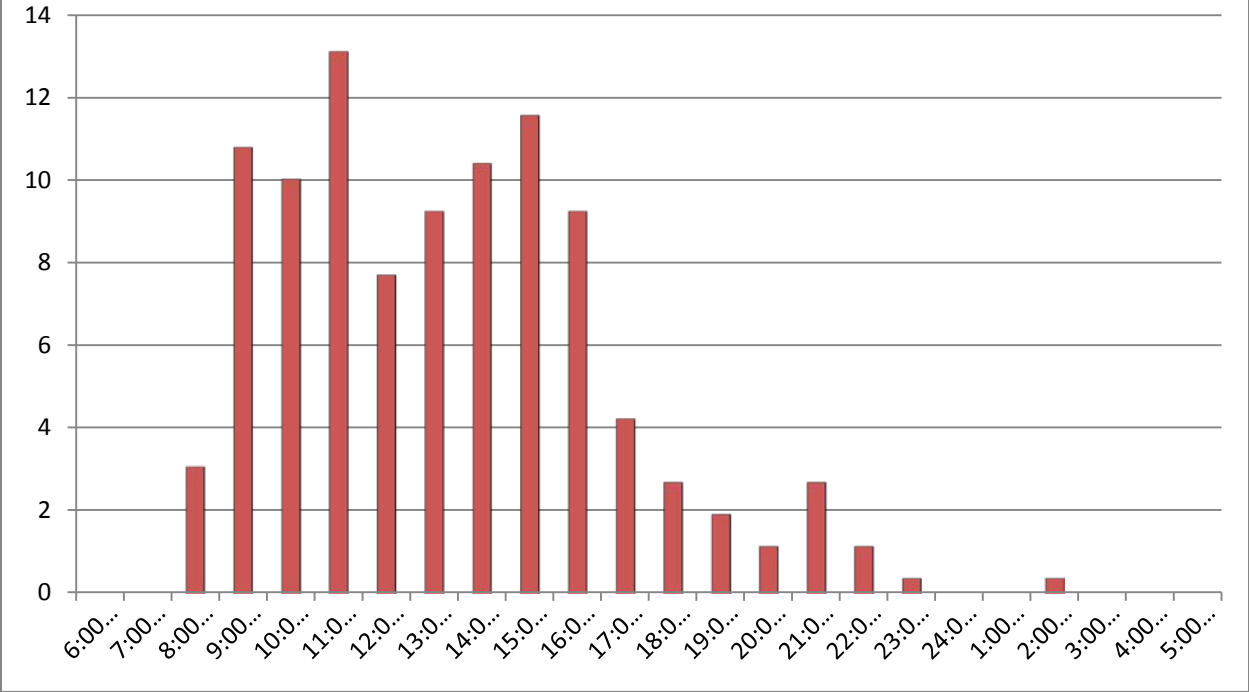


Figure : 4 Percent of Interviews Completed in GCC Countries by the Day of the Week

