

Social Exclusion and Migration: A Case Study of Caste in Nepal

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Abstract

We investigate if and how social exclusion influences out-migration and the choice of migration destinations. While literature has shown that migration can increase the social and economic status of individuals and their families, it is unclear if socially excluded groups have equal access to migration, and particularly migration to premier destinations. We argue that individuals from socially excluded groups will be less likely to migrate in general, but when they do, there will be no difference in their migration to destinations where the same patterns of social exclusion are not practiced. We use the detailed longitudinal data from a migrant sending setting in Nepal to test these arguments. Using the multinomial logistic regression event history modeling, we find that individuals from socially excluded caste/ethnic groups are less likely to migrate. However, when social and economic capitals are controlled, they are no more or less likely to migrate to premier destinations. This suggests that migration might begin to serve as a levelling factor of caste/ethnic-related social exclusion in Nepal.

Key words: caste, ethnicity, destination, migration, disadvantaged, rural, Nepal, South Asia, social exclusion

Introduction

Social exclusion is a major social problem. Exclusion from full participation in society, in terms of rights, opportunities, and resources (including access to housing, employment, community relationships, civic engagement, safety, and due process) is a key concern in almost all, if not all countries in the world. There is some variance in the malleability of social exclusion and if and how individuals can attain higher social status and escape from exclusion, yet in most places entrenched culture and social norms make this at least very difficult. Understanding how social exclusion affects individuals, families, and groups and if and how it can be overcome is a key topic in sociology. Despite decades of study on this issue, processes of social exclusion and change still remain confounding, especially in poorer countries where less research has been conducted.

In this paper, we investigate the influence of social exclusion on an important social behavior—migration. Migration is a common behavior in many countries around the world. Indeed, more people are geographically mobile today than at any point in human history, with as estimated 232 million international and 750 million domestic migrants in 2013 (UN Press Release 2013; International Organization for Migration, 2015). A substantial majority of these migrants are from poorer countries where migration is a key livelihood strategy, with monetary remittances supplementing farm income and allowing families to sustain a basic standard of living, health, and education for children. Social and political remittances are also important consequence of migration with significant impacts on origin communities (Vari-Lavoisier, 2014; Kamuleta, 2014; Levitt, 1998; Adhikari and Hopley 2013).

On an individual level, research has shown that migration is also a “cultural act” (Levitt and Lamba-Nieves 2011 p.2) that can be used as a strategy to improve social status and

identities. Numerous studies in different parts of South Asia (including India, Sri Lanka, and Nepal) and one in Morocco find that returned migrants and their households from lower caste or otherwise excluded groups have used the money and prestige from migration to renegotiate traditional degrading occupations, change consumption practices, and actively resist domination and discrimination (Adhikari and Hobley 2013; Carswell and de Neve 2014; Gidwani and Sivaramakrishnan 2003; Ilahiane 2001; Kurien 2002; Osella and Osella 2000; Poertner, Junginger, and Muller-Boker 2011; Still 2009; Sunam 2014; Thangaraja 2003; Thieme and Wyss 2005). The incredible rates of migration worldwide and the potential economic *and* social impacts make it a likely catalyst of social change in many ways and a key topic for sociological research.

If migration is possibly a strategy to renegotiate status, or dampen traditional categories of social exclusion, then a key question is—who migrates? If people from socially excluded groups are less likely to migrate than others, then we can expect that the massive migration flows in some countries will have either no effect or serve to further bolster existing patterns of social exclusion. However, if people from excluded groups are equally or even more likely to migrate, then migration could be an important catalyst in dampening status hierarchies. In this article, we examine one part of this potentially cyclical process—how does social exclusion affect the likelihood of migration and how does it affect destination choice, where some destinations are substantially more economically and socially beneficial than others?

Our study is based in rural Nepal, where temporary out-migration rates are high. Over 1500 Nepalis move outside of Nepal everyday (Pattison, 2014). The 2011 population census reported about 2 million individuals as migrants with the percentage being much higher for young people and for men (CBS, 2011). Nepali society is also heavily influenced by a Hindu-

based caste system, with high caste Hindu groups receiving preferential treatment in almost every aspect of life and low caste “untouchables” excluded from most. The caste system in Nepal, although previously encoded as law, has no basis in present-day law and some policies even seek to provide preferential treatment to lower caste groups (Constituent Assembly of Nepal 2015). While such legal and policy provisions have had little impact on the massive social exclusion of low caste group to-date, they create a situation where changes to the social hierarchy are at least ostensibly possible from a legal standpoint.

We use exceptionally detailed longitudinal data from the Chitwan Valley Family Study (CVFS) and sophisticated multinomial multi-level logistic regression models to examine which caste/ethnic groups are more likely to migrate to different destinations and if these effects are due to social and economic capitals (such as education and economic ability), or social exclusion. Our results show that caste/ethnicity has important effects on migration and destination choice. However, when social and economic capitals (education, work and economic status) are controlled, we find no caste/ethnic differences in migration to preferential destinations; in other words, individuals from socially excluded caste/ethnic groups are no more or less likely to migrate to places where the potential monetary and social benefits are higher. Thus, in this setting, high rates of migration have the potential to alter patterns of social exclusion. In this way, this article contributes both to the migration literature and provides a basis for us to argue that migration might be a key factor in understanding the dynamics of social inclusion, both in Nepal and elsewhere as well.

In the next section, we present a broad theoretical framework, based on existing literature and theory and that is designed to be applicable regardless of geographic setting. As with any sociological study, the particularities of how social exclusion function in Nepal are important for

developing appropriate and testable hypotheses and for interpreting empirical results. Thus we next describe our study setting of rural Nepal and the migration and social exclusion patterns that relate to this study. We present both general and setting specific empirical hypotheses for how we expect social exclusion to affect migration and destination choice. After that we test our hypotheses with regression models of the Chitwan Valley Family Study data.

Theoretical Framework

Much of the existing literature on migration focuses on socio-economic, primarily economic, and structural determinants of out-migration (Massey et al. 1993; 1998). However, classic theories of migration are helpful to understand general migration decision making. The neo-classical economics theory of migration which has received strong empirical support for decades (Sjaastad 1962; Todaro 1969; Todaro and Maruszko 1987) suggests that people are likely to migrate when they can expect higher wages elsewhere. Extending this beyond just economics, we can take from this that when people can expect better outcomes (in terms of wages, but also in terms of other social benefits), they will be likely to migrate. Furthermore, this would also suggest that, *ceteris paribus*, migrants will choose the most destinations with the best expected economic and social possibility.

There are a few studies relating race and ethnicity (particularly disadvantaged or excluded racial and ethnic groups) to migration, but which are largely based in wealthier countries such as the US (e.g. Frey et al. 2005), regardless, several of these studies provide an important grounding for development of theory on the topic of social exclusion and migration.

During the African American "Great Migration" for example, Tolnay (2003) documents high rates of black migration from the southern to the northern US. In northern destination states,

more restrictive immigration policies during World War I caused employers to prefer southern blacks and whites over Europeans for inexpensive labor (Tolnay 2003). In southern origin states, some of the influencing push factors for migration included inferior educational opportunities, behavioral restrictions, political disenfranchisement and racial violence. Tolnay finds that black migrants were more attracted to places that had stronger ethnic community support for African Americans. However, the ethnogenic impact on migrant choice of destination decreased, and was gradually substituted by social networks of migrant participants following family members and friends who had migrated to those destinations previously. White migrants were more likely to migrate to nonmetropolitan, farm destinations (White et al. 2005) in the West, and small towns and cities in the Northeast and Midwest (Tolnay 2003). Compared to black migrants, white migrants were able to migrate to further destinations as they were in a better economic position, and had established networks in those destinations due to prior migrants (Tolnay et al. 2005). In the present day, black migrants from the south are more likely to migrate to metropolitan areas and central cities such as Philadelphia, New York and Chicago (White et al. 2005). However, little is known about the characteristics of migrants in different specific city destinations and the reasons for their choices in migration destinations. In both cases, post WWI and the present day, black migration in the US was and is influenced by social exclusion in the south, employment opportunities in the north, and the moderating factors of social networks, expected reception at destinations, and their own economic status.

Tsujita and Ota (2012) examine caste and exclusion based migration patterns in the Indian state of Bihar in the present day. First, they discovered that the probability of landless agricultural laborers to migrate is high and the probability of migrating decreases as the size of

landholding increases. Second, Extreme Backward Castes (EBC¹), are more likely to migrate than other castes, with 45.71% of the EBC population as migrant households. They attribute this to the fact that lower castes have less land, which increases the need for migration. Meanwhile, the difference between Scheduled Castes² and higher caste Hindus in migrating however, is not statistically significant, and the probability of Scheduled Castes (SC) migrating is not as high as expected. However, similar to the weaknesses which Tolnay (2003) mentioned in the literature of the Great Migration, this paper does not identify how choice of destinations differ for migrants of different castes. The key results here are that socially excluded castes are more likely to migrate, and that this is possibly due more to economic status (lack of landownership) rather than other consequences of social exclusion.

In Nepal, Gurung (2012) examined the effects of caste, economic, human, cultural, social and geographical capital on migration and destination choice (rural Nepal, urban Nepal, India, and other countries) using a social exclusion framework. Although not ideal because it is a household level analysis and he uses a proxy for migration (whether a household received remittances) instead of a direct measure of migration, his results are an instructive foundation for our purposes here. His descriptive statistics find higher rates of migration amongst the highest and lowest caste groups in the hill regions and Muslims and lower rates of migration amongst all caste groups (high and low caste) in the lowland terai region. However, when controlling for

¹ The Extreme Backward Castes (EBC) is unique to the state of Bihar, where the government divided the Other Backward Castes (OBC) group into two categories for political purposes: the EBCs, and the BCs (backward caste). It was to protect the upper backward sub-castes (who are placed into the BCs) from taking away the quota jobs under India's reservation system. Mallahs, Tanti, Juleha, Chaurasia, Kanu and Halwai are among those which form the EBC group. The OBC meanwhile, broadly includes communities who suffer from economic and social discriminations, which not only includes Scheduled Castes/Tribes, but generally those in the lower rungs of the caste hierarchy such as Shudras.

² According to the Constitution of India, the "Scheduled Castes" is the legal and constitutional name collectively given to the groups which have traditionally occupied the lowest status in Indian society and the Hindu religion which provides the religious and ideological basis for an "untouchable" group, which was outside the caste system and inferior to all other castes".

basic economic and social assets (including land values and education of household head), results from regression models show little difference in migration between caste groups from different areas of the country. Further investigating destination choice of migrants, he finds that Muslims (who are at the lower end of the caste hierarchy) either have similar or higher rates of migration to any of the destinations considered, compared to the other caste groups (of both higher and lower castes). Thus the key instructive findings from this paper are that when even basic social and economic characteristics of households are controlled, there is little effect of caste on migration.

These studies demonstrate that it is likely that social exclusion, in many different contexts, affects the likelihood of migration and destination choices. However, there is almost no developed theory to explain how and why this might occur in any setting. The theoretical gap is what we now address.

There are several ways in which social exclusion could affect migration. The first is through potential indirect pathways. Social exclusion can affect education, wealth, and income. In many (if not most) countries, socially excluded groups display lower educational attainment, less wealth, and lower incomes (Sparkes 1999; Gurung and Tamang 2014; DFID, World Bank 2006; Sen 2000; Loury 2000; Barron 2008). We also know from migration research, that education, wealth, and income are some of the strongest predictors of migration outcomes. In almost every study that addresses education, empirical results show that higher educational achievement leads to a higher likelihood of migration (Williams 2009; Caldwell 1969; Donato 1993; Yang and Guo 1999; Stark and Taylor 1991; Williams 2009). There is also general agreement that economic factors (wealth and income) have a U-shaped relationship with migration (Vanwey 2005; McKenzie and Rapoport 2007; Bhandari 2004). People or households with very low wealth

and/or income do not have the resources to finance a migration, and are thus unlikely to migrate. People or households with relatively high wealth and/or income have less motivation to migrate (for financial purposes at least) and are thus unlikely to migrate. Instead, it is those in the middle or lower middle of the income and wealth distribution that have both motivation to migrate and the financial ability to do so. In any case, there is broad agreement that social exclusion leads to systematic differences in education, wealth and income, and these in turn lead to systematic differences in migration. Thus we expect that social exclusion will have indirect and negative effects on migration through education, income, and wealth.

Second is a potential direct pathway between social exclusion and migration. This returns to our definition of social exclusion, in the first paragraph of this article, which states that people are excluded from social institutions such as housing, employment, community relationships, civic engagement, etc. All of these social institutions need to be re-negotiated at a migrants' destination. A migrant needs to find new employment, housing, and live within a new community of other people. Individuals from socially excluded groups are likely to have a much harder time finding employment and housing and are less likely to be treated well by neighbors and to be accepted in the social and political life of a new community. As a result, and drawing on our broad interpretation of the neo-classical economics theory of migration, we hypothesize that the expectation of poorer outcomes at a destination where an individual is socially excluded is likely to decrease the likelihood that they will migrate.

The above arguments address the relationship between social exclusion and whether or not an individual migrates. We now turn to destination choice. The key to this discussion is there are geographic variances in the factors that determine social exclusion. In other words the groups of people who are socially excluded vary geographically. Roma people are socially excluded in

Europe; Dalits are socially excluded in Hindu regions of South Asia, and African-Americans are socially excluded in the United States. But Dalits of South Asian origin are no more socially excluded in Europe than other people of South Asian origin, Roma people are no more socially excluded in the United States, and African-Americans are no more socially excluded in South Asia than other North Americans. With this in mind, we return to our hypothesis in the above paragraph—people will expect poorer outcomes from migration at destinations where they are socially excluded. Alternately, people might expect reasonable outcomes from migration to destinations where they are not socially excluded. Thus, we expect lower migration rates of individuals to destinations where they are members of a socially excluded group. On the other hand, for destinations where the attribution of social exclusion is different from that at the origin, we expect that there will be no difference in migration rates between individuals who are and are not members of socially excluded groups at the origin.

In summary, our general, non-geographically specific, hypotheses for empirical testing are as follows:

H1: Individuals from socially excluded groups will be less likely to migrate.

H2: The negative effect of social exclusion is partially mediated by social and economic capitals (education, wealth, and income).

H3: Net of social and economic capitals (education, wealth, and income), there will be a remaining direct effect of social exclusion on migration. In other words, when social and economic capitals (education, wealth, and income) are controlled, individuals from socially excluded groups will be less likely to migrate.

H4: Net of social and economic capitals (education, wealth, and income), individuals who are members of a socially excluded group at the origin will be less likely to migrate to destinations where that same group is socially excluded.

H5: Net of social and economic capitals (education, wealth, and income), individuals who are members of a socially excluded group at the origin will have the same likelihood of migrating to destinations where that same group is not socially excluded.

The Study Setting- Chitwan Valley of Nepal

The setting for this study is the western Chitwan valley that lies in the south central part of Nepal. Connected by all-weather roads to the rest of Nepal, bordering India, and home to productive agriculture, the valley has become a hub for both services (schools, health posts, markets, employers, etc.) and host to in-migrants from the hills and mountainous areas of Nepal (Kandel 1996; Joshi 1995; Gurung 1998). The valley, part of the low lying and fertile Gangetic plain, was once known as a “death valley” due to its malaria-infested dense forests, and is now known as the bread basket of the country. With in-migrants from around the country, drawn by recently opened land and productive farming opportunities, Chitwan is now a melting pot, home to people of almost all castes and ethnicities in Nepal. Outside the one city, Narayanghat, in the northern corner of our study area, most residents live in small villages and sustain themselves with a combination of subsistence and market agriculture and animal husbandry.

Migration in Nepal

Nepal has a long history of migration. Historically populated by peoples of Indo-Aryan ancestry from the South and Tibeto-Burmese peoples from the North, Nepal now has turned into one of the major migrant sending countries of the world. It experienced rapid growth in internal migration from the mountains and hills during 1950s when the Nepali government opened the southern plains (Terai region including the Chitwan Valley) for settlement by clearing the dense forest and turning the fertile land into what is now called ‘the granary of the count (Kandel 1996; Joshi 1995; Gurung 1998).

Massive international migration, however, is a more recent phenomenon in Nepal. Although international labor migration formally began in 1815 AD with the recruitment of Nepali youth from the hill regions (particularly the Tibeto-Burmese Gurung and Magar ethnicities) into the British Army Gurkha Brigades (Rathaur 2001; Gurung 1983; Thieme and Wyss 2005), this included only a small portion of the Nepali population. In 1989 only, the Nepali government promulgated the Foreign Employment Act to encourage migration to destinations other than India by licensing non-governmental institutions to export Nepalese workers abroad and legitimizing certain labor contracting organizations. The result was an explosion of international migration outside of India (Kollmair et al. 2006; Thieme and Wyss 2005). Recent estimates suggest that there may be as many as three million Nepalis, or about 10 per cent of the total population, working abroad at any time (World Bank, 2009) and in 131 countries (Government of Nepal, 2014), with the percentage being much higher for young people and for men. Other reports document as many as 1,500 Nepalis moving outside of Nepal every day (Pattison, 2014; Kern and Muller-Boker 2015) and the number of undocumented migrants (especially to India) is also very high.

India, the Middle East (Gulf, the Far East) and South East Asia, the West (Northern Europe and North America) and Australia are the major international destinations for Nepali workers. While migration to India still dominates due to its open border, socio-cultural and linguistic similarities, and past migration experiences, migration to other destinations is increasing more recently. The 2009 Nepal Migration Survey estimates, 41 percent of international migrants from Nepal were in India, 38 percent in the Persian Gulf countries, 12 percent in Malaysia and 8.7 percent in other wealthy Asian and Western countries (World Bank 2011a; Ministry of Finance, Government of Nepal cited in Ozaki 2012). Reports suggest that about 75% Nepali international migrants are unskilled and are employed mainly in entry-level jobs such as cleaning and construction (Kern and Muller-Boker 2015).

Of course, not all destinations are equal, in terms of possible remuneration, living standards, accessibility, and specific educational requirements. Destinations within Nepal and India are relatively accessible, require lower travel costs, and have relatively similar cultural patterns. Travel to India does not require a visa and a passport and there is no restriction on the access to employment. Most jobs are low-paying menial labor and wages are generally low. Data from the Chitwan Valley Family Study (CVFS) show an average of NRS 17195 (USD 181 for India) and NRS 18,273 (US\$ 192 for Nepal) per month.

Countries in the Middle East (primarily the Persian Gulf), are further away, require higher initial investment (for travel costs as well as securing an employment contract through labor recruiting agencies), and are culturally dissimilar to Nepal. Most Nepalis there work as unskilled labor in the construction, trucking, and service industries and working conditions are extremely difficult with long work hours in very high temperatures. However, wages in the

Middle East are much higher than in South Asian destinations, with an average NRS 33165 (US\$ 349 USD per month from CVFS data.

Countries of Europe and North America, and East and South Asia are most desirable destinations, with even higher wages (average NRS 112,133 (1180 USD) per month from CVFS data), and better working and living conditions (Seddon, Gurung and Adhikari 1998). Due to the distances involved and immigration policies, travel costs and the difficulties of access are much higher and migrants with more resources, and higher education and skills are more likely to gain entry. The CVFS data show, and Seddon, Gurung and Adhikari (1998) also report that even the lowest level of monthly remittances from East and South East Asia or the West are significantly higher than from the Persian Gulf, India, or Nepal. Moreover, student mobility has been an important part of these countries' skilled migration. Destinations in Europe, the Americas and Australia also offer the potential for long-term settlement, making them preferable for those with long-term intentions

Social Exclusion in Nepal

Social exclusion and inclusion based on caste/ethnicity affects almost every aspect of life in Nepal. Nepal is an admixture of various castes, sub-caste and ethnic groups of Indo-Aryan and Tibeto-Mongoloid origins. The 2011 census reported 126 such caste/ethnic groups in Nepal³ (CBS, 2012). These caste/ethnic groups are organized into a hierarchy of inclusion and exclusion based on the Hindu caste system, similar to that in India. Although discriminatory practices

³ Brahmin-Chhetri (also called upper caste Hindu) comprises of 31% of the total population followed by Hill Janajati (19.3%), Dalit (14.3%), Newar (5%), (Tharu (6.6%) and all others (25%) (Nepal Census 2011).

based on caste were legally abolished in 1962, caste-based exclusion is still rampant in the nation.

Brahmin and Chhetri peoples are generally termed high caste Hindu, are considered religiously pure, are at the top of the caste hierarchy, have historically been the most socially advantaged in almost every sphere of life, and have enjoyed the best access to various economic, social, and political resources. (Acharya and Bennet, 1981; Bista 1991; Dahal, 2003; Levine, 1987; Bennet and Govindasamy, 2008; Gellner, 2007).

The Newar ethnic group, Hill Janajati (ethnic groups of Tibeto-Burmese origin), and Terai Janajati (ethnic groups of Tibeto-Burmese origin) are also religiously pure, but lower in the hierarchy than high caste Hindu peoples. Given the Newar group's historical homeland in the Kathmandu Valley, the seat of the Nepali government, they have long enjoyed particular advantage, opportunities, and involvement in business, trade, and politics (Acharya and Bennet, 1981; Bennet et al., 2008; DFID/World Bank, 2006). On the other hand, Hill Janajati (including Gurung, Magar, Tamang) enjoy fewer advantages than the Newar, Brahmin, and Chhetri peoples. Terai Janajati groups, although they are not considered impure from a religious standpoint, are considered somewhat ethnically different than the other caste/ethnic groups, tend to live in villages that are exclusively of their own group instead of residential integration with other groups, and are generally heavily disadvantaged in social, economic, and political spheres as well as health outcomes.

Dalit is the term for the caste groups considered to be impure, known historically as “untouchables”, who occupy the lowest rank in the caste hierarchy (Bista 1991). This includes the Kami, Sunar, Damai, Sarki, Mushahar, Dome and many other Terai caste peoples. These groups are heavily disadvantaged in terms of education, income, health outcomes, life

expectancy, and score very low on the overall Human Development Index (Bennet et al., 2008; Bennet and Govindasamy, 2008; NESAC, 1998; Norwegian Refugee Council/Global IDP Project, 2003). Because they are considered impure, religious customs dictate a bevy of restrictions on their interactions with people in higher caste groups. For example, peoples of higher caste are not supposed to eat/share particularly cooked food or water touched by/with Dalits. Dalits are most often not extended the traditional respectful greeting “Namaste” and in many cases are not supposed to enter the homes of higher caste people. Thus, in addition to the tangible benefits of society (access to housing, employment, education, etc.), they are also generally excluded from social relations and civic participation.

In summary, there are two ways to hierarchically organize caste/ethnic groups. In terms of conceptions of religious purity (and therefore who can and cannot interact in certain ways), there is a clear basic hierarchy as follows: 1) Brahmin-Chhetri, 2) Newar/Hill Janajati/Terai Janajati, and 3) Dalit. In terms of outcomes, such as political inclusion, education, income, health, and life expectancy, one can organize a hierarchy as follows: 1) Brahmin-Chhetri/Newar, 2) Hill Janajati, and 3) Terai Janajati and Dalit.

Based on the general theory of how social exclusion and migration might be related, and in particular exclusion and migration in the Nepali context, we propose the empirical hypotheses. Each Nepal-specific hypothesis is based on our geographically non-specific hypotheses, and the Nepal-specific additions are underlined.

H1 Nepal: Dalits and Terai Janajati will be less likely to migrate than other caste/ethnic groups.

H2 Nepal: The negative effect of social exclusion on migration of Dalit and Terai Janajati people will be partially mediated by social and economic capitals (education, wealth, and income).

H3 Nepal: Net of social and economic capitals (education, wealth, and income), there will be a remaining direct and negative effect of being a member of the Dalit and Terai Janajati groups on migration.

H4 Nepal: Net of social and economic capitals (education, wealth, and income), there will be a remaining direct and negative effect of being a member of the Dalit and Terai Janajati groups on migration to destinations within Nepal.

H5 Nepal: Net of social and economic capitals (education, wealth, and income), individuals who are members of the Dalit and Terai Janajati groups in Nepal will have the same likelihood of migrating to destinations outside Nepal, compared to other caste/ethnic groups.

Data

The data for our empirical test of these hypotheses come from the 2008-2012 Chitwan Valley Family Study (CVFS), which sampled all individuals aged 12-59 who were currently living in the Chitwan Valley in 2008. A baseline survey was conducted in 2008 with sampled residents aged 15-59, and the baseline for those aged 12-14 in 2008 was conducted when these individuals turned age 15. The final sample for the baseline survey comprises 4936 individuals aged 12-59 in 2008, with the response rate for the initial baseline interview being 97 percent. It is these 4936 individuals that comprise our sample of people at risk of migration.

Baseline respondents residing continuously in Nepal (either in Chitwan or elsewhere in

Nepal) were re-interviewed thrice yearly through 2012, with 93 percent of this group interviewed in all waves. All respondents moving outside Nepal at some point after 2008 were re-interviewed in follow-ups occurring before they moved internationally. If the international move of these migrants took place by June 2011, the movers were re-interviewed twice subsequent to their move, with a completion rate of 95 percent. All baseline respondents who migrated out of Chitwan (either domestically or internationally) by June 2011 were asked about their migration experience after the 2008 baseline, providing both the timing and destination of all geographic moves.

Another important component of the 2008-2012 CVFS is the thrice yearly household-level interviews that provide continuous demographic information about each of the original household members from the baseline interview through the end of 2012. These household interviews collected information on marriages, births, deaths, residential location, and school attendance, providing for each household member a continuous history with monthly precision of demographic events and changes, including residential moves to other districts within Nepal or to foreign countries. Thus we have data from household interviews for an average of 49 months of demographic events for our study sample (with the exact number of months depending on the date of the first and last interviews). Very few households moved in their entirety, were lost to follow-up, or refused to provide information about household members. Thus, we have household reports of residential location through 49 months for 98 percent of our original sample.

Because we have reports of migration from both the respondents themselves and from the household interviews, our study protocol provides two migration reports for almost all of the 2008 baseline respondents. We have two reports through an average of 49 months for 94 percent

of the original sample. A comparison of all respondents to their household informant reports reveals a high degree of consistency, with 98 percent of respondents reporting the same migration outcome for themselves (no migration; domestic migration; or migration to a specific world region) as their household members reported for them. Even when the comparisons are limited to only respondents who migrated from Chitwan, during the study period, the individual and household reports provided the same first destination status for 91 percent of the migrants. These comparisons provide substantial confidence for the quality of the migration information reported by household informants. For our analyses in this paper, we use the information about residential moves obtained from the migrants themselves when that information is available, which it is for 94 percent of the sample. When residential information is not available from the individual, we rely on the reports of the household interviews for our migration information, a justified approach because of the very close overlap between the data ascertained from individual and household interviews. With the two sources of residential change data, we have nearly complete migration information for 97 percent of the original sample members.

Measures

Outcome measures. We use two measures of migration: (i) *any migration outside Chitwan*, which is measured as any first time (after 2008) departure from Chitwan lasting six months or more for any reason (except marriage or childbirth related) (coded 1 for migration, otherwise 0), and (ii) *destination specific migration*, which is a measure of destination specific migration lasting six months or more for any reason (except marriage or childbirth related). Migration destinations are categorized as: no migration (within Chitwan), migration in Nepal (but outside Chitwan), to India, to the Middle East, and to other (mostly wealthier Western and Asian

countries).

The main international destinations that we identified as being in the Middle East were the countries of the Persian Gulf (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates), with 93 percent of those migrating to the Middle East going to those six countries. The remaining 7 percent of Middle Eastern migrants were divided among Afghanistan, Iraq, Israel, and Lebanon. The primary international destinations in the other category were Australia, the United Kingdom, the United States, Japan, Malaysia, South Korea, and Thailand, with these seven countries accounting for 86 percent of all migrants categorized as going to other countries. The remaining 14 percent in that category were divided evenly among the following eleven countries: Belgium, Belize, Canada, China, Finland, Germany, Iceland, Maldives, Poland, Portugal, and Spain. Although these countries categorized as other represent a wide range of geographical locations and cultures, they are all quite culturally dissimilar from Nepal and all are classified by the World Bank as upper middle or high income countries whereas Nepal is categorized as a low income country, justifying their grouping together for this analysis.

Explanatory measure. We examine the variation in out-migration by caste/ethnicity. Thus, our explanatory measure is caste/ethnicity as reported by individuals and grouped as: (a) Brahmin-Chhetri (upper caste Hindu), (b) *Dalit* (lower caste Hindu), (c) Hill Janajati (e.g. Tamang, Gurung, and Magar), (d) Newar, and (e) Terai Janajati (e.g. Tharu, Derai and Kumal). As Brahmin-Chhetri group is considered as the most advantaged caste/ethnic group, it is used as the reference category.

Controls. We control many other factors that have been shown in this study area, and around the world, to have important influences on migration. Individual level controls include: gender, age (a time-varying measure categorized into nine birth cohorts - 14-19, 20-24, 25-29,

30-34, 35-39, 40-49, 50-63),; marital status (a time varying measure - currently married, ever married and never married); education (a time varying measure - no schooling, 1-5 years, 6-9 years, 10-11 years, 12+ years); work status (a time varying measure– never worked, wage only, salary only, and both wage and salary) and individual migration experience before the baseline interview (no migration, domestic migration only, international migration only, and both).

Household level controls include: number of household members (a time varying measure - 0-14 years, 15-59 years, and 60+ years); land ownership as: less than or equal to average (<16.75 *kattha*) and above average (>16.75 *kattha*); and a time varying measure of household level migration (percent migrants). Notably, we use land ownership as a measure of wealth and income. Finally, the community level controls include: number of community services at age 12, number of community services during adulthood, community level migration experience (time varying, percent migrants), and the distance to the main market center of Narayanghat as - closest to the market center, furthest from the market center and in between (middle range).

Analytic Strategy

First, we calculated the univariate distribution of all measures used in the analysis (Table 1). In Table 2, we present a distribution of migrants by caste/ethnicity by destination. Then, we estimated multivariate regression models to model the monthly hazard of out-migration (Tables 3-5).

Our regression models analyze the rates of migration using discrete-time multivariate event history models with person-months as the unit of analysis (Axinn and Thornton 1992; Axinn and Thornton 1993; Massey et al. 2010; Thornton, Axinn and Hill 1992; Thornton, Axinn

and Teachman 1995; Thornton and Rodgers 1987; Williams 2009; Williams et al. 2012). The measure of first-time out-migration is coded “1” in the month that person migrated for 6 months or more, and “0” otherwise. Our outcome measures— any migration and migration by destination — are specified as the rate of a person making a transition in geographic location. For these transitions we specify the dependent variable (Y) as a monthly hazard (H) of making the transition. Each person at risk of the transition is followed from the baseline interview until they experience the transition or are censored because the observation period has terminated. Instead of analyzing the transition rate (H) directly, we make a logit transformation, $[H/(1-H)]$, and estimate this as a function of the predictors. Both binary logistic and multinomial regression techniques were used to estimate the effects of explanatory variables on the odds of making a transition during a month, but because these odds in any given month are so low, the estimated effects on the monthly odds are very similar to the effects of the explanatory variables on monthly rates. Note that while using person-months of exposure to risk as the unit of analysis in discrete-time models substantially increases the sample size, it does not deflate standard errors, and thus provides appropriate tests of statistical significance (Allison 1984; Petersen 1986; Petersen 1991).

Results

Table 1 provides for our sample of 4935 eligible respondents, the percent distribution or mean and standard deviation of each variable appearing in our models.

(Table 1 about here)

Our first outcome variable (any migration) reveals that eight hundred respondents (16%) experienced an out-migration lasting six months or longer during the observation period (forty-

nine months duration maximum) following the baseline interview. In terms of destinations, nine percent of respondents had a domestic migration, two percent migrated to India, three percent to the Middle East, and nearly two percent migrated to other countries. Of the 800 reported migrations outside of Chitwan, 55 percent occurred within Nepal, 14 percent were to India, 20 percent were to the Middle East, and 11 percent were to other countries (results not shown). Excluding domestic migrants and looking only at those who migrated internationally, nearly half (46 percent) moved to the Middle East, 31 percent moved to India and the remaining 24 percent moved to other countries (results not shown).

The distribution for caste/ethnicity, the key independent variable in our analyses, indicates that 44 percent of the sample belonged to the Brahmin-Chhetri castes, 11 percent to the Dalit, 17 percent to the Hill Janajati, 7 percent belonged to the Newar caste, and nearly 22 percent to the Terai Janajati.

Next we turn to Table 2 to examine the bivariate relationship between caste/ethnicity and migration propensity. We find clear caste differences in migration rates. Nearly 20 percent of Hill Janajati reported a migration of six months or longer during the study period, followed by 18.5 percent of Newars, 17.2 percent of Bhramin-Chhetris, nearly 16 percent of Dalits, and just over 11 percent of Terai Janajati people. While most migrations occur within Nepal itself, migration destinations outside of Nepal also vary considerably by caste. Newars are less likely than others to migrate outside of Nepal. Dalits and Terai Janajati migrate to countries of the Middle East more often than the other groups. Bhramin-Chhetris are more likely to go to other countries and are less likely to go to India. International migrations by Hill Janajati are mostly to India or the Middle East. Terai Janajati are least likely to migrate to other countries. These

results provide basic support for hypothesis 1, that Dalits and Terai Janajati people are less likely to migrate than higher caste groups (Brahmin-Chhetris, Newar, and Hill Janajati and).

Table 3 provides estimates of the effect of caste on the rate of any type of migration away from Chitwan (domestic or international). Model 1 estimates the influence of caste net of the following controls: respondent's gender; age (time-varying); marital status (time-varying); household member age composition (time-varying); individual, household and community level migration specific capitals, community services available to the respondent during child and adulthood; and relative distance of the respondent's household from Narayanghat. This provides a test of hypothesis 1. To test hypotheses 2 and 3, Models 2-4 progressively add controls for respondent's social capital (educational attainment) and economic capitals (work experience and land ownership).

All four models presented in Table 3 clearly suggest that social exclusion relative to caste plays an important role in an individual's decision of whether or not to migrate. Model 1 indicates that when controlling for gender, age, marital status, family member composition, migration specific capitals and neighborhood characteristics, the odds ratios for lower caste Dalit and Terai Janajati are 13 percent and 30 percent lower than Brahmin-Chhetri. In otherwise analogous models but with Newar and Hill Janajati as reference groups (results not shown here), we find that odds ratios for Dalits and Terai Janajati are 0.20 and 0.35 percent lower than Newar and 21 and 36 percent lower than Hill Janajati peoples. This again supports hypothesis 1, based on the idea that people in socially excluded groups are less likely to migrate.

Our second hypothesis, (the negative effect of social exclusion is partially mediated by respondent's social (here, education) and economic (here, employment and land ownership) capitals), is supported by the results in Models 2-4. Each model shows to some degree that the

inclusion of respondent's social and economic capital controls serves to dampen the effect of social exclusion (caste) on migration propensity. The odds ratio increases to 0.87 for Dalits and 0.75 for Terai Janajati once education is controlled (Model 2), increases to 0.89 and 0.71, respectively, when work experience is controlled (Model 3) and remains 0.89 and 0.70 when land ownership is controlled (Model 4). Thus we find that much of the caste differences in migration are mediated through education, work experience, and land ownership (wealth).

Despite these strong mediation effects of respondent's social and economic capitals, we also find some support for our third hypothesis-- net of social and economic capitals (education, employment and wealth), there will be a remaining direct effect of social exclusion on migration. Our fully controlled Model 4 indicates the odds ratio of migration for Terai Janajati is .70, meaning they are substantially less likely to migrate compared to members of the Bhramin-Chhetri caste. Alternately, while the odds ratio for Dalits is negative, at .89, it is not statistically significant, meaning that our evidence shows no reason to believe there is a difference in migration between them and Brahmin-Chhetri people, once social and economic capital is taken into account.

Next we turn to the results of our multinomial logistic regressions predicting the effect of caste on specific destinations. Table 4 provides odds ratio estimates net of basic controls for individuals not experiencing a migration verses those migrating within Nepal, to India, to the Middle East, or to other countries.

Once again we see the role caste plays in the destination choices of our Nepali migrants. Dalit and Terai Janajati people are significantly less likely to migrate within their own country, where an individual's caste plays a prominent role in every aspect of life. Results in model 5 (Table 4) show that odds ratios for Dalits to migrate within Nepal are 40 percent lower and for

Terai Janajati 34 percent lower (odds ratios of .60 and .66 respectively) than for Brahmin-Chhetri people. These findings are statistically significant at the .01 level. On the other hand, we see that Hill Janajati and Newar people are more likely to migrate within Nepal (odds ratios 1.09 and 1.32 respectively) than Brahmin-Chhetris, but these results are marginally or not statistically significant.

When we look at the destination choices of India and the Middle East, we see a dramatic increase for Dalits in their odds of choosing to migrate to one of those two areas. Odds ratios for Dalits to India are 1.65 times higher than for Brahmin-Chhetris and 1.55 times higher to the Middle East (results however not significant at .05 levels). Since India is another country strongly associated with the caste system, it may seem surprising that Dalits from Nepal show a propensity to migrate there. However, given our extensive ethnographic experience in Nepal, we have come to understand that Dalits may find a job in factories and other wage jobs such as coolie (a porter in railway station) where caste may not influence for employment or they can successfully hide their caste in India, where no one is familiar with their family or background. Unlike Dalits, we find no statistically significant difference in the odds of Terai Janajati people migrating to India or the Middle East, compared to Brahmin-Chhetri people.

Note that all caste groups in Model 5 were less likely than Brahmin-Chhetris to migrate to other countries. Odds ratios for Terai Janajati are 68 percent lower than Brahmin-Chhetris; this finding is highly significant (.01 level). Odds ratios for Dalit and Hill Janajati were .39 and .48 respectively, with results significant at the .05 level. However, the odds ratio for Newars migrating to other countries was not statistically significant. Together, these results in Table 4 suggest that there are caste differences in migration to specific destinations, but controlling for

social and economic capitals (education, work experience, and land ownership) is necessary to thoroughly test our hypotheses.

(Table 4 about here)

Finally, we turn to Table 5 (Model 6) where we see the effect of caste/ethnicity on destination choice net of all controls. Looking across all four destination choices we see evidence that confirms our two remaining hypotheses. Referring to Hypothesis 4 (*Net of social and economic capitals (education, employment and wealth), individuals who are members of a socially excluded group at the origin will be less likely to migrate to destinations where that same group is socially excluded*), results show that both Dalits and Terai Janajati are significantly less likely to migrate within Nepal (odds ratios of .65 and .70 respectively), the country where their caste/ethnicity will be judged most harshly. Contrast this with the two groups not facing the same levels of discrimination at the two destinations – both Newars and Hill Janajati are more likely than Brahmin-Chhetris to move within Nepal. Also notable is the large odds ratio of 2.05 for Hill Janajati migration to India. In analogous models with Hill Janajati and Newars as reference groups (results not shown here), we find that both of these groups are more likely than Dalits and Terai Janajati peoples to move both within Nepal and to India.

While not directly related to our hypotheses about social exclusion, these results can be explained by historical and present day contingencies of caste/ethnic groups in Nepal. Newars traditionally inhabited the Kathmandu Valley and that area is still heavily populated by Newar people. Thus, the high rate of Newar migration out of Chitwan might be simply a process of these people moving to their traditional homeland in Kathmandu. Or, they may have moved to

other parts of Nepal for reasons of business or employment in governmental or non-governmental organizations.

The large and positive odds ratio for Hill Janajati people migrating to India is likely a result of history. The Gurkha Brigades of the British Army, initially based in India, almost exclusively employed fighters from Hill ethnic groups (Gurung, Magar, Rai, and Limbu). Thus there is a long history (since the early 1800's) of these groups migrating to India. Migrant social networks in these groups are heavily based in Indian destinations and this might explain the high rate of Hill Janajati migration to India that we find in this study.

Evidence supporting Hypothesis 5 (*net of social and economic capital (education, employment and wealth), individuals who are members of a socially excluded group at the origin will have the same likelihood of migrating to destinations where that group is not socially excluded*) is provided in odds ratio results shown in migration destinations to the Gulf and other countries. Here we see no statistically significant ($p < 0.05$) effects of any caste group on migration to the Middle East or other countries. To be clear, when education, work experience, land ownership, and all other relevant factors are controlled, we find no difference in rates of migration of any caste group to the Middle East and other countries where a Hindu-based caste system is not recognized.

(Table 5 about here)

Discussion and Conclusion

We investigate the influence of caste/ethnicity on the rate of migration out of an area and the choice of migration destinations using exceptionally detailed panel data from a migrant sending setting of rural Nepal. The results from logistic regression and event history analysis that control for individual, household and community factors show that both the rate of migration out of an

area and the migration destination are closely associated with caste/ethnicity. Overall, individuals who belonged to the Dalit and Terai Janajati groups, which are socially excluded in almost all sectors of life in Nepal, were significantly less likely to migrate compared to individuals from advantaged Brahmin-Chhetri caste/ethnicity. While it is also claimed that Hill Janajati are also disadvantaged/excluded compared to Brahmin-Chhetri or Newars, the results do not show any evidence of exclusion at least in migration. While much of the caste/ethnicity effect on migration is mediated by education, work experience, and wealth (in the form of land ownership), we still find that Terai Janajati people are substantially less likely to migrate.

The destination disaggregated results are even more interesting. Results show that Dalit and Terai Janajati individuals are significantly less likely to move within Nepal. Terai Janajati are also less likely to move to India while Hill Janajati individuals are significantly more likely to move to India compared to Brahmin-Chhetris. Overall, once social and economic factors are controlled we find that while caste/ethnicity has a substantial influence on migration destinations within Nepal, by and large there is no statistically significant evidence of caste/ethnicity differences in migration to other countries, including the wealthier countries in Asia and the west where migrant earning potential is the highest.

Together, these results show that individuals from caste/ethnicity groups that are heavily socially excluded in Nepali society are less likely to migrate. Even when social and economic factors are controlled, one caste group, Tarai Janajati, is still less likely to migrate. However, when destinations are taken into account, it becomes clear that much of this effect is due to lower migration of socially excluded groups to destinations in Nepal. It is exactly these domestic destinations where low caste and excluded peoples will continue to be excluded, in terms of access to housing, employment, social relationships, and more. Alternately, these same people

from socially excluded groups are no less likely to migrate to other countries, where they are not generally excluded on the basis of their caste/ethnicity. Notably, it is also these international destinations that offer much greater benefits, in terms of wages, living conditions, and social desirability, in comparison with destinations within Nepal.

We now return to our original motivation for this study. We understand from previous literature that migration provides multiple benefits (economically as well as socially). In Nepal, there is no doubt that remittances have dramatically reduced poverty (Sharma and Gurung 2009; Lokshin, Bontch-Osmolovski, and Glinskaya 2007; KC 2003). Recent estimates suggest that almost 20% of the 11% decline in poverty in Nepal between 1995 and 2004 is attributable to the inflow of remittances from labor migrants (World Bank 2005). Remittances have helped households to buy land, repay debt, increase savings, as well as provide education, and health care for children and other family members (Bhandari and Chaudhary, 2015). Further, Sunam (2014) finds _____. Studies from other countries show similar patterns of social and economic benefits of migration for both individuals and households (Acosta, Calderon, Fajnzylber and Lopez, 2006; Rozelle, Taylor and de Brauw, 1999; Stark, Taylor and Yitzhaki, 1988; Massey and Parrado, 1998; Lauby and Stark, 1988; Lokshin, Bontch-Osmolovski and Glinskaya, 2007; Adams, 2011; Brown and Ahlburg, 1999; Seddon, 2004, Hoermann and Kollmair, 2009).

Given this background, we seek to understand if social exclusion creates a barrier to migration. If socially excluded peoples are less likely to migrate and/or less likely to migrate to profitable and desirable destinations, then migration is likely a factor that will increase disparities. On the other hand, if migration (and to desirable destination) is either equally or more accessible to socially excluded groups, then migration could decrease disparities and dampen patterns of social exclusion.

In this context, our results are mixed. Our descriptive results show that individuals of socially excluded groups are indeed less likely to migrate. However, when economic and social factors are taken into account, we find that this difference is largely due to lower migration of socially excluded peoples within Nepal and not to more desirable destinations outside of Nepal. This suggests that the incredibly high rates of migration in Nepal might serve to decrease, or at least change, patterns of social exclusion based on caste/ethnicity.

This study is not free from limitation. As with any in-depth study of a particular case, our findings are based on data from only a small part of the southern Terai plain of Nepal. We do not know if they are generalizable to the rest of Nepal or to the relationship between social exclusion and migration in other countries. We do find empirical support for our general theoretically based hypotheses that are not geographically specific- namely that net of social and economic characteristics, social exclusion based on factors important in one country should not influence migration to destinations where the same factors are not a basis for patterns of social exclusion. There is clearly a need for further studies in other parts of Nepal and other countries. Towards that end, this study contributes important theoretical developments, backed up by strong empirical tests, that can help the design of future research and the further development of this important area of study. We also believe that the questions we address and the theoretical and empirical outcomes of this study contribute to the general sociological understanding of how patterns of social exclusion might change on a broad level.

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Table 1. Percent Distributions or Means for Respondents in Chitwan at the Baseline Interview who are at risk for Migration N=4935

<i>Measures</i>	<i>percent Distribution or Mean</i>	<i>SD</i>	<i>Min-Max</i>
<i>Outcome measures – Any Migration</i>			
Non-migrants	83.8		
Any migrants	16.3		
<i>Migration Destinations</i>			
Non-migrants	83.9		
Migrants outside Chitwan in Nepal	8.9		
India	2.2		
Middle East	3.3		
Other	1.7		
<i>Respondent Demographic Characteristics</i>			
Caste/ethnicity			
Bhramin-Chhetri	44.0		
Newar	6.5		
Hill Janajati	16.9		
Dalit	10.9		
Terai Janajati	21.8		
Gender: Female	60.9		
Male	39.1		
Respondents age in 2008 (years)	31.09	13.55	12-59
Marital status (tvary): Married	69.1		
Never married	27.9		
Ever Married (tvary)	4.0		
#HH members age 0-14 (tvary)	1.2	1.17	0-8
#HH members age 15-59 (tvary)	3.3	1.56	0-10
#HH members age 60+ (tvary)	0.4	0.48	0-1
Neighborhood services age 12	0.71	0.26	0-1
Neighborhood services adulthood	0.43	0.25	0-1
Closest to Narayanghat	29.2		
Middle range	30.9		
Furthest from	40.0		
Respondent's education in 2008	8.8	6.10	0-34
Respondent: never worked			
Wage work only	34.8		
Salary work only	11.9		
Both wage & salary work	8.1		
R's migration history from Age 15-BL			
No migration	60.2		
Domestic migration only	24.9		
International migration only	7.9		
Both	7.0		
Land ownership (kattha) (n=4427)	16.75	20.8	0-200.25
Land ownership categories (n=4935)			
Below average (~16.75 kattha)	31.0		
Above average (~16.75 kattha)	69.0		
Land ownership variables missing	10.3		
percent HH member migration	43.80	31.3	0-100
percent NBH member migration	48.12	13.74	0-100

Table 2. Percent Distributions of Migrants by Destination and Caste/Ethnicity

Caste/ethnicity	Moved (yes=1) (n=4935)	If moved, migration destination				
		In Nepal (n=437)	India (n=108)	Middle East (n=164)	Other countries (n=85)	Total (n=794)
Bhramin-Chhetri	17.2	58.5	8.7	16.8	16.0	100.0
Dalit	15.6	36.1	19.3	38.6	6.0	100.0
Hill Janajati	19.7	54.0	20.9	19.0	6.1	100.0
Newar	18.5	71.2	13.6	8.5	8.5	100.0
Terai Janajati	11.3	50.8	15.0	28.3	5.8	100.0

Table 3. Odds Ratio Estimates for having a Greater or Equal to 6 Month Migration from Caste, Age at Baseline, Gender, Household and Neighborhood Migration Capital, and Household Social and Economic Capitals by Migration Type (Any Migration Type -Domestic and or International) (n=4935)

Measures	Model 1	Model 2	Model 3	Model 4
Caste/ethnicity				
Bhramin-Chhetri	****	****	****	****
Newar	1.09 (0.560)	1.11 (0.489)	1.10 (0.499)	1.09 (0.535)
Hill Janajati	1.10 (0.334)	1.16 (0.154)	1.15 (0.168)	1.12 (0.279)
Dalit	0.87 (0.274)	0.91 (0.486)	0.89 (0.350)	0.89 (0.386)
Terai Janajati	0.70 (0.002)***	0.75 (0.016)*	0.71 (0.005)**	0.70 (0.003)**
Gender (1=female)	0.41 (0.000)***	0.42 (0.000)***	0.45 (0.000)***	0.45 (0.000)***
Age at baseline: 14-19	0.56 (0.000)***	0.61 (0.000)***	0.64 (0.000)***	0.63 (0.000)***
20-24	****	****	****	****
25-29	0.51 (0.000)***	0.51 (0.000)***	0.50 (0.000)***	0.52 (0.000)***
30-34	0.31 (0.000)***	0.32 (0.000)***	0.31 (0.000)***	0.32 (0.000)***
35-39	0.17 (0.000)***	0.18 (0.000)***	0.17 (0.000)***	0.19 (0.000)***
40-49	0.10 (0.000)***	0.10 (0.000)***	0.10 (0.000)***	0.11 (0.000)***
50-63	0.04 (0.000)***	0.04 (0.000)***	0.04 (0.000)***	0.05 (0.000)***
Marital status (tvary): Married	****	****	****	****
Never married	1.32 (0.024)*	1.26 (0.059)	1.28 (0.045)*	1.19 (0.045)*
Ever Married (tvary)	2.20 (0.001)***	2.30 (0.000)***	2.37 (0.000)***	2.51 (0.000)***
#HH members age 0-14 (tvary)	0.97 (0.329)	0.97 (0.448)	0.97 (0.415)	0.97 (0.318)
#HH members age 15-59 (tvary)	0.93 (0.003)**	0.92 (0.002)**	0.92 (0.002)**	0.95 (0.034)*
#HH members age 60+ (tvary)	0.98 (0.678)	0.97 (0.547)	0.97 (0.627)	1.02 (0.763)
Neighborhood services age 12	0.96 (0.831)	0.90 (0.607)	0.89 (0.570)	0.95 (0.812)
Neighborhood services adulthood	0.82 (0.182)	0.83 (0.206)	0.83 (0.226)	0.79 (0.108)
Closest to Narayanghat	****	****	****	****
Middle range	1.01 (0.952)	1.01 (0.885)	1.02 (0.830)	1.04 (0.668)
Furthest from	1.07 (0.475)	1.08 (0.384)	1.09 (0.362)	1.14 (0.152)
R's migration history from Age 15-BL				
No migration	****	****	****	****
Domestic migration only	1.86 (0.000)***	1.88 (0.000)***	1.85 (0.000)***	1.76 (0.000)***
International migration only	2.42 (0.000)***	2.45 (0.000)***	2.26 (0.000)***	2.21 (0.000)***
Both	3.77 (0.000)***	3.83 (0.000)***	3.58 (0.000)***	3.24 (0.000)***
percent HH member migration (tvary) [log]	1.05 (0.028)*	1.05 (0.025)*	1.05 (0.017)*	1.06 (0.013)*
percent NBH member migration (tvary) [log]	1.03 (0.785)	1.02 (0.844)	1.05 (0.694)	1.01 (0.946)
Respondent : no school (tvary)		****	****	****
1-5 years of school		1.36 (0.062)	1.33 (0.084)	1.32 (0.094)
6-9 years of school		1.16 (0.374)	1.16 (0.352)	1.18 (0.315)
10-11 years of school		1.37 (0.068)	1.40 (0.049)*	1.40 (0.049)*
12+ years of school		1.50 (0.025)*	1.51 (0.024)*	1.52 (0.024)*
Respondent: never worked			****	****
Wage work only			1.15 (0.142)	1.22 (0.226)
Salary work only			1.21 (0.113)	1.20 (0.137)
Both wage & salary work			1.45 (0.009)**	1.42 (0.013)*
Land ownership				
Below average (~16.75 kattha)				****
Above average (~16.75 kattha)				0.99 (0.887)
Land ownership missing				1.67 (0.000)***
Fit Statistics				
AIC (intercept only=10382.85)	9675.85	9674.65	9673.10	9653.72
-2 Log L (intercept only=10380.85)	9623.85	9614.65	9607.10	9583.72
Number of P Periods	193825	193825	193825	193825
Number of Moves	800	800	800	800

Significance: *.05, **.01, ***.001

30 kattha = 1 hectare = 2.471 acre

Figures in parenthesis are p values.

Table 4. Odds Ratio Estimates (Model 5) for having a Greater or Equal to 6 Month Migration from Caste, Other Individual Characteristics and Migration Capitals by Migration Destination (n=4935)

Measures	Migration Destinations (Model 5)			
	Nepal	India	Gulf	Other
Caste/ethnicity				
Bhramin-Chhetri	****	****	****	****
Newar	1.32 (0.114)	1.98 (0.089)	0.49 (0.129)	0.40 (0.086)
Hill Janajati	1.09 (0.507)	2.83 (0.000)***	0.92 (0.716)	0.48 (0.042)*
Dalit	0.60 (0.009)**	1.65 (0.110)	1.55 (0.056)	0.39 (0.048)*
Terai Janajati	0.66 (0.009)**	1.12 (0.714)	0.83 (0.430)	0.32 (0.008)**
Gender (1=female)	0.87 (0.177)	0.28 (0.000)***	0.07 (0.000)***	0.18 (0.000)***
Age at baseline: 14-19	0.77 (0.051)	0.79 (0.392)	0.16 (0.000)***	0.15 (0.000)***
20-24	****	****	****	****
25-29	0.47 (0.000)***	0.31 (0.001)***	0.61 (0.069)	0.57 (0.079)
30-34	0.28 (0.000)***	0.12 (0.000)***	0.37 (0.001)***	0.30 (0.003)**
35-39	0.14 (0.000)***	0.11 (0.000)***	0.22 (0.000)***	0.14 (0.000)***
40-49	0.12 (0.000)***	0.05 (0.000)***	0.07 (0.000)***	0.07 (0.000)***
50-63	0.08 (0.000)***	0.02 (0.000)***	0.001 (0.904)	0.02 (0.000)***
Marital status (tvary): Married	****	****	****	****
Never married	1.96 (0.000)***	1.09 (0.793)	0.78 (0.347)	0.60 (0.133)
Ever Married (tvary)	2.94 (0.000)***	0.001 (0.976)	1.32 (0.702)	0.001 (0.976)
#HH members age 0-14 (tvary)	0.93 (0.145)	1.12 (0.195)	1.02 (0.794)	0.90 (0.307)
#HH members age 15-59 (tvary)	0.88 (0.000)***	0.89 (0.123)	1.02 (0.705)	0.95 (0.481)
#HH members age 60+ (tvary)	0.84 (0.032)*	0.75 (0.092)	1.20 (0.124)	1.45 (0.009)**
Neighborhood services age 12	0.73 (0.245)	1.21 (0.750)	0.92 (0.858)	3.57 (0.068)
Neighborhood services adulthood	0.94 (0.771)	0.36 (0.012)**	1.92 (0.053)	0.20 (0.000)***
Closest to Narayanghat	****	****	****	****
Middle range	0.76 (0.030)*	1.16 (0.598)	3.02 (0.000)***	0.74 (0.295)
Furthest from	0.87 (0.247)	1.55 (0.093)	2.43 (0.000)***	0.65 (0.117)
R's migration history from Age 15-BL				
No migration	****	****	****	****
Domestic migration only	2.42 (0.000)***	0.91 (0.812)	1.03 (0.901)	1.90 (0.031)*
International migration only	0.97 (0.926)	5.57 (0.000)***	2.17 (0.001)***	2.95 (0.003)**
Both	2.84 (0.000)***	8.27 (0.000)***	3.05 (0.000)***	5.23 (0.000)***
percent HH member migration (tvary) – log	1.05 (0.090)	1.09 (0.180)	1.00 (0.925)	1.22 (0.009)**
percent NBH member migration (tvary) - log	1.02 (0.901)	1.90 (0.112)	0.75 (0.242)	1.08 (0.858)
Respondent : no school (tvary)				
1-5 years of school				
6-9 years of school				
10-11 years of school				
12+ years of school				
Respondent: never worked				
Wage work only				
Salary work only				
Both wage & salary work				
Land ownership				
Below average (~16.75 kattha)				
Above average (~16.75 kattha)				
Land ownership missing				
Fit Statistics				
AIC (intercept only=12158.83)	11097.079	11097.079	11097.079	11097.079
-2 Log L (intercept only=12150.83)	10889.079	10889.079	10889.079	10889.079
Number of P Periods	193825	193825	193825	193825
Number of Moves	800	800	800	800

Significance: *.05, **.01, *** .001
30 kattha = 1 hectare = 2.471 acre
Figures in parenthesis are p values.

Table 5. Odds Ratio Estimates (Model 5 plus Social and Economic Capitals) for having a Greater or Equal to 6 Month Migration from Caste, Migration Capitals, Other Individual Characteristics and Household Social and Economic Capitals by Migration Destination (n=4935)

Measures	Migration Destinations (Model 6)			
	Nepal	India	Gulf	Other
Caste/ethnicity				
Bhramin-Chhetri	****	****	****	****
Newar	1.34 (0.098)	1.63 (0.231)	0.45 (0.095)	0.50 (0.193)
Hill Janajati	1.12 (0.413)	2.05 (0.008)**	0.85 (0.499)	0.76 (0.466)
Dalit	0.65 (0.033)*	1.06 (0.862)	1.25 (0.372)	0.83 (0.704)
Terai Janajati	0.70 (0.033)*	0.77 (0.431)	0.66 (0.102)	0.64 (0.336)
Gender (1=female)	0.94 (0.602)	0.23 (0.000)***	0.07 (0.000)***	0.21 (0.000)***
Age at baseline: 14-19	0.89 (0.440)	0.71 (0.260)	0.16 (0.000)***	0.21 (0.001)***
20-24	****	****	****	****
25-29	0.47 (0.000)***	0.34 (0.005)**	0.60 (0.002)**	0.52 (0.052)
30-34	0.30 (0.000)***	0.14 (0.000)***	0.37 (0.002)***	0.27 (0.002)**
35-39	0.16 (0.000)***	0.13 (0.000)***	0.21 (0.000)***	0.14 (0.000)***
40-49	0.16 (0.000)***	0.06 (0.000)***	0.07 (0.000)***	0.08 (0.000)***
50-63	0.11 (0.000)***	0.02 (0.000)***	0.001 (0.899)	0.03 (0.000)***
Marital status (tvary): Married	****	****	****	****
Never married	1.93 (0.000)***	1.30 (0.437)	0.87 (0.601)	0.47 (0.032)*
Ever Married (tvary)	3.57 (0.000)***	0.001 (0.977)	1.16 (0.841)	0.001 (0.979)
#HH members age 0-14 (tvary)	0.94 (0.189)	1.06 (0.492)	0.99 (0.939)	0.96 (0.700)
#HH members age 15-59 (tvary)	0.90 (0.004)**	0.95 (0.454)	1.04 (0.466)	0.89 (0.159)
#HH members age 60+ (tvary)	0.90 (0.182)*	0.86 (0.421)	1.26 (0.067)	1.21 (0.205)
Neighborhood services age 12	0.66 (0.153)	1.75 (0.362)	0.87 (0.771)	1.70 (0.467)
Neighborhood services adulthood	0.86 (0.460)	0.38 (0.021)*	2.07 (0.036)*	0.26 (0.006)**
Closest to Narayanghat	****	****	****	****
Middle range	0.80 (0.071)	1.22 (0.488)	3.08 (0.000)***	0.73 (0.283)
Furthest from	0.96 (0.725)	1.67 (0.057)	2.49 (0.000)***	0.66 (0.140)
R's migration history from Age 15-BL				
No migration	****	****	****	****
Domestic migration only	2.18 (0.000)***	0.91 (0.811)	1.005 (0.986)	1.97 (0.026)*
International migration only	0.88 (0.672)	5.39 (0.000)***	1.80 (0.026)*	3.64 (0.000)***
Both	2.30 (0.000)***	8.23 (0.000)***	2.61 (0.003)**	6.23 (0.000)***
percent HH member migration (tvary) – log	1.06(0.061)+	1.11(0.104)	1.02 (0.718)	1.17 (0.032)*
percent NBH member migration (tvary) - log	0.95 (0.727)	1.94 (0.105)	0.79 (0.322)	1.08 (0.844)
Respondent : no school (tvary)	****	****	****	****
1-5 years of school	1.50 (0.078)	1.46 (0.408)	1.54 (0.245)	0.52 (0.431)
6-9 years of school	1.38 (0.156)	0.92 (0.863)	1.48 (0.298)	1.36 (0.649)
10-11 years of school	1.72 (0.022)*	0.60 (0.318)	1.58 (0.253)	2.63 (0.151)
12+ years of school	1.93 (0.009)**	0.56 (0.312)	1.13 (0.779)	3.83 (0.056)
Respondent: never worked	****	****	****	****
wage work only	1.05 (0.689)	1.78 (0.019)*	1.87 (0.009)**	0.44 (0.055)
salary work only	1.39 (0.049)*	0.95 (0.886)	1.42 (0.194)	0.53 (0.064)
both wage & salary work	0.99 (0.959)	0.99 (0.972)	2.17 (0.006)**	1.004 (0.993)
Land ownership				
Below average (<16.75 kattha)	****	****	****	****
Above average (>16.75 kattha)	0.96(0.726)	0.70(0.199)	0.86 (0.467)	1.71 (0.042)*
Land ownership missing	2.06(0.000)***	1.35(0.304)	0.95(0.828)	1.22 (0.609)
Fit Statistics				
AIC (intercept only=12158.83)	11057.78	11057.78	11057.78	11057.78
-2 Log L (intercept only=12150.83)	10777.78	10777.78	10777.78	10777.78
Number of P Periods	193825	193825	193825	193825
Number of Moves	800	800	800	800

Significance: *.05, **.01, ***.001
30 kattha = 1 hectare = 2.471 acre
Figures in parenthesis are p values.