

Socio-Economic Characteristics of Non-Family-Reason Internal Migration

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Abstract

The volume of an internal migration is affected by the gaps of pull and push factors between the places of origin and destination. However, the proportion of internal migration due to the family reasons could be large, which is less affected by pull and push factors. This paper studies the non-family-reason internal migration (NFIM) and shows that the non-family-reason internal migration population has different characteristics from the other population and internal migrants.

Keywords

Household Survey, Internal Migration, Logistic Regression, Migration, Nepal

1. Introduction

The volume and direction of the migration are determined by the gaps between pull and push factors between origin and destination areas like economics, lifestyles, opportunities, resources, and the availability of jobs. Some of the important push factors are unemployment, economic underdevelopment, low wages, discrimination based on religion, poor urban life, and low career expectations. Similarly, some of the important pull factors for migration are better economic perspective, higher salaries, better living standards, lack of discrimination, career building opportunities, and greater demand for labor and skills (Ghosh, 1985). Migration will be less likely if they can get the same opportunities and facilities where they live. A large gap between the opportunities and facilities available between the origin and destination places of migration will increase the volume of migrants. Poverty is one of the causes that may incline people to move in search of both employment and better wages. Professionals/students may migrate in search of opportunities/better-education, and other individuals may migrate for an easier lifestyle, good opportunities, or other reasons.

A migration could be internal or external migration. An internal migration is the migration within a state, country, or region, and external migration is the migration to a different country or region. The internal migration does not change the population within the country or region, but it affects the social, economic, and demographic structure within the country or region. Internal migration is one of the main drivers of a local population change and therefore an important factor to consider in the provision of services in key domains such as housing (Darlington-Pollock et al., 2019). The reasons for internal migration could be family or non-family-reasons. So, we partition the internal migration population into two blocks as family-reason internal migration (FIM) and not-family-reason internal migration (NFIM). A large proportion of the internal migration in Nepal is due to family reasons. The family reasons for migration include marriage or migration as a dependent. This paper focuses on the NFIM population. An increase in the proportion of the NFIM population shows that the two geographical areas (origin and destination) have gaps in facilities, development, or opportunities. In Nepal, the NFIM population had a different profile from other populations (Manandhar, 2006). Facilities like higher education, better health care, government services, and transportation facilities are concentrated at the Sonigaa (Kathmandu valley) of the Nepalmandal, district headquarters and a few urban areas of hill and terai belts of Nepal. Nepal had a population of 23,151,423 in the 2001 census. In terai, hill and mountain geographic belts, there were 48.4%, 44.3% and 7.3% of the total population; and land areas are 23.1%, 41.7%, and 35.2% of Nepal respectively. The population densities in the terai, hill and mountain belts were 329.6, 167.1, and 32.6 people per square kilometer; and the number of municipalities was 29, 27, and 2 respectively (Pantha & Sharma, 2003). There were 14% urban population in 806 wards in 58 municipalities, and 86% rural population in 35,226 wards of 3914 village development committees during the population census of 2001 in Nepal (Bastola, 2003; Manandhar, 2009). The uneven development in different parts of the country created pull and push factors for internal migration. This paper used a multiple logistic regression model to study the binary response variables NFIM and internal migration. The multiple logistic regression is used in many fields and applied by many authors to study internal migration (Kalemba et al., 2022; Ruhnke et al., 2022; Latkin et al., 2021; Njeru et al., 2020).

This study has used the socio-economic, demographic, and geographic variables from the national household survey data. We organized the paper as follows. In Section 2, this paper discusses the source of data and the method. In Section 3, this paper presents the results of the data analysis. Discussions are in Section 4.

2. Data and Method

2.1. Data

This paper used migration, socio-economic, geographic, and demographic variables from the second Nepal Living Standards Survey 2003/04 to understand

characteristics of NFIM and internal migration population. For convenience, we will refer to the second Nepal Living Standards Survey, 2003/04 as NLSS. The NLSS is the national survey conducted by the Central Bureau of Statistics (CBS), Nepal, which followed the World Bank's Living Standards Measurement Survey methodology. The two-stage stratified random sampling NLSS collected information like consumption, income, housing, labor markets, education, and migration. The survey has information from 20,264 individuals (17,727 were age five and above), 3912 households, and the information on migration is in section four (CBS, 2004). In NLSS, migration was defined as an individual who changed his/her usual place of residence. That is, the change of the usual place of residence from one village development committee or municipality to another. The questions about migration were asked for all individuals aged five and above. The temporary change of residence or change of usual residence due to business or medication for example, was not considered as a migration. There were 6671 ever migrated individuals in the survey; 436 of them were aged less than five when they migrated at that destination place and no further information of migration were asked to them. So, there were 6235 individuals who ever migrated, and the age at migration was greater than or equal to five. Among those 6235 individuals in the NLSS, 5471 were internal migrants. In NLSS, within the internal migrants, 3950 migrated because of family reasons and 1521 individuals are NFIM. In this study internal migration includes population who changed their usual place of residence as defined by the survey and the age when they migrated was greater than or equal to five. The NFIM population is the subset of internal migrants whose reasons for migration are other than family reasons.

2.2. Method

This paper studied the socio-economic characteristics of the NFIM population and fitted the multiple logistic regression models, one for the NFIM and another for the internal migrant with the same set of independent variables and their corresponding reference groups. The multiple logistic regression model for a binary response variable y given a set of k independent variables x_1, x_2, \dots, x_k is

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k,$$

where $p = P(y = 1 | x_1, x_2, \dots, x_k)$ is the probability of success, and $\frac{p}{1-p}$ is the odds of success.

3. Results

3.1. Migration

The ever migrated population (6671 individuals in survey) included the internal as well as the external migration populations regardless of their age during migration. **Table 1** (CBS, 2004), presents the percentage of ever migrated population as partitioned by consumption quintiles, five partitions of an ascending

ordered consumption data set. The first partition is the poorest twenty percent of the population, the second partition represents the second fifth (21% to 40%) in ordered (ascending) consumption data and so on. The fifth partition includes the richest twenty percent of the population. There were 37 percent ever migrated population in Nepal. The percentage of ever migration was higher for the females (50%) than males (22%). The higher percentage of the ever migrated female population is due to marriage (a family reason). There is an increase in percentages of ever migrated as the consumption quintile partitioned index increases from the first to the fifth; the same pattern seen for both genders.

Table 2 shows the reasons for an ever migrated population, 75% of migration was due to family reasons, 11.6% for an easier lifestyle and 6.8% migrated for a new job. The percentage of ever migration due to family reasons was three-fourths compared to all other reasons (CBS, 2004). **Table 2** also shows that within each quintile partition, family reasons for the ever migrated population are higher for the first (poorest 20%), second and third partitions than the fourth and fifth (richest 20%) partitions. It is because of the non-family-reasons for migration like education/training, easier-lifestyles and looking for job were higher for the top consumption quintile partitions.

Table 1. Ever migrated population by gender (in %).

Consumption quintile	Male	Female	Total
First (Poorest 20%)	14.1	41.5	28.8
Second	14.8	45.6	32.2
Third	17.6	51.7	35.6
Fourth	22.9	53.9	39.3
Fifth (Richest 20%)	36.0	57.0	46.6
Whole country	21.6	50.1	36.6

Source: NLSS-II Statistical Report Vol. 1, 2003/04.

Table 2. Reason for migration for ever migrated population (in %).

Consumption quintile	Family reason	Education Training	Political reason	Natural Disasters	Looking for job	Easier Lifestyle	Other	Total
First (Poorest 20%)	81.9	0.4	0.0	1.1	4.7	10.1	1.8	100
Second	84.1	0.6	0.2	0.9	3.1	8.7	2.4	100
Third	82.4	0.7	0.3	0.8	4.2	9.4	2.4	100
Fourth	74.7	1.8	0.1	0.4	6.7	13.4	3.0	100
Fifth (Richest 20%)	61.2	7.3	0.1	0.5	12.2	14.3	4.6	100
Whole country	75.2	2.6	0.1	0.7	6.8	11.6	3.0	100

Source: NLSS-II Statistical Report Vol. 1, 2003/04.

3.2. Non-Family-Reason Internal Migration (NFIM)

The NLSS showed that Nepal consists of a 7.4% (1521 individuals in survey) NFIM population and a remaining other population 92.6% (16,205 individuals in survey). The other population included all individuals aged five and above who never migrated, or external migrants, or family-reason internal migrants. **Table 3** presents the origin and destination (urban/rural) regions of NFIM population. Within the NFIM population, 8.8% originated from urban areas and 91% of the NFIM originated from the rural areas. Among NFIM population, 36% had an urban destination and 64% had a rural destination.

Table 4 shows that the urban areas had a 17% and the rural areas had a 5.6% NFIM population out of their total population. Within the richest fifth consumption quintile partition of the urban and rural populations, 20.3% and 10.6% of them were from NFIM population respectively. **Table 4** shows that though the NFIM population was small, it constituted a high proportion in the top consumption quintiles in urban as well as in rural areas.

Table 5 presents the percentages of literacy, household with agricultural land for farming, household living on own dwelling and status of poverty for NFIM and other population. This table shows that the NFIM population was more literate (59.4%) than other populations (48.5%). This table also shows that the percentage of poor (14.3%), farm household (59.2%), and own dwelling (77.8%) were lower for the NFIM than for other populations.

Table 6 shows the per capita per year expenditure and income in Nepalese rupees by consumption quintile partitions for the NFIM and other populations. The median per capita per year expenditure for the NFIM population was Rs. 16,169 and for other population was Rs. 10,082. The median per capita per year income for NFIM was Rs. 15,556 and other's population had Rs. 9606. This table shows that these differences came from the richest fifth quintile partition.

Table 3. Origin and destination region of non-family-reason internal migration (in %).

		Destination		
		Urban	Rural	Total
Origin	urban	4.37	4.38	8.75
	rural	31.78	59.47	91.25
	Total	36.15	63.85	100

Table 4. Percentage of the non-family-reason internal migrant by consumption quintile partition and region.

Consumption quintile	Urban	Rural	Total
First (Poorest 20%)	5.2	4.2	4.3
Second	6.5	3.5	3.7
Third	10.7	4.5	5.0
Fourth	14.0	7.1	7.9
Fifth (Richest 20%)	20.3	10.6	15.2
Whole country	17.0	5.6	7.4

Table 5. Percentage of some social variables for non-family-reason internal migrant.

	Literacy	Farm	Own dwelling	Poor
Non-family-reason internal migrant	59.4	59.2	77.8	14.3
All others	48.5	82.6	95.2	30.4
Whole country	49.3	80.8	93.9	29.2

Table 6. Per capita per year consumption and income for non-family-reason internal migrant and other population (in Rupees).

Consumption	Per capita consumption				Per capita Income			
	NFIM		Other		NFIM		Other	
quintile partition	Mean	Median	Mean	Median	Mean	Median	Mean	Median
First (Poorest 20%)	5053	5162	4953	5088	5331	5219	5733	5159
Second	7453	7442	7382	7359	8088	7450	7994	7292
Third	10,358	10,379	10,107	9993	12,426	11,540	10,440	9450
Fourth	14,857	14,789	14,780	14,702	16,564	13,859	15,113	13,583
Fifth (Richest 20%)	46,370	34,476	40,130	28,940	42,285	31,333	34,702	27,400
Whole country	26,014	16,169	15,349	10,082	25,094	15,556	14,687	9606

3.3. Logistic Models for Non-Family-Reason Internal Migration and Internal Migration

We fitted multiple logistic regression models to study characteristics of the binary response variables, the NFIM ($Y = 1$ for 1521 NFIM and $Y = 0$ for 16,206 other population) and internal migrant ($Y = 1$ for 5471 internal migrant and $Y = 0$ for 12,256 other population). For comparison purposes the same independent variables and the same reference groups were used for both models. The independent categorical variables were: geography (*reference group mountain*), age variables (*reference group age less than 21*), education (*reference group illiterate or education level less than or equal to class 10*), poverty (*reference group poor*), income (*reference group per capita income less than 800 rupees per month*), employment status (*reference group self-employed in agriculture*), ethnicity (*reference group hill Brahmin/Chhetry*). **Table 7** and **Table 8** show that hill, terai, age 21 - 45, age ≥ 46 , and nonpoor have positive effects on both the NFIM and the internal migration models. The terai and hill belts had a higher proportion of NFIM or internal migrant population than the mountain belt. For the age variable, age higher than twenty years individuals had higher odd to be found as a NFIM and internal migrant. The odds ratio for the age 21 - 45 and age ≥ 46 were higher for internal migrant than NFIM. It was due to the large proportion of family-reasons individuals for internal migrants. The models show that for the nonpoor, the odds of being NFIM and internal migrant were increased by 37% and 21% respectively compared to poor. The ethnicity and farm household variables have negative coefficients for both NFIM and internal migrants with respect to their reference group. The negative coefficient of the ethnicity clusters indicate that all other ethnic clusters were less likely to be NFIM or internal

Table 7. Multiple logistic regression model for non-family-reason internal migration.

Variable	Coefficient	Std. Err.	<i>z</i>	$P > z $	[95% Conf. Interval]	Odd Ratio	
Belt							
Moutain	0					1	
Hill	1.14	0.18	6.20	0	0.78	1.50	3.12
Terai	1.65	0.18	8.95	0	1.29	2.01	5.19
Age group							
00 - 20	0						1
21 - 45	1.09	0.09	12.85	0	0.93	1.26	2.99
46 and above	2.00	0.09	23.40	0	1.83	2.16	7.37
Education							
Illiterate - Class 10	0						1
S.L.C /Under-graduate	0.38	0.10	4.00	0	0.20	0.57	1.47
Graduate or above	0.78	0.16	4.80	0	0.46	1.10	2.18
Poverty status							
Poor	0						1
Nonpoor	0.31	0.10	3.04	0.002	0.11	0.51	1.37
Per capita income per month							
Less than Rs. 800	0						1
800 - 1100	0.23	0.10	2.18	0.029	0.02	0.43	1.25
1100 - 2000	0.37	0.10	3.83	0	0.18	0.55	1.44
More than Rs. 2000	0.70	0.10	7.17	0	0.51	0.89	2.01
Employment status							
Self employed in agriculture	0						1
Self employed in trade	0.60	0.12	4.93	0	0.36	0.84	1.83
Wage employment in agriculture or non-profession	0.64	0.09	7.48	0	0.48	0.81	1.91
Wage employment in profession	0.58	0.15	3.86	0	0.28	0.87	1.78
Agriculture land							
Not farm household	0						1
Farm household	-1.08	0.07	-15.94	0	-1.21	-0.95	0.34
Ethnicity							
Hill Brahmin/Chhetry	0						1
Hill/Terai indigenous	-0.23	0.07	-3.17	0.002	-0.37	-0.09	0.79
Newaa/Pahari	-1.59	0.11	-14.20	0	-1.81	-1.37	0.20
Dalits	-0.71	0.12	-5.98	0	-0.95	-0.48	0.49
Terai high cast	-1.42	0.20	-7.09	0	-1.81	-1.02	0.24
Terai middle caste	-1.37	0.14	-9.90	0	-1.64	-1.10	0.25
Other minorities	-2.51	0.27	-9.47	0	-3.03	-1.99	0.08
Constant	-4.30	0.22	-19.79	0	-4.72	-3.87	

Table 8. Multiple logistic regression model for internal migration.

Variable	Coefficient	Std. Err.	<i>z</i>	$P > z $	[95% Conf. Interval]	Odd Ratio	
Belt							
Moutain	0					1	
Hill	0.28	0.07	4.04	0	0.14	0.42	1.32
Terai	0.76	0.07	10.56	0	0.62	0.90	2.14
Age group							
00 - 20	0						1
21 - 45	2.27	0.05	46.48	0	2.17	2.36	9.65
46 and above	2.29	0.05	43.18	0	2.19	2.40	9.91
Education							
Illiterate - Class 10	0						1
S.L.C /Under-graduate	-0.48	0.07	-6.56	0	-0.63	-0.34	0.62
Graduate or above	-0.48	0.14	-3.38	0.001	-0.76	-0.20	0.62
Poverty status							
Poor	0						1
Nonpoor	0.19	0.05	3.72	0	0.09	0.30	1.21
Per capita income per month							
Less than Rs. 800	0						1
800 - 1100	-0.03	0.06	-0.44	0.662	-0.14	0.09	0.97
1100 - 2000	0.20	0.06	3.65	0	0.09	0.31	1.22
More than Rs. 2000	0.43	0.06	6.97	0	0.31	0.56	1.54
Employment status							
Self employed in agriculture	0						1
Self employed in trade	-0.12	0.10	-1.27	0.203	-0.31	0.07	0.88
Wage employment in agriculture or non-profession	-0.48	0.06	-7.60	0	-0.61	-0.36	0.62
Wage employment in profession	-0.14	0.13	-1.08	0.281	-0.39	0.11	0.87
Agriculture land							
Not farm household	0						1
Farm household	-0.54	0.05	-11.07	0	-0.64	-0.45	0.58
Ethnicity							
Hill Brahmin/Chhetry	0						1
Hill/Terai indigenous	-0.34	0.05	-7.06	0	-0.43	-0.24	0.71
Newaa/Pahari	-1.11	0.07	-15.91	0	-1.24	-0.97	0.33
Dalits	-0.32	0.07	-4.67	0	-0.46	-0.19	0.73
Terai high cast	-1.42	0.14	-10.37	0	-1.69	-1.15	0.24
Terai middle caste	-0.99	0.08	-12.78	0	-1.14	-0.84	0.37
Other minorities	-1.46	0.10	-14.36	0	-1.65	-1.26	0.23
Constant	-2.14	0.10	-22.02	0	-2.33	-1.95	

migrant compared to the Brahmin/Chhetries. Keeping all other variables constant and changing the ethnicity label from category hill Brahmin/Chhetry to hill/terai indigenous, Newaa/Pahari, dalits, terai high cast, terai middle cast or other minorities, there are decreases in the odds of being an NFIM individual by 21%, 80%, 51%, 76%, 75%, and, 92% and decreases in odds of being internal migrant by 29%, 67%, 27%, 76%, 63%, and, 77% respectively. The farming households experienced a reduction of 66% and 42% in the odds of being NFIM and internal migrant compared to the non-farm household, keeping all other variables constant. An increase in the education level of individuals, an increase in per capita income, and employment different from self employed in agriculture had positive effects on NFIM (**Table 7**). But this pattern was not the same for the internal migrant population, showed negative associations for education and employment status (**Table 8**).

4. Discussions

The characteristics of the non-family-reason internal migrant (NFIM) population may not be the same as that for other populations or for the internal migrants. This paper studied the NFIM population, the sub population of the internal migrant, whose ages during migration were greater than and equal to five and reasons for migration were other than family reasons, like better job opportunities, high salary, easier life style or higher education. This paper used the national Nepal Living Standards Survey 2003/04 data which had socio-economic, demographic, and geographic variables as well as migration. The NLSS survey showed that three-fourths of the ever migrated population age five and above were due to family reasons; the family reasons for migration include marriages and dependents. The NLSS data shows that the NFIM population had a higher literacy rate, less poverty rate, a lower percentage of households with agriculture land for farming, and a lower percentage of households living on their own dwelling as compared to the other population. Among the richest top quintile partition, NFIM population had better mean/median consumption and income than other populations. The study shows that though the NFIM population was small, within consumption quintile, it covered a good proportion in the top richest partition both in urban and rural areas.

This study had fitted two multiple logistic regression models, one for the NFIM and another for the internal migrant response variables with the same set of independent variables and their corresponding reference groups. The logistic regression results show that there were differences between NFIM and internal migrant populations. The NFIM population was positively affected by belt (*reference group mountain*), age (*reference group age less than 21*), higher education status (*reference group illiterate or education level less than or equal to class 10*), higher income (*reference group per capita income less than 800 rupees per month*), and employment (*reference group self-employed in agriculture*). It was negatively affected by ethnicity (*reference group hill Brahmin/Chhetry*) and farm (*reference group non-farm household*). The coefficients for the age effect

were higher for internal migrants than for the NFIM population. It was because the internal migration includes family reason (marriage and dependents). The NFIM and internal migration coefficients had the same sign for hill/terai, non-poor, farm, and ethnicity. This paper studied the NFIM population's characteristics using the second Nepal Living Standards Survey 2003/04 data. It is possible that there are similar characteristics of the NFIM population in other geographical areas.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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