

Driving Factors of Emigration from Nepal

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Extended Abstract

Introduction

Migration in Nepal is characterised mainly by internal migration, long term and seasonal migration, diaspora, student migration, refugees, travel for family reunion and visits. The overall internal migration pattern is Tarai centred where more than half (53.6%) of the population resides (NSO, 2023). The international migration is characterised by both emigration and immigration. Of the total households in Nepal, 1,555,961 household had at least one absentee with 2,190,592 population who were absent abroad making 7.5% of the total population. Whereas the total number of foreign born population living in Nepal were 744,245 making 2.6% of the total population (NSO, 2023). The main reason of emigration from Nepal is due to employment or salary/wage purposes whereas main reason of immigration in Nepal is marriage. Volume of emigrants and immigrants were almost equal until 2001 as indicated in periodic population censuses of Nepal (MoLESS, 2020). Since 2011, the number of emigrants has doubled compared to immigrants. The National Population and Housing Census (NPHC) 2021 data published by NSO showed that 2,190,592 people were absent from Nepal, including 3,90,917 (17.8%) females (NSO, 2023). International migration for foreign employment has, thus, become a common livelihood option for Nepali youth.

Data sources and analysis

Nepal has been conducting population census in every ten years since 1911 and census of 2021 is 12th census in its series. This study is based on the census data of 2021 which was conducted for National Statistics Office (NSO), Government of Nepal. This study presents trend analysis of international migration focusing on drivers of emigration from Nepal using mainly the Nepal Population and Housing Census (NPHC) 2021 data. These data were received from NSO as comma-separated values (CSVs) files as well as frequency tables based on the dummies submitted by the writers. For the analysis of socio-economic associates related to international migration, regression analysis has been done at household level (household with at least one absentee) and individual level (absent population). The main aim of this analysis is to identify the relationship between dependent variable (emigration status) and independent variables (background variables), enabling the prediction or explanation of dependent based on independent variables. By this method, an attempt has been made to examine how categorical

or continuous independent variables related to migration can have influence over the dichotomous dependent variable (Hosmer & Lemeshow, 1989).

Multivariate logistic regression is represented by the equation:

$$\log(p/1-p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

where, p is the probability of outcome variable, β_0 is the odds of intercept, $\beta_1, \dots, \beta_n$ are the coefficients associated with the reference group, and $X_1, \dots, X_n$ are the independent variables.

Main findings

The findings of 2021 census revealed the fact that the major driving factor of emigration was employment or salary/wage purposes which make up of two third of the total absentee whereas about one tenth were absent abroad for seeking job. Both household and individual related background characteristics could be contributory factor for emigration. The households with at least one absentee, individual emigrant with main reason of absent and duration of stay of emigrant at destination countries could have been affected by various independent variables. Both at household and individual level, logistic regression models were applied to observe which independent variables had statistically significant association. In these models, household with at least one absentee, main reason of absent and duration of stay are regarded as dependent variable whereas ecological belt, place of residence, province, household ownership, age group, sex, wealth quintile, family structure, gender of HH head, caste/ethnicity, level of education of household head, size of family, occupation of HH head and types of occupation (industry) are considered as independent variables.

Status of emigration varies with different independent variables. The likelihood ratio of emigration is observed higher in hill (OR=1.04, CI: 1.04-1.05), peri-urban (OR=1.08, CI: 1.07-1.09) and Sudurpaschim province (OR=1.17, CI: 1.15-1.18). Similarly, the likelihood ratio of emigration from own house is observed two times higher (OR=2.04, CI: 2.02-2.06) and such likelihood is observed about three times higher with household from extended family and female headed households (OR=2.95, CI: 2.93-2.97 and OR=3.17, CI: 3.15-3.19). Similarly, in terms of caste/ethnicity, the likelihood ratio of emigration is observed higher in all caste/ethnicity groups except tarai janajati and other, foreigners and not stated group. The probability of emigration from hill Dalit is found two times higher than reference group (OR=2.00, CI: 1.98-2.03). The level of education of household head is also significantly associated with household with at least one absentee. The likelihood ratio is observed about two times higher among household head having basic education, level not state and illiterate (OR=1.87, CI: 1.85-1.89, OR=1.90, CI: 1.87-1.93 and OR=1.80, CI: 1.78-1.83 respectively). The probability of emigration from household with agriculture occupation is found about two times higher than non-agriculture whereas the likelihood ratio is observed higher with household having secondary and tertiary occupation (OR=1.02, CI: 0.96-1.07 and OR=1.11, CI: 1.05-1.18) (Annex Table 1).

The main reason of emigration from Nepal to different destination countries and duration of stay at destination countries could have been affected by various independent variables. Two logistic regression models have been applied to observe which independent variables had statistically significant association with the dependent variables. In this section, main reason of emigration and duration of stay at destination countries are considered as dependent variables. Whereas ecological belt, place of residence, province, level of education of absentee, gender, age group, caste/ethnicity of HH head, occupation of HH head, types of occupation (industry), level of education of household head, size of family, household ownership, family structure and wealth quintile are chosen as independent variables.

The outflow of Nepali migrant from Nepal to different destination countries largely varies with the background variables/independent variables. The likelihood ratio or odds ratio also varies with the independent variables. In this model, the output of regression analysis shows that the likelihood ratio of main reason of absence as salary/wage is observed higher in hill and tarai as well as peri-urban and rural areas (i.e., OR=1.36, CI:1.34-1.39 and OR=1.33, CI:1.30-1.35 for hill and tarai whereas OR=1.12, CI:1.10-1.13 and OR=1.15, CI:1.13-1.17 for peri-urban and rural areas). The likelihood ratio of emigrated for salary/wage is observed about 15 times higher in 35-44 years age group whereas the likelihood ratio is observed lowest in households with highest wealth quintile (OR=0.90, CI:0.89-0.92) (Annex 2).

Similarly, the duration of stay at destination country differs with the background characteristics of absentee abroad. The findings of regression analysis shows that the likelihood ratio of duration of stay for less than five years is higher in tarai and rural area (OR=1.30, CI:1.28-1.33 and OR=1.18, CI: 1.16-1.19). The likelihood ratio of staying less than five years is observed highest from madhesh/tarai Dalit (OR=1.69, CI:1.64-1.73). The likelihood ratio is observed about three times higher with absentee from age group 45 years and above (OR=3.16, CI:3.08-3.25) whereas the probability of emigration is observed highest from household having family with 7-8 persons (OR=1.03, CI: 1.01-1.04). Similarly, the likelihood ratio is observed lowest with household having highest wealth quintile (OR=0.36, CI: 0.36-0.37) (Annex 3).

Conclusion

The emigration of Nepali people to different destination countries could have been affected by various factors. Logistic regression was applied to observe what factors had statistically significant association with the probability of emigration. Basically, logistic regression was applied at two levels—household level and individual level. One model at household level was applied to see the statistical association between emigration and other factors whereas two models for individual level were applied to observe the statistical associations between dependent and independent variables.

Driven mainly by economic opportunities directed towards labour markets in the Gulf countries, the volume is further fueled by high unemployment, limited local jobs and economic instability.

Social costs including family separation, physical, mental health challenges are equally responsible. These all factors have given visible impacts: barren land especially in mid-hills, declined population in rural areas with shortage of human resource. These findings reveal that international migration emerged as crucial socio-economic and demographic phenomenon in Nepal influencing lives of migrants, their family and society. This human resource contributing through remittance to economic and social development of receiving countries now demands policy reforms to maximise production sector job opportunities inside Nepal.

References

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Annex

Annex 1: Logistic regression analysis of factors associated with emigration at household level

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Ecological belt			
Tarai	1		
Mountain	0.70	0.69-0.71	0.00
Hill	1.04	1.04-1.05	0.00
Place of residence			
Rural	1		
Urban	0.91	0.91-0.92	0.00
Peri Urban	1.08	1.07-1.09	0.00
Province			
Madhesh	1		
Koshi	0.76	0.75-0.76	0.00
Bagmati	0.57	0.56-0.57	0.00
Gandaki	0.90	0.89-0.91	0.00
Lumbini	0.89	0.88-0.90	0.00
Karnali	0.55	0.54-0.55	0.00
Sudurpaschim	1.17	1.15-1.18	0.00
Household ownership			
Rented	1		
Own	2.04	2.02-2.06	0.00
Institutional	0.72	0.69-0.75	0.00
Others	1.35	1.31-1.39	0.00
Wealth quintile			
Highest	1		
Lowest	0.42	0.41-0.42	0.00
Lower	0.58	0.58-0.59	0.00
Middle	0.64	0.63-0.64	0.00
Higher	0.71	0.70-0.71	0.00
Family Structure			
Nuclear Family	1		
Extended Family	2.95	2.93-2.97	0.00
Gender of HH head			
Male	1		
Female	3.17	3.15-3.19	0.00
Caste/ethnicity			
Madhesh/Tarai Castes	1		
Hill Castes	1.60	1.58-1.62	0.00
Mountain/Hill Janajatis	1.65	1.63-1.67	0.00
Tarai Janajatis	0.82	0.81-0.83	0.00
Hill Dalits	2.00	1.98-2.03	0.00

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Madhesh/Tarai Dalit	1.09	1.08-1.11	0.00
Religious/Linguistic groups	1.84	1.82-1.86	0.00
Others, Foreigners & Not stated	0.83	0.79-0.87	0.00
Level of education of household head			
Higher (bachelor+)	1		
Illiterate	1.80	1.78-1.83	0.00
Basic (0-5)	1.87	1.85-1.89	0.00
Secondary (6-inter)	1.43	1.41-1.44	0.00
Level/Leve Not Stated/Never attending	1.90	1.87-1.93	0.00
Literacy not stated	1.24	0.97-1.58	0.08
Size of family			
1-2 persons	1		
3-4 persons	0.56	0.55-0.56	0.00
5-6 persons	0.25	0.25-0.26	0.00
7-8 persons	0.23	0.23-0.23	0.00
9+ persons	0.27	0.26-0.27	0.00
Occupation of HHs head			
Non-agriculture	1		
Agriculture	1.76	1.67-1.86	0.00
Types of occupation (Industry)			
Primary	1		
Secondary	1.02	0.96-1.07	0.60
Tertiary	1.11	1.05-1.18	0.00

Note: ***refers <0.001, **refers <0.005 and *refers <0.010.

Annex 2: Logistic regression analysis of factors associated with main drivers of emigration at individual level

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Ecological belt			
Mountain	1		
Hill	1.36	1.34-1.39	0.000
Tarai	1.33	1.30-1.35	0.000
Place of residence			
Urban	1		
Peri Urban	1.12	1.10-1.13	0.000
Rural	1.15	1.13-1.17	0.000
Province			
Koshi	1		
Madhesh	0.75	0.74-0.77	0.000
Bagmati	0.70	0.69-0.71	0.000
Gandaki	0.92	0.91-0.94	0.000

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Lumbini	0.88	0.87-0.90	0.000
Karnali	0.42	0.41-0.43	0.000
Sudurpaschim	0.89	0.88-0.91	0.000
Level of education of absentee			
Basic	1		
Secondary	1.12	1.11-1.13	0.000
Higher	0.78	0.76-0.79	0.000
Others	0.99	0.96-1.02	0.643
Illiterate	0.86	0.85-0.88	0.000
Sex of absentee			
Male	1		
Female	0.48	0.47-0.48	0.000
Age Group			
<14 years	1		
15-24	9.44	9.24-9.64	0.000
25-34	13.51	13.21-13.81	0.000
35-44	14.64	14.29-15.00	0.000
45+	9.99	9.71-10.27	0.000
Not Stated	1.00		
Duration of stay at destination			
0-2 years	1		
3-5 years	0.95	0.94-0.96	0.000
6-9 years	1.04	1.03-1.06	0.000
10-14 years	1.09	1.07-1.11	0.000
15-19 years	1.15	1.12-1.17	0.000
20+ years	1.35	1.32-1.38	0.000
Not Stated	0.54	0.52-0.57	0.000
Caste/ethnicity of HH head			
Hill castes			
Madhesh/Tarai Caste	0.83	0.81-0.84	0.000
Mountain/Hill Janajatis	1.26	1.25-1.28	0.000
Tarai Janajatis	1.00	0.98-1.02	0.936
Hill Dalits	1.05	1.04-1.06	0.000
Madhesh/Tarai Dalit	1.00	0.97-1.03	0.927
Religious/Linguistic groups	1.02	0.99-1.05	0.157
Others, Foreigners & Not stated	0.60	0.55-0.66	0.000
Occupation of HHs head			
Agriculture	1		
Non-Agriculture	0.89	0.80-0.99	0.028
Types of occupation (Industry)			
Primary	1		
Secondary	1.11	1.00-1.23	0.043
Tertiary	1.04	0.94-1.15	0.487
Level of education of HH head			

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Beginner	1		
Basic (0-5)	0.99	0.98-1.00	0.026
Secondary (6-inter)	0.87	0.86-0.88	0.000
Higher (bachelor+)	0.57	0.56-0.59	0.000
Level/Leve Not Stated/Never attending	1.00	0.98-1.02	0.684
Literacy not stated	0.64	0.43-0.96	0.031
Size of family			
1-2 persons	1		
3-4 persons	0.95	0.94-0.96	0.000
5-6 persons	0.94	0.92-0.95	0.000
7-8 persons	0.91	0.90-0.93	0.000
9+ persons	0.89	0.86-0.91	0.000
Family Structure			
Nuclear Family	1		
Extended Family	1.10	1.09-1.11	0.000
Wealth Quintile			
Lowest	1		
Lower	1.12	1.10-1.13	0.000
Middle	1.14	1.12-1.15	0.000
Higher	1.12	1.10-1.14	0.000
Highest	0.90	0.89-0.92	0.000

Annex 3: Logistic regression analysis of factors associated with main duration of stay at destination countries at individual level

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Ecological belt			
Mountain	1		
Hill	1.13	1.12-1.15	0.000
Tarai	1.30	1.28-1.33	0.000
Place of residence			
Urban	1		
Peri Urban	1.12	1.11-1.13	0.000
Rural	1.18	1.16-1.19	0.000
Province			
Koshi	1		
Madhesh	1.04	1.02-1.05	0.000
Bagmati	1.13	1.11-1.14	0.000
Gandaki	0.79	0.78-0.80	0.000

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Lumbini	1.15	1.14-1.16	0.000
Karnali	2.13	2.09-2.18	0.000
Sudurpaschim	1.34	1.32-1.36	0.000
Level of education			
Basic	1		
Secondary	1.29	1.28-1.30	0.000
Higher	1.21	1.19-1.23	0.000
Others	0.86	0.83-0.88	0.000
Illiterate	0.81	0.80-0.83	0.000
Sex of absentee			
Male	1		
Female	1.24	1.23-1.26	0.000
Age Group			
<14 years	1		
15-24	1.49	1.46-1.52	0.000
25-34	1.96	1.92-2.00	0.000
35-44	2.49	2.44-2.55	0.000
45+	3.16	3.08-3.25	0.000
Not Stated	0.74	0.71-0.76	0.000
Main reason of absent			
Salary/wage	1		
Trade/business	0.82	0.79-0.86	0.000
Study/training	1.37	1.35-1.39	0.000
Seeking job	1.10	1.09-1.12	0.000
Dependent	0.95	0.93-0.97	0.000
Others	1.14	1.10-1.18	0.000
Not Stated	0.55	0.53-0.56	0.000
Caste/ethnicity of HH head			
Hill castes	1		
Madhesh/Tarai Caste	1.42	1.39-1.44	0.000
Mountain/Hill Janajatis	1.01	1.00-1.02	0.056
Tarai Janajatis	1.26	1.24-1.29	0.000
Hill Dalits	1.08	1.06-1.09	0.000
Madhesh/Tarai Dalit	1.69	1.64-1.73	0.000
Religious/Linguistic groups	1.58	1.54-1.61	0.000
Others, Foreigners & Not stated	1.29	1.18-1.40	0.000
Occupation of HHs head			
Agriculture	1		
Non-Agriculture	0.96	0.88-1.06	0.428
Types of occupation (Industry)			
Primary	1		
Secondary	1.11	1.02-1.22	0.022
Tertiary	1.02	0.93-1.12	0.665
Level of education of HH head			
Beginner	1		

Characteristics	Odds Ratio (OR)	95% C.I.	p-Value
Basic (0-5)	0.99	0.98-1.00	0.015
Secondary (6-inter)	0.89	0.88-0.89	0.000
Higher (bachelor+)	0.74	0.73-0.76	0.000
Level/Leve Not Stated/Never attending	0.93	0.91-0.95	0.000
Literacy not stated	0.82	0.58-1.16	0.266
Higher male	0.97	0.96-0.98	0.000
Size of family			
1-2 persons	1		
3-4 persons	1.00	0.99-1.01	0.913
5-6 persons	0.99	0.97-1.00	0.073
7-8 persons	1.03	1.01-1.04	0.004
9+ persons	1.02	1.00-1.05	0.040
Household ownership			
Own	1		
Rented	1.15	1.13-1.17	0.000
Institutional	1.20	1.12-1.30	0.000
Others	1.02	0.97-1.07	0.479
Family Structure			
Nuclear Family	1		
Extended Family	1.07	1.06-1.08	0.000
Wealth Quintile			
Lowest	1		
Lower	0.83	0.82-0.84	0.000
Middle	0.69	0.68-0.70	0.000
Higher	0.53	0.52-0.54	0.000
Highest	0.36	0.36-0.37	0.000