Migration Trends and Demographic Changes in Rudraprayag District, Uttarakhand

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Abstract: Migration in hilly regions, particularly in areas like Rudraprayag district of Uttarakhand, is a multifaceted phenomenon shaped by various socioeconomic, environmental, and infrastructural factors. This study focuses on out-migration in the Rudraprayag district, analysing its various consequences, patterns, causes, and effects. Two villages from each of the 3 blocks in the district were selected for the study, and data was gathered through surveys conducted with 60 households across these villages. 10 households were chosen from each village, creating a representative sample of Rudraprayag. To collect information on the different types of migration experienced by families, such as their destinations, motivations, and the impacts of their migration, the authors developed a systematic questionnaire to gather responses from family members. The author also examined the migrants` age, gender, occupation, income, and education level. The report highlights that out-migration has become a significant concern in the Rudraprayag district, leading to various socioeconomic issues. If this matter is not addressed promptly, many villages may lose their residents. Additionally, the report includes several policy proposals aimed at reducing migration from the Rudraprayag district.

Keywords: Migration • Out-migration • Socio-economic • Environmental • Infrastructural • Destination and Motivations

Introduction

People moving from one location to another, frequently across national or regional borders, is called migration. Economic, social, political, and environmental issues are some of the causes of this shift, which may be voluntary or involuntary. There are numerous types of migration, such as forced or voluntary, economic or refugee, internal or international, and temporary or permanent. Individuals or groups may migrate for several reasons, including better employment prospects, escaping political oppression or violence, getting back in touch with family, or simply enjoying a higher standard of living. Migration has important political, social, and economic ramifications. Communities' social and cultural fabric may be significantly impacted and may also affect the political system, public services, and labour market.

Throughout history, migration has significantly influenced the Garhwal Himalayas. People have utilised this widespread occurrence as a different approach to risk diversification and sustenance (Gautam & Andersen 2016, Macchi 2011, Machhi 2010). Migration in the Garhwal Himalayas began in the eleventh and twelfth centuries when many people fled the horrors of Muslim rule by moving to the highlands from the Indian subcontinent (Nagalia 2017). Following the Mughals' conquest of India in the 16th century, a second significant wave of immigration occurred. Along rivers, on mid slopes, and in the highlands, people from the Indo-Gangetic plains and other regions of India moved to the Garhwal Himalaya. However, the creation of the Garhwal and Kumaon regiments during the colonial era marked the beginning of out-migration from

the mountains, which resulted in a significant exodus of young men to join the British Indian Army (Rural Development and Migration Commission, 2018). Outmigration peaked when young people began moving out of state and across the country in pursuit of employment in the 1980s and 1990s. Before 2000, outmigration from the Garhwal hills was mainly seasonal, with people moving until their service periods ended. The scenario altered once Uttarakhand became a state in 2000. Since then, many families have begun to leave their homes and properties behind and move permanently (Mehta & Maikhuri 2018).

The literature assessment reveals that while numerous studies have been conducted on migration-related topics in the Garhwal, very few have specifically examined out-migration. Furthermore, there are few thorough and accurate studies on the reasons behind and effects of out-migration in the Garhwal. This study is distinct since it is founded on an extensive field inquiry, with findings derived from primary surveys conducted throughout the Rudraprayag district. Examining the many forms and trends of migration, as well as its causes and effects, are the study's main objectives. Additionally, it will link migration to several factors, including income, occupation, education, and altitude, and it will suggest several strategies for reducing out-migration.

Study area

In Uttarakhand's Garhwal area, the Rudraprayag district is renowned for its rough alpine landscape, river valleys, and religious significance. In 1997, it was separated from the districts of Chamoli and Pauri Garhwal. The district lies 30°19′ N to 30°49′ north latitude and 78°49′ to 79°21′ east longitude. It is bounded on the North by Chamoli district, northwest by Uttarkashi district, west by Tehri Garhwal district, and south by Pauri Garhwal district (Fig 1).
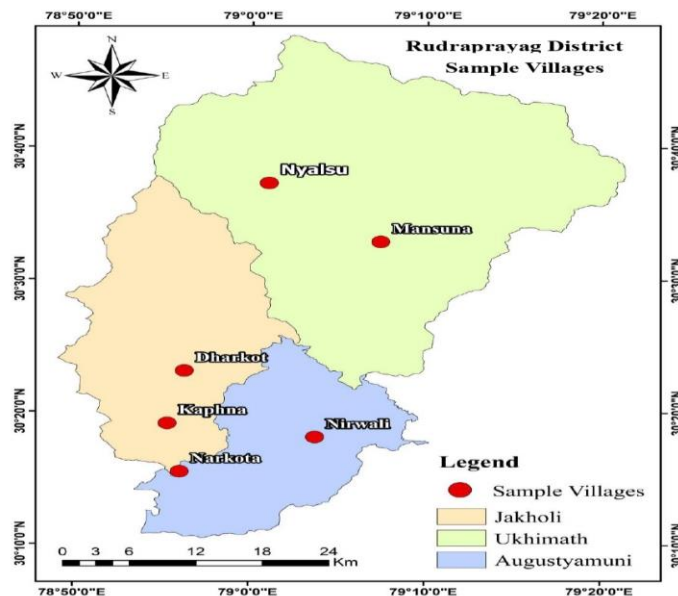

Fig. 1. Map of Rudraprayag District showing the case study villages (Source: SOI)

Objectives

Rudraprayag is located in the Middle and Lesser Himalayas. The Alaknanda and Mandakini are two major rivers that converge at Rudraprayag town, a prominent religious confluence. One important geological feature is the Chorabari Glacier, which is close to Kedarnath. Rudraprayag district is divided into 3 development blocks.

(1) To find out the migration condition in the research region.

(2) To find out migration's causes and effects and recommend suitable policies to lessen migration.

Methodology

The study's primary dataset was gathered in January 2025. Six villages were chosen from the Rudraprayag districts. 60 households in all, 10 of the households in every village, were surveyed. 297 people were living in all the communities (Table 1). Of them, 66% were non-migrants and 34% were migrants. They were either permanent or semipermanent migrants. A well-organised survey was created. The heads of the households were questioned regarding the sorts of migration they practise, the migration destination, and the migration motivations. In addition, questions about the migrants' age, sex, occupation, income, and education were asked. Additionally, the authors used interviews and group discussions to determine how migrants considered the effects of out-migration. The migration data was assessed using percentile analysis, and a number of graphs and tables were produced to show the results. The effects of out-migration in the region were also investigated. Lastly, a number of policy suggestions and initiatives were put up to lessen the population exodus from the Rudraprayag district.

Results

Population share of migrants and non-migrants

Migration is a frequent occurrence in the hilly rural areas of the Garhwal Himalayas. Those who move are known as migrants, and those who stay behind are known as non-migrants. Figure 2 shows the percentage of migrants and non migrants in the sampled villages (n=6 villages). Two villages, Nirwali and Nyalsu, had a high number of migrants - more than 40%. The migrant population was substantial (>30%) in Dharkot village. Less than 30% of the migrants in Narkota, kaphna and Mansuna villages were identifiable. Village in Augustmuni block (Nirwali) and Ukhimath block (Nyalsu) had the highest out-migration **(Table 1)**.

Table 1. Characteristics of the surveyed village population (Source: Primary Survey, January 2025)

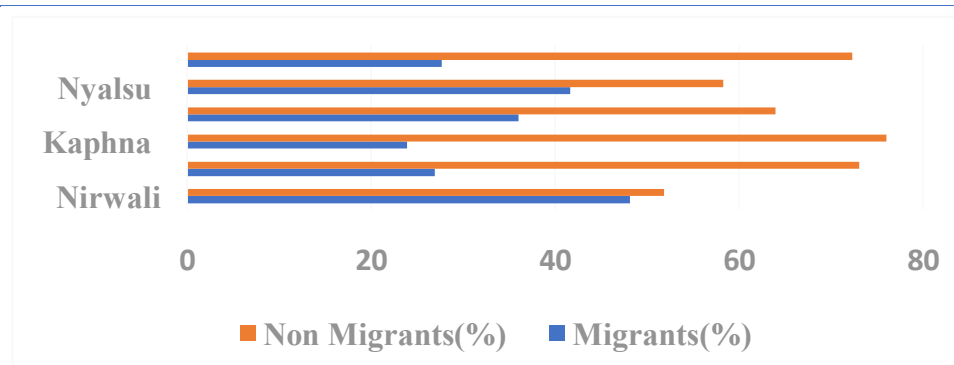| Block	Village	Total Household	Total Population	Total Population	Migrated	Migrants (%)
Augustmuni	Nirwali	10	54	26		48.14
Augustmuni	Narkota	10	52	14		26.92
Jakholi	Kaphna	10	46	11		23.91
Jakholi	Dharkot	10	50	18		36
Ukhimath	Nyalsu	10	48	20		41.66
Ukhimath	Mansuna	10	47	13		27.65

Fig. 2: The percentage of villages with migrants and non-migrants (n=6 villages)

Male and female migration

Nyalsu village has 18 male migrants, making it the largest village. In contrast, Nirwali village has 11 female migrants, the highest among villages. In addition to this, 15 men have migrated from Nirvali; 11 men and 3 women have migrated from Narkota; 7 men and 4 women have migrated from Kaphna; 12 men and 6 women have migrated from Dharkot; 2 women have migrated from Nyalasu; and 9 men and 4 women have migrated from Mansuna **(Table 2)**.

Table 2. Total male and female migration (Source: Primary Survey, January 2025)

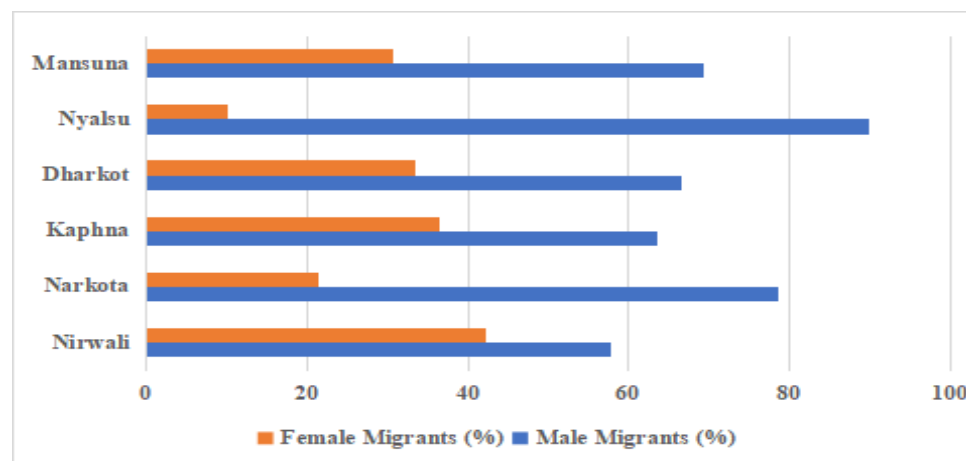| Village	Total Household	Total Population	Total Male Population	Total Female Population	Total Male Migrants	Total Female Migrants
Nirwali	10	54	28	26	15	11
Narkota	10	52	23	29	11	3
Kaphna	10	46	23	23	7	4
Dharkot	10	50	26	24	12	6
Nyalsu	10	48	25	23	18	2
Mansuna	10	47	24	23	9	4

Fig. 3: The percentage of villages with male and female migrants (n=6 villages)

Types of migration

Permanent and semi-permanent migration are the two categories. **Table 3** shows the percentage of permanent and semi-permanent migration from the examined areas. The data indicate that out-migration occurs in every villages, although the proportions vary.

Table 3. The percentage of villages with permanent and semi-permanent migration (n=102 migrants) (Source: Primary Survey, January 2025)

Village	Permanent Migration	Semi-permanent Migration
Nirwali	15.38	84.62
Narkota	21.42	78.58
Kaphna	0	100
Dharkot	27.78	72.22
Nyalsu	25	75
Mansuna	0	100

When a person or family leaves their community and settles somewhere else, it's known as permanent migration. The amount of permanent migration from the villages under study is shown in **Table 3**. Dharkot village has the highest rates of permanent migration, with almost 25% of the population leaving permanently. The permanent migration rate was moderate, ranging between 20 and 25 %, in the villages of Narkota and Nyalsu. Less than 20% of Nirwali's population left permanently, which is a low rate. However, nobody ever left the villages of Kaphna and Mansuna for good **(Table 4).**

Table 4. Permanent migration from the villages during survey (Source: Primary Survey, January 2025)

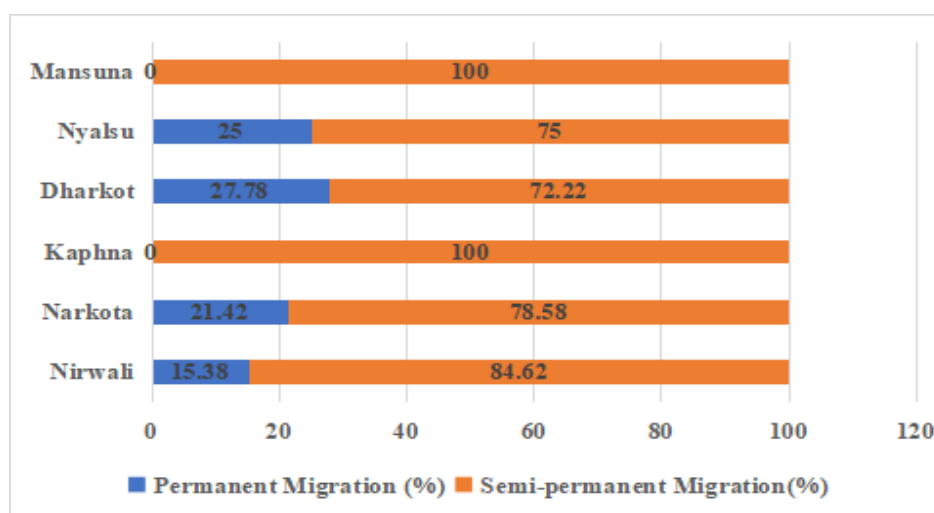| Indices(%)	Level	Villages and blocks
>25	High	Dharkot (Jakholi block)
20-25	Medium	Narkota (Augustmuni block) and Nyalsu (Ukhimath block)
<20	Low	Nirwali (Augustmuni block)
0	Zero	Kaphna (Jakholi block) and Mansuna (Ukhimath block)

Fig. 4: The percentage of semi-permanent and permanent migrants in the villages

Monthly, weekly, daily, short-term, and long-term migrations are semi-permanent. Semi-permanent migrants continue to visit their relative's communities while staying at their destination for a set period. We looked at the semi-permanent migration in the sampled villages (Table 3). Due to the absence of permanent migration, the two villages of Mansuna and Kaphna had a large amount of semi-permanent migration (100%) (figure 4). On the other hand, Nyalsu, Dharkot, Nirwali, and Narkota all had semi-permanent migration rates exceeding 50%.

Causes of out-migration

Employment is the primary driver of movement in the research area, accounting for 50% of all migrations. Additionally, 5.88 people moved to seek health care services, and 44.12% moved to access educational institutions.

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Figure 5: Causes of out-migration (n=102 migrants)

Trends of out-migration

A thorough review of the migrants' destinations revealed various migration trends (Figure 6). The migrants went to the state capital, the district headquarters, other districts within the state, out of state, and as well as to adjacent towns and villages. According to the data, 4.90% of persons relocate to near by town, with 13.73% going to the district headquarter. 21.57% relocated to the state capital, 23.53% relocated to other district of

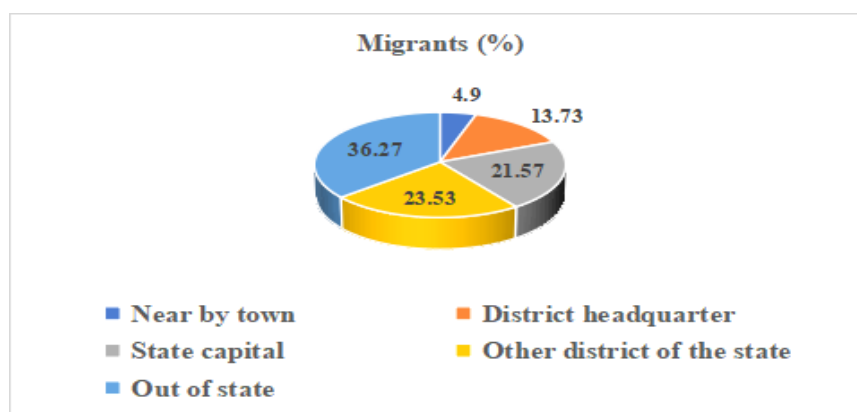the state and 36.27% of persons relocated out
of state.

Fig. 6: Destination of migrants (n=102)

Discussion

The study says that although not to the same extent, there has been migration from the Rudraprayag district. There was widespread permanent or temporary migration to the villages of Agastyamuni and Ukhimath. The authors found that the Ukhimath and Augustmuni blocks had higher rates of semi-permanent migration, while the Jakholi block experienced more permanent migration. In the Augustmuni block, Nirwali village has experienced the highest migration rate of women. Nyalsu village has experienced the highest migration rate of men in Ukhimath block. The lack of job opportunities is the primary reason for migration among the villages being studied. Specifically, 50% of the residents have moved in search of employment, while 44.12% relocated for educational opportunities, and 5.88% sought better medical facilities.

Conclusion

Promoting cooperative farming is an effective strategy to enhance agricultural productivity. In Uttarakhand, livestock husbandry holds promise but requires revival due to its gradual decline. Expanding the cultivation of medicinal herbs and horticultural crops is essential. Crop protection from wild animals is a major concern, and the government should ensure village-level solutions, such as deploying guards. Farmers aiming to diversify should receive adequate support, including access to modern technology, equipment subsidies, and training. These steps can boost employment and yield in the agricultural sector. Combating out-migration requires comprehensive action—developing infrastructure, healthcare, and education facilities in Rudraprayag is crucial to create local opportunities. Tourism promotion can also help generate employment and local revenue. Additionally, the establishment of mountain-friendly industries, small-scale enterprises based on Himalayan bioresources, and support for traditional crafts will strengthen the rural economy. Encouraging return migration by ensuring sustainable livelihoods is vital for revitalizing village life in the region.

References

Gautam Y and Andersen P (2016). Rural livelihood diversification and household well-being: Insights from Humla, Nepal. Journal of Rural Studies 44: 239–249.

Macchi M (2011). Framework for Community-Based Climate Vulnerability and Capacity Assessment in Mountain Areas. International Centre for Integrated Mountain Development (ICIMOD).

Machhi M (2010). Mountains of the World – Ecosystem Services in a Time of Global

and Climate Change. International Centre for Integrated Mountain Development (ICIMOD).

Mehta K and Maikhuri R K (2018). Assessing Reasons of Outmigration from Garhwal Himalayan Region A Case Study of Three Hill District. Conference on Recent Innovations in Emerging Technology & Science,| JB Institute of Technology, Dehradun & IJCRT.

Nagalia BS (2017). Rural migration in Uttarakhand: A Geographical analysis.

Rural Development and Migration Commission. (2018). Interim Report on the Status of Migration in Gram Panchayats of Uttarakhand. Pauri: Rural Development and Migration Commission.