



Sustainable rural development through reverse migration in Uttarakhand

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Abstract

Uttarakhand experienced a new phenomenon of reverse migration, especially after the covid-19 pandemic. Approximately 215875 people have returned to their native villages in the both Kumaun and Garhwal divisions of Uttarakhand. Reverse migration has created various challenges and opportunities for the state. As a hilly state, Uttarakhand is facing many challenges like rural-urban migration, unemployment, difficult agricultural conditions, and poor infrastructure. It is also dealing with environmental vulnerability, risk from wild animals, and poor health services in the hills. This paper examines the impact of reverse migration on sustainable development practices in Uttarakhand. This paper also studies patterns and reasons behind rural-urban migration in Uttarakhand and the role of government policies on rural development.

Keywords: Rural development, Reverse migration, Outmigration, Organic farming

Introduction

Uttarakhand, formed on November 9, 2000, comprises 53,483 sq. km (1.6% of India's land) and has 0.83% of the country's population. The state is divided into two administrative divisions, namely, the Kumaun and Garhwal divisions. Kumaun consists of six districts: Almora, Bageshwar, Champawat, Nainital, Pithoragarh, and Udham Singh Nagar. The Garhwal division has seven districts: Dehradun, Haridwar, Pauri, Chamoli, Uttarakashi, Rudrapur, and Tehri Garhwal. Uttarakhand has been confronting various issues such as rural-urban migration, poor levels of social and economic infrastructure, and environmental vulnerability since its formation in 2000. The Covid-19 outbreak faced major issues to governments and politicians, but it also produced a new trend of reverse migration in Uttarakhand. 'Reverse migration refers to the process in which individuals return to their native place from the location where they were previously working¹ India is an agricultural country, with the majority of its population dependent on agriculture for a livelihood. In modern days farming practices have been changed significantly due to technology and the commercialization of agriculture. Over-reliance on modern methods has negatively affected the environment and water resources and soil health. 'Sustainable rural development helps farmers earn more by adding value and trying new activities, connects farming with society's needs, and uses rural resources wisely for long-term growth^[2].'

Objectives

- To study the trends and patterns of rural-urban migration and reverse migration in Uttarakhand.
- To identify the major reasons responsible for rural-urban migration.

- To study the reverse migration process and its role in sustainable rural development.
- To analyze the major challenges to sustainable rural development in Uttarakhand.
- To suggest measures to promote sustainable development in rural Uttarakhand.

Methodology

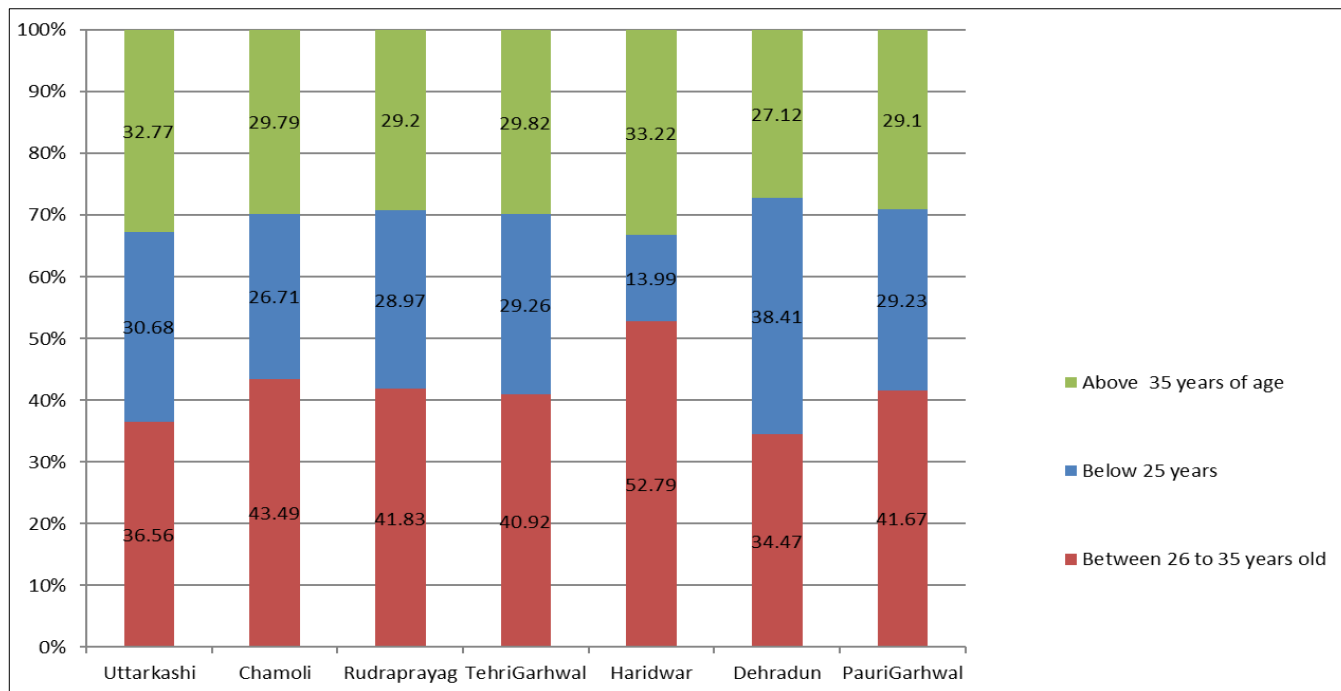
This study focused on trends of outmigration and reverse migration in Uttarakhand. The data for this study have been collected from the various government reports, including the Report of the Rural Development and Migration Commission, Uttarakhand; the Department of Tourism, Government of Uttarakhand; and the Directorate of Economics and Statistics, Uttarakhand.

Outmigration in Uttarakhand

Prior to the formation of the state, people from the hilly regions migrated to metro cities in search of employment. Now, after the formation of the state, this phenomenon continues and the rate of outmigration from the hilly region of Uttarakhand has accelerated.³ In Uttarakhand, better civic amenities and developed infrastructure have connected villages to cities, but life in the hills remains difficult and challenging; especially rural farmers are dealing with high transport costs to sell their produce to Mandis. In search of better income opportunities and other facilities, many families from the hills have migrated to plain regions of the state like Udham Singh Nagar, Ramnagar, Haldwani, Dehradun, and Haridwar^[4]. 'During the last decade, 383726 people have migrated to the plains region from the 6338 gram panchayats on a semi-

permanent basis. During the same time period, 118,981 people have migrated permanently from 3,946 gram panchayats. The

data shows there are larger population migrating on semi permanent basis who periodically return to their villages [5].'

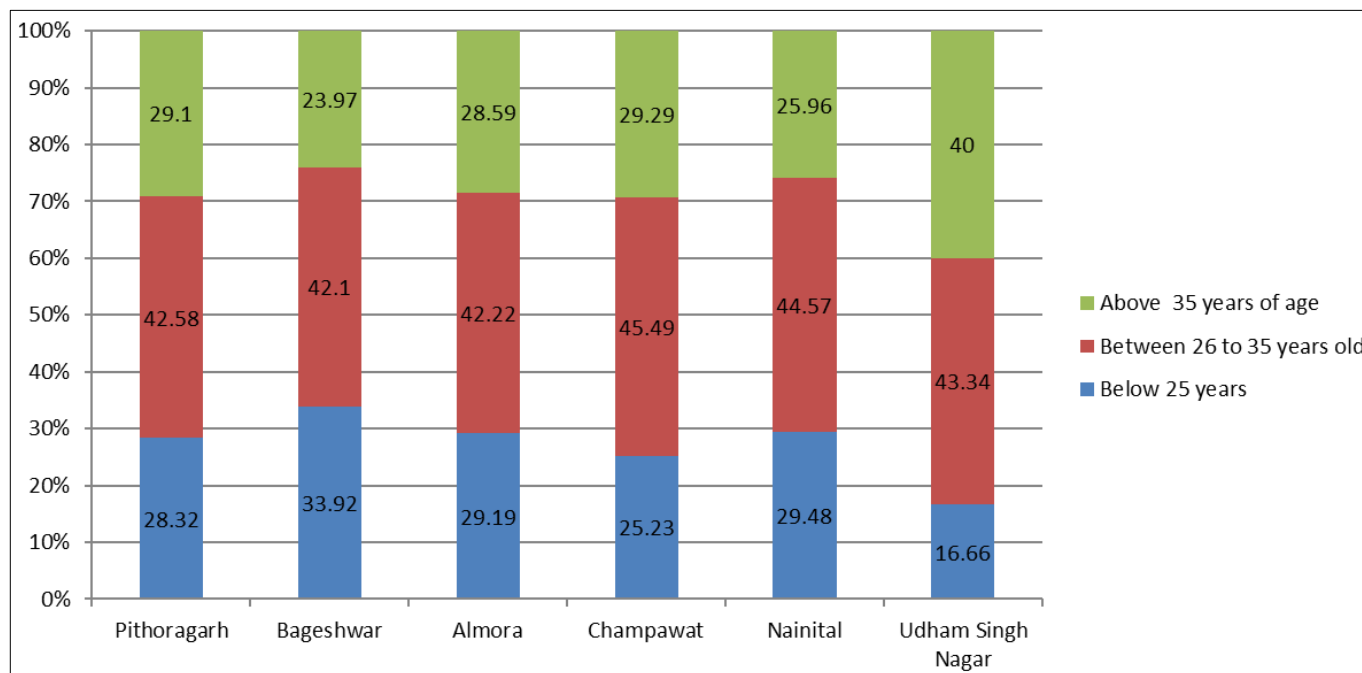


Source: Rural development and migration commission, Uttarakhand

Fig 1: Age wise migration Status in Garhwal Division (in Percentage)

Figure 1&2 reveals age-wise migration from hills to plain regions of both Kumaun and Garhwal divisions of Uttarakhand. The data shows that the most productive age group of 26-35 years has the highest number of out-migrants, which is around 41 percent in the Garhwal region and 43 percent in the Kumaun

region, respectively. The age group of less than 25 years shows a moderate level of migration, which is mainly for education and early job search, which is around 28 percent in the Garhwal region and 27 percent in the Kumaun region.

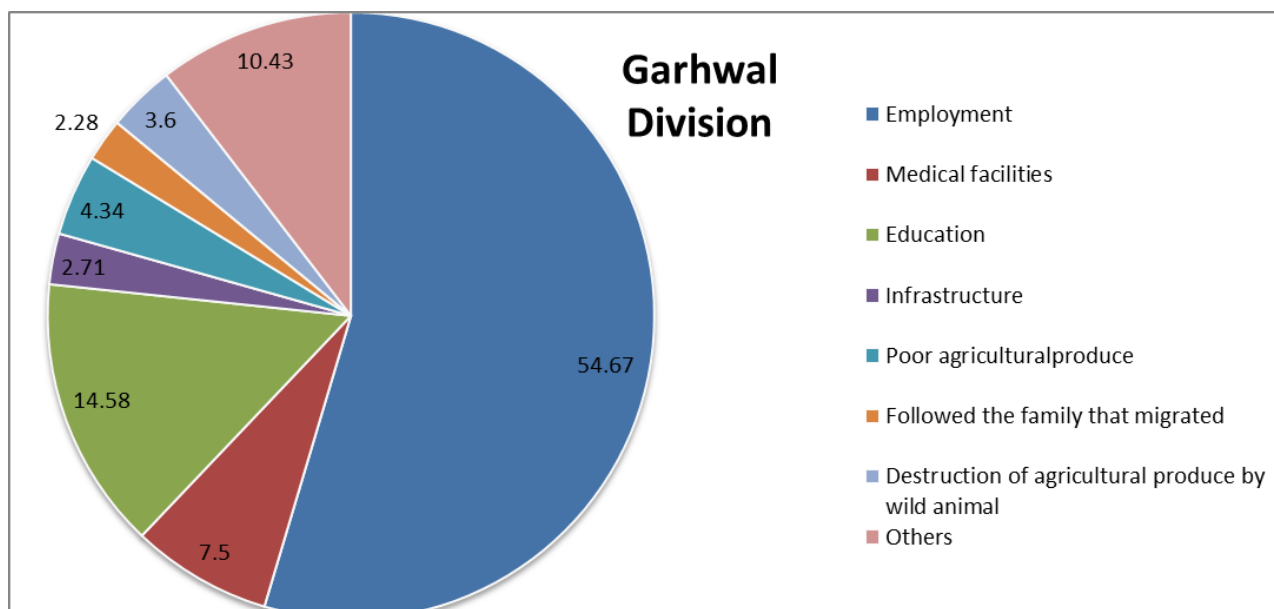


Source: Rural Development and Migration commission, Uttarakhand

Fig 2: Age wise migration Status in Kumaun Division (in Percentage)

The individuals' age group of more than 35 years migrated

around 30 percent in both regions of Uttarakhand.

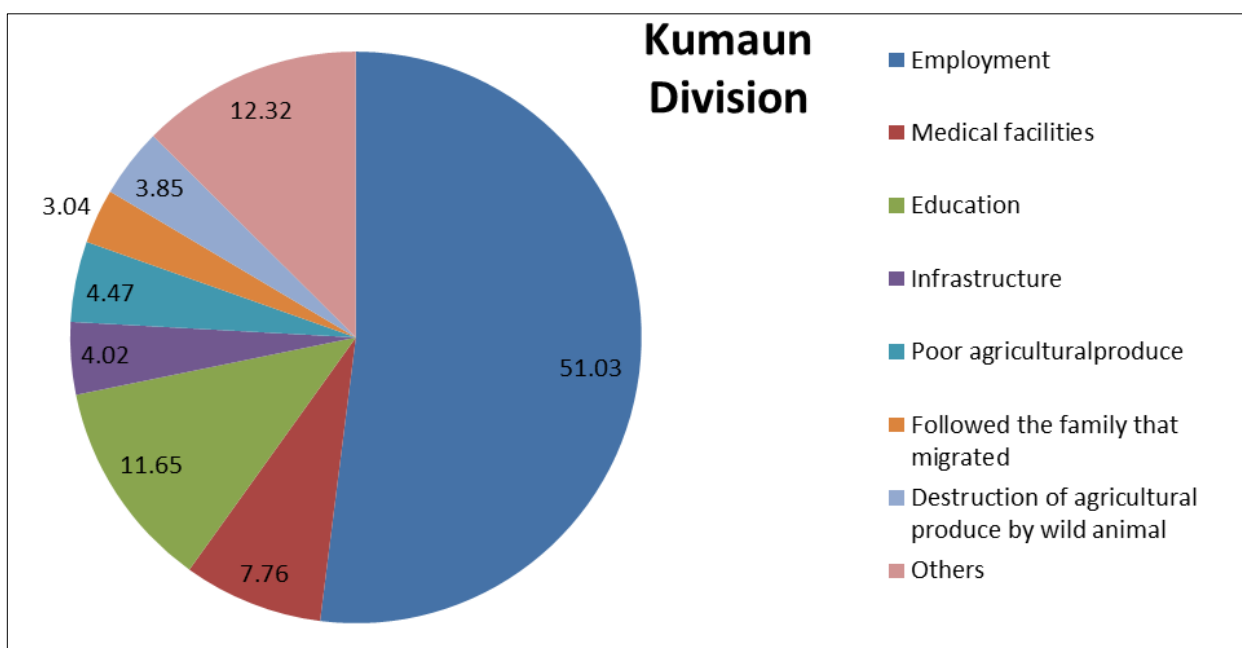


Source: Rural development and migration commission, Uttarakhand

Fig 3: Reasons for Outmigration in Garhwal and Kumaun Division (in Percentage)

Figure 3 & 4 reveals major reasons for rural-urban migration in the Kumaun and Garhwal divisions of Uttarakhand. The data reveals that more than 50 percent of the total migrants migrate to urban areas for employment opportunities in both the

Garhwal and Kumaun divisions. Education remains the second highest contributor to migration from the hills to the plain region, which is around 11 percent.



Source: Rural development and Migration commission, Uttarakhand

Fig 4: Reasons for Outmigration in Kumaun Division (in Percentage)

While medical facilities, infrastructure, poor agricultural conditions, family issues, and risk of wild animals are other major reasons for rural-urban migration.

Reverse Migration and Sustainable Rural Development

Kumaun and Garhwal, both divisions in all their districts, have experienced reverse migration. Development and renovation of tourist places result in an increase in the inflow of tourists and create better employment opportunities for locals. “Reverse

migration has been observed in nearly 850 villages across all 13 districts of Uttarakhand. With growing tourist inflow, many locals have entered trekking and tourism-related activities, taking loans to purchase equipment such as tents and horses. Some families who had left their ancestral homes years ago are now returning. The promotion of homestays and guesthouses by the state government has also boosted demand for locally grown vegetables and rice, positively influencing agriculture [6].

Table 1: Reverse Migration in Garhwal and Kumaun Division

Division	Districts	Number of Reverse migrants
Garhwal Division	Pauri	60440
	Chamoli	5877
	Dehradun	2254
	Haridwar	3136
	Uttarkashi	19405
	Tehri	19242
	Rudraprayag	7656
	Total	118010
Kumaun Division	Pithoragarh	5451
	Champawat	15097
	Almora	43784
	Bageshwar	1925
	Udhamsingnagar	21958
	Nainital	9650
	Total	97865

Source: Rural development and migration commission, Uttarakhand

Table no.1 shows that in the Garhwal division, Pauri has the highest number of reverse migrants, which is more than 50 percent of the total reverse migrants in the division, followed by Uttarkashi (16.4 percent), Tehri (16.4 percent), Rudraprayag (6.4 percent), Chamoli (4.9 percent), Haridwar (2.6 percent), and Dehradun (1.9 percent). In the Kumaun division Almora has the highest number of reverse migrants, which is more than 40 percent of total reverse migrants, followed by U.S. Nagar (22.4 percent), Champawat (15.4 percent), Nainital (9.8 percent), Pithoragarh (5.5 percent), and Bageshwar (1.9 percent).

Reverse migration in Uttarakhand, particularly after the COVID-19 pandemic, has opened new possibilities for sustainable rural development. For many years, the state faced serious problems of outmigration due to limited employment opportunities, difficult hilly terrain, and lack of infrastructure. The return of a large number of people to their native villages has created both challenges and opportunities for rebuilding rural economies.

Sustainable rural development remains at the center of the state's developmental policy, especially after the COVID-19 pandemic. It has not only posed challenges for policymakers but also created opportunities to reconstruct the rural economy. The underdevelopment of the rural economy continues to be a significant challenge in creating new opportunities for both local residents and reverse migrants. The government is focusing on more job creation and self-employment generation for locals through various ways.

Tourism and development of home stays

'Homestay programs have become popular in Uttarakhand as they offer local life style, culture and allow tourists to stay with the host families. It is not only the exchange of culture and but also the income generation and employment opportunities for the locals'.⁷ Sustainable rural development is a primary objective of developmental policy in the environmentally vulnerable rural area of Uttarakhand. Reverse migration has a positive impact on sustainable rural development through the construction of home stays and the selling of local organic products to tourists.

Revival of agriculture and allied activities

Difficult geographical terrain, climatic conditions, and unavailability of markets make traditional farming an unfavorable activity in the hills. A mass outmigration and risk of wild animals have caused deterioration of the agriculture system in the rural areas. Reverse migration has positively affected this deteriorating agriculture by adopting new technology and cash crops. Adoption of new methods, organic farming, dairy farming, beekeeping, medicinal plants, etc. have created better income and employment opportunities for locals, which is also promoting sustainability of the rural economy.

Development of entrepreneurship

In recent years, Uttarakhand has been experiencing the development of local and GI-tagged products. Reverse migration has opened doors for the establishment of local enterprises. Government is providing skill development training and offering concessional loans to reverse migrants to start their own enterprise. It has resulted in an increase in the number of homestays from 1022 units in 2019 to more than 6000 units in 2025. Locals are also taking initiative in organic farming, food processing from local produce, and handicraft units.

Environmental sustainability

Fragile ecosystems in the hilly regions require sustainable practices. Reverse migration and awareness have promoted sustainability in the region through the adoption of new methods like rainwater harvesting, ecotourism, organic farming, and traditional farming.

Challenges to sustainable rural development

Mountains significantly affect global and regional climate by influencing wind, rainfall, and temperature patterns. However, mountain regions continue to face problems of marginality, inaccessibility, and ecological instability, which restrict inclusive growth and development of the region. Despite acknowledging the need for a specialized development approach, planning in these environmentally sensitive areas has not yet fully incorporated sustainable and region-specific strategies^[8].

'The world today faces numerous challenges, including climate change, rising natural disasters, food and energy crises, rapid population growth (expected to reach 9.2 billion by 2050), increasing water scarcity, desertification, declining water quality, loss of biodiversity, ecosystem degradation, financial instability, political unrest, migration, and rapid urbanization. These issues have a greater impact on mountain regions and their communities, especially in developing countries, where vulnerability to environmental and economic changes is particularly high [9].'

The sustainability of developmental activities in rural Uttarakhand remains a difficult task because of its difficult terrain, mountains, and fragile ecosystem. Construction of roads, hospitals, and schools in this region is costly and difficult to maintain. There are several challenges to sustainable development in rural Uttarakhand, such as

Environmental challenges

The hilly area of Uttarakhand is ecologically vulnerable and frequently affected by landslides, cloudbursts, wildfires, and human-wildlife clashes. Nowadays climate change has caused frequent natural disasters, crop damage, soil erosion, and loss of wildlife.

Socio-economic challenges

Large outmigration from the hills to the plain has led to a decrease in village population, which further results in labor shortages and abandonment of agricultural land. Traditional farming and small land holdings are making agriculture a loss-making activity. Absence of non-farm employment opportunities in rural areas is further deteriorating the socio-economic structure of rural Uttarakhand.

Lack of marketing facilities

Unavailability of marketing facilities and grain markets in rural areas posed several challenges to farmers to sell their produce at fair prices. Poor infrastructure, connectivity, and costly transport result in a reduction in the profit share of farmers.

Conclusions

Large-scale rural-urban migration resulted in increasing empty villages in the hills. Reverse migration after the Covid-19 pandemic has changed the rural economy to some extent. Now the government is also focusing on retaining these returnees by promoting skill development, concessional loans, and other activities. This government support is helping in income generation and use of local resources. Organic farming, tourism, homestays, small enterprises, and the development of local products and brands are promoting sustainable rural development. At the same time, challenges such as inadequate infrastructure, environmental vulnerability, and weak market linkages continue to persist. However, with effective planning, supportive government policies, and promotion of sustainable livelihood opportunities, reverse migration has the potential to strengthen rural economies and build resilient, self-reliant, and environmentally sustainable communities in Uttarakhand.

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