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Out-Migration and Social Capital Depletion in the Himalayan Borderlands of Pithoragarh, Uttarakhand

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ABSTRACT: Persistent out-migration is changing the social structure of Himalayan border villages, but not much is said about its impact on rural resilience with regard to social capital or institutional settings. This paper aims to understand the relationship between migration intensity, social capital depletion and rural transformation in Pithoragarh District, located in Uttarakhand, India. The study is based on a mixed-methods approach relying on Putnam's theory of social capital. For fieldwork, a survey of 150 households was conducted, as well as 20 interviews and three focus group discussions. Quantitative data were processed with the help of descriptive statistics, chi-square tests and simple linear regression analysis, while qualitative materials were subject to thematic analysis. Migration intensity was significantly associated with community participation ($\chi^2 = 12.84$, $p < .05$), social trust ($\chi^2 = 10.67$, $p < .05$), and labour sharing ($\chi^2 = 14.21$, $p < .01$). Migration intensity also positively predicted agricultural land abandonment ($\beta = .57$, $SE = .13$, $t = 4.30$, $p < .001$; $R^2 = .32$). Interviews indicated declining labour reciprocity, weaker village participation, greater burdens on women and older residents, and growing social isolation. The findings show that migration-led rural transformation involves not only demographic and economic change but also erosion of the networks and institutions that sustain collective resilience in strategically important mountain borderlands.

1. INTRODUCTION

In the Global South, migration is becoming a major socioeconomic issue that impacts people's lives. The academic debate has moved from understanding migration as a result of poverty and environmental stress to its complexity as an expression of aspiration and adaptation. Given its significant contribution to the economic and social development of both origin and host communities, migration is increasingly linked to the Sustainable Development Goals (SDGs)[1]. SDG 10.7 (safe, orderly, and regular movement) mentions migration, which intersects with SDGs 1 (No Poverty), 5 (Gender Equality), 8 (Decent Work and Economic Growth), and 13 (Climate Action). Thus, migration is increasingly recognised as a livelihood strategy and a process that impacts and affects global sustainable development [2].

About 1 billion people live in mountainous regions, 70% of whom are rural. These areas are changing rapidly due to large-scale outmigration from highlands to lowlands and cities [3]. People leave mountains for many reasons, often related. Uneven development, historical marginalisation, environmental stress, natural catastrophes, diminishing agriculture, seasonal unemployment, climate change, food and livelihood instability, ethnic and armed conflict, globalisation, and young ambitions [4].

The Hindu Kush Himalayan Region (HKH), a transboundary mountain system in eight Asian nations with nearly 270 million people, illustrates these processes. Studies show that livelihood insecurity, resource degradation, and climatic vulnerability encourage migration across HKH nations. At least 15% of worldwide migrants come from the HKH region [5].

The Indian Himalayan Region (IHR), a key part of the HKH, has similar population and movement trends. Migration is a frequent livelihood option in the IHR and profoundly ingrained in its socioeconomic structure. Due to socio-economic and environmental causes, migration has grown significantly in recent years [6].

One of India's most environmentally vulnerable and strategically vital alpine areas is Uttarakhand. Pithoragarh, one of its thirteen districts, borders Nepal and the Tibet Autonomous Region of China. Rugged and sparsely inhabited, the territory relies on subsistence agriculture and has minimal infrastructure.[7] However, persistent out-migration has changed its demographic and socioeconomic environment during the previous 30 years. Young people who are economically engaged have left their villages for good to find education, employment, and higher living conditions in cities, leaving behind ageing populations, neglected agricultural areas, and weak village organisations. As a consequence, population density, social networks, and community engagement are declining in some border towns, raising concerns about rural development, border security, and regional resilience [8].

The present research study treats migration as the process of social and institutional change rather than focusing on the economic markers, as was done in numerous previous studies, such as remittances, labour employment and household income. The present work presents rural transformation as a gradual decline in social capital, which includes social trust, reciprocity, collective action and involvement in community activities. Rural society is becoming weaker with the constant outflow of economically active people and deterioration of traditional labour sharing, kinship and social institutions. At the same time, local communities are still able to maintain their livelihood, socio-cultural uniqueness and territorial integrity along the Himalaya border region, which makes it necessary to study such processes [10].

According to research, migration helps both the source and destination regions and the migrants. Migrants frequently have greater job prospects, salaries, and living standards. It improves their education, job, health care, and quality of life. It gives them new experiences and abilities that boost their career and personal growth. Migration relieves strain on the source region's few resources [11]. Social and economic remittances help families, boost family income, and boost the local economy. Migration fills employment shortages in host communities with youthful workers. [12] Migrants boost productivity, pay taxes, and demand goods and services. They balance demographic patterns in ageing societies and encourage social and cultural diversity. In this way, migration benefits everyone. Migration has drawbacks. Migration may be expensive, risky, and emotionally draining, with family separation, prejudice, exploitation, and terrible working conditions. Brain drain from large-scale outmigration from source areas may hinder local development and create developmental divisions between source and destination [13]. This might lead to overreliance on remittances. Rapid migrant arrivals may strain host towns' housing, education, and health systems, compete for local employment, and cause social conflicts. Migration may be good or bad depending on the conditions. Migrants, source areas, and host communities benefit from good management. It can cause socioeconomic issues if mismanaged [14].

Migration in the Uttarakhand Himalayas is twofold. It presents new obstacles for isolated mountain communities but offers economic and social mobility to some. Remittances and social mobility have boosted family well-being, but young permanent outflow has increased regional inequities, agricultural decline, and population ageing [15].

Previous research on migration in the Indian Himalayas has concentrated on labour migration, remittances, demographic change, agricultural decline, and regional economic growth. Few empirical studies have examined migration and social capital depletion in geostrategically significant Himalayan border regions like Pithoragarh. Few studies have examined how extensive out-migration affects individual trust, labour-sharing agreements, village institutions, and collective resilience. Few studies explain the experiences of people who remain using quantitative household data and qualitative accounts. Social Capital Theory

and a mixed-methods research methodology are used to examine the sociological effects of rural out-migration in Pithoragarh District [16].

A. Research Questions

- The primary socio-economic and environmental variables promoting out-migration in Pithoragarh District?
- How has long-term out-migration affected Himalayan border village social capital?
- How do migratory intensity, agricultural land abandonment, and community engagement relate?
- How do elderly and left-behind women see the evolution of village institutions and communal resilience?
- What policies can improve Pithoragarh's social capital and rural development?

B. Hypotheses

- H1: Migration intensity (number of migrants per household) is negatively associated with community participation, measured by participation in village meetings and collective activities (H0: no association).
- H2: Migration intensity positively predicts agricultural land abandonment, measured as the area or proportion of household agricultural land left fallow (H0: β migration = 0).
- H3: Higher migration intensity is associated with lower bonding and bridging social-capital scores, operationalised through social trust, reciprocal labour-sharing, and cross-household/community participation (H0: no association).
- H4: Higher migration intensity is associated with lower institutional resilience, operationalised as participation in and perceived capacity of local institutions to organise collective action (H0: no association).

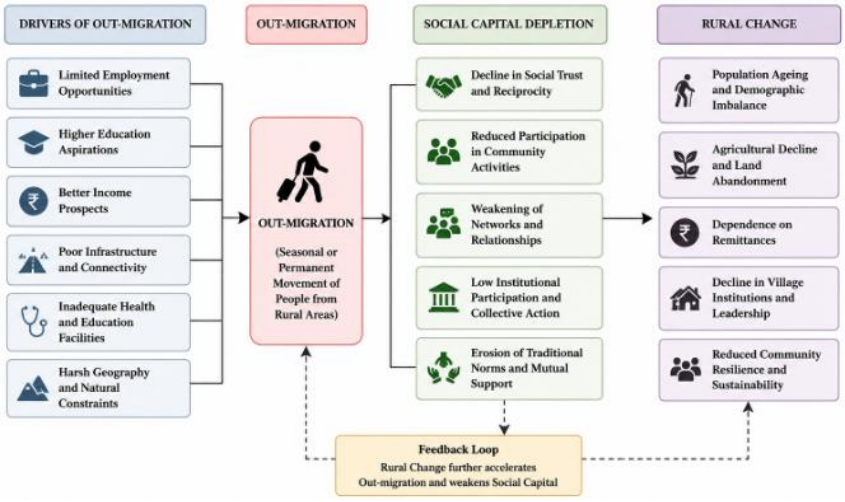


Figure 1. Pithoragarh District's outmigration, social capital depletion, and rural transformation conceptual framework.

2. LITERATURE REVIEW

A. Global Perspectives on Mountain Out-Migration

Due to outmigration, population ageing, and changing livelihood objectives, mountain regions worldwide are changing demographically. Young individuals are moving to cities for education, jobs, health care, and a better living standard, according to studies in the European Alps, South American Andes, and Hindu Kush Himalaya [17]. Migration boosts family income, but population reduction has weakened local institutions, reduced agricultural production, and increased senior dependence. Recent research shows that mountain migration is a multifaceted social shift that affects demographic stability, cultural continuity, environmental management, and community resilience [18].

Climate change has exacerbated livelihood insecurity via decreasing agricultural output, water shortages, natural hazards, and ecosystem degradation, facilitating migration from alpine environments. Thus, many mountain villages face population reductions, abandoned agriculture, and social disintegration. There is growing comparative evidence that mountain communities

are sustained via economic investment, local social capital, community engagement, and institutional resilience [19]. International experiences help explain migratory trends in Himalayan border areas like Pithoragarh.

B. Migration in the Indian Himalayan Region

Rural out-migration in the Indian Himalayan Region (IHR) has increased dramatically in the previous two decades. Recent research shows that migration has changed from seasonal and temporary to long-term and permanent, especially for educated youth seeking employment, higher education, health care, and better living conditions. This change has caused population ageing, agricultural decline, abandonment of cultivable land, and collapse of traditional village structures in several Himalayan states [20].

Uttarakhand is one of the most examined migratory landscapes in the IHR owing to rural depopulation and abandoned villages. Remittances from migration boost family income and restructure rural communities, according to a new study. Migrants have better educational opportunities, occupational mobility, and household economic security, but they lack productive labour, community participation, and independence from elderly family members and village women. These changes affect mountain communities' social structure beyond the economy.

Recent research suggests that Himalayan migration should not be seen purely via push–pull lenses. There are many complex factors, such as climate variability, environmental degradation, changing aspirations, expanding educational opportunities, and uneven regional development influence migration decisions. At the same time, rural village residents' experiences are being studied. Research increasingly shows that left-behind households are more socially isolated, have more caregiving responsibilities, are less involved in collective institutions, and have fewer informal support networks. Migration brings economic opportunity and major sociocultural issues to rural communities [21].

Due to its position on India's borders with Nepal and China's Tibet Autonomous Region, Pithoragarh district is important to migration. Pithoragarh illustrates how population decrease impacts community resilience, village institutions, and borderland sustainability, unlike many districts that focus primarily on economic migration. Thus, the district is a good example of studying migration through social capital depletion rather than demographic or economic change. This study adds sociological theory and mixed-methods data from a key border zone to Himalayan migration literature.

C. Migration and Rural Change

Rural change in the Himalayas is not confined to population mobility; it affects the village's economics, society, and institutions. According to recent research, the persistent outmigration of young and economically active people has altered the demographic makeup, resulting in ageing populations, reduced labour availability, and lower agricultural output. Thus, many families have downsized or abandoned agricultural land, and traditional professions are declining.

Migration has altered rural social structures. Lack of working-age individuals has forced women and elderly inhabitants to conduct agricultural, household, and communal tasks with little assistance. Due to diminishing involvement, village institutions including labour-sharing, community meetings, and communal decision-making have diminished. Villages are more vulnerable to economic and environmental issues due to less social interaction and community cohesion [22].

Migration promotes economic benefits in terms of remittances and improved living conditions but has social consequences for the long run. As such, sustainable rural development has to rely on the mobilisation of communities, local leaders, and institutions able to withstand changes, but not only on the availability of funds for these purposes.

D. Social Capital Theory

Social Capital Theory helps analyse rural outmigration's societal effects. Bourdieu (1986) defined social capital as resources gained from long-term social relationships and networks. Coleman (1988) explained how trust, shared norms, and social obligations enable social cooperation and action. Given these viewpoints, Putnam (2000) claimed that community resilience and institutional success need robust social networks, citizen participation, and reciprocal trust [23].

Putnam (2000) identified three interrelated dimensions of social capital: bonding, which strengthens family and close community relationships; bridging, which links social groups and facilitates cooperation; and linking, which links local communities and formal institutions. These social capitals facilitate communal farming, labour exchange, community decision-making, and social support under economic or environmental hardship in remote Himalayan settlements.

Out-migration reduces the number of economically engaged villagers in village institutions and communal activities, weakening these social bonds. Trust, reciprocal labour-sharing, and local leadership decline, reducing communities' ability to address social and developmental issues. Migration affects rural life's demographics, economy, and institutions, and Social Capital Theory can help explain this. Pithoragarh District's social capital depletion study [24] uses this theoretical approach as its analytical underpinning.

E. Migration and Social Capital Depletion

Outmigration has more than economic and demographic repercussions, including the steady degradation of rural social capital, according to a recent study. Economic advancement frequently leads to decreased participation in community affairs, sharing of work, and involvement in local decision-making processes. As village populations shrink, the decrease in participation in community activities, the disintegration of local communities, and social networks occur.

Traditionally, the subsistence of the mountain villages relied on farming, local resource management, community traditions, spiritual practices, and some village-building activities. Out- migration interrupts the development of such patterns, leaving local communities with fewer participants. This affects the elderly and women particularly, as they are given more work to do and fewer social networks [25].

The recent studies about migration in the Himalayas point to the necessity of including economic development projects in rural development policies, along with the development of infrastructure and local institutions. The approach helps to understand the migration phenomenon better.

F. Research Gap

Migration is a well-explored area of research in the Indian Himalayas. In most of the studies, migration's impact on the economy is discussed. Migration's influence on social capital, community engagement, and institutional resilience has received little attention. Despite its strategic significance and population reduction, Pithoragarh, a border district, has few empirical investigations.

Quantitative surveys and descriptive accounts have dominated left-behind community research, and few have combined household data with qualitative narratives. Thus, the effects of long-term outmigration on trust, reciprocal social ties, village structures, and collective resilience are unknown.

The Social Capital Theory in a mixed-methods framework is used to examine out-migration and rural transformation in Pithoragarh District to address these gaps. The research provides a sociological explanation of migration based on quantitative household surveys and qualitative interviews, adding to the knowledge on sustainable development in Himalayan border areas.

3. STUDY AREA

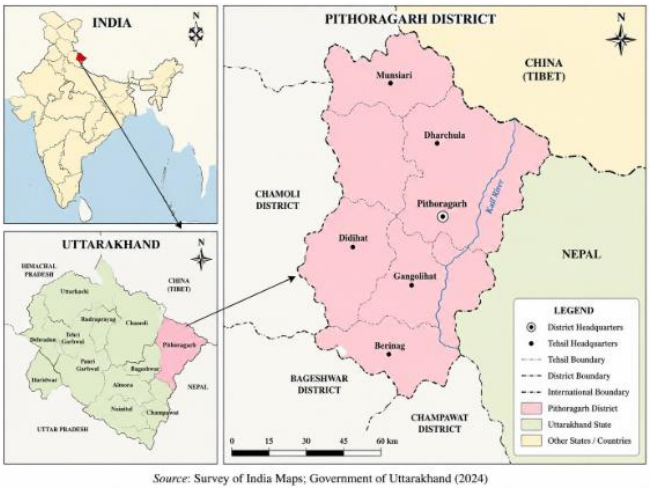
One of India's most crucial Himalayan border districts is Pithoragarh in eastern Uttarakhand's Kumaon division. International boundaries with Nepal in the east and Tibet Autonomous Region (China) in the north make it socio-economically and nationally significant. The district has rugged mountains, deep river valleys, high-altitude communities, and dispersed rural villages. Agriculture, horticulture, animal husbandry, and minor commerce are important livelihoods. Dependence on service sector jobs [26] has encouraged urban migration.

The district is isolated by hilly terrain, poor transport links, and limited access to higher education, health services, and employment. This causes many economically active residents to move to Delhi, Dehradun, Haldwani, and other metro cities permanently or seasonally. Continued outmigration has caused population ageing, agricultural land abandonment, and village institution weakness [27]. Pithoragarh is a good example of how outmigration, rural transformation, and social capital depletion affect Himalayan border communities.

Table 1. General Pithoragarh District profile

Particular	Description
State	Uttarakhand

Division	Kumaon
Headquarters	Pithoragarh
International Borders	Nepal and China (Tibet Autonomous Region)
Major Tehsils	Pithoragarh, Dharchula, Munsiari, Didihat, Gangolihat, Berinag
Main Livelihoods	Agriculture, horticulture, livestock, trade, services
Major Issue	Long-term out-migration



Source: Survey of India Maps; Government of Uttarakhand (2024)

Figure 2. Uttarakhand's Pithoragarh District.

A. Socio-economic Characteristics

The rural economy of Pithoragarh relies on subsistence agriculture, horticulture, cattle, and small enterprises. The fragmentation and rain-fed nature of most farms limits productivity and employment. Over the last 20 years, schooling has increased, but access to higher education, industrial employment, and specialist health care is still restricted. Thus, migration is a livelihood option for many families [28].

Many working-age men and teenagers leave the region, forcing women and elderly family members to farm. Remittances are raising wages and living standards, but the long-term workforce shortage has lowered agricultural output and eroded communal farming and community engagement. The social fabric and rural livelihoods have been greatly affected by these socio-economic developments.

Table 2. Pithoragarh rural socioeconomics.

Indicator	Current Situation
Agriculture	Mostly subsistence-based
Employment	Limited local opportunities

Education	Moderate improvement
Migration	High among youth
Women in agriculture	Increasing
Elderly dependency	High

B. Migration Scenario

One demographic feature of Pithoragarh District is out-migration. Higher education, government jobs, private sector jobs, business opportunities, and better living conditions drive young adults to move. Remittances and family income have increased due to migration, although many communities have seen population ageing and a diminished rural workforce [29].

Village institutions, community engagement, and labour-sharing have also suffered from migration. Several settlements have declining school enrolment, agricultural cultivation, and collective development participation. These trends suggest that migration reorganises rural social organisation as well as the economy. The social capital concept on migration explains rural transformation in Pithoragarh District holistically [30].

4. MATERIAL AND METHODS

A. Research Design

This mixed-method study examines out-migration and social capital depletion in Pithoragarh District using quantitative and qualitative methodologies. Quantitative. We will study migration, demographics, agricultural land abandonment, and community participation. Qualitative. We will study left-behind women, elderly residents, and community leaders. Combining both approaches helps understand migration's social effects and strengthens research findings.

B. Sampling and Data Collection

A structured home survey obtained primary data from 150 families in high migration areas of Pithoragarh District. The survey included household demographics, migration history, remittances, agricultural land usage, and community institution membership.

The survey results were supplemented with 20 semi-structured interviews and three FGDs with older residents, women, village leaders, and local stakeholders. Interviews were conducted until data saturation, showing no major new themes throughout the field investigation [32].

Table 3. Study sample composition.

Data Source	Sample Size
Household Survey	150
Semi-structured Interviews	20
Focus Group Discussions	3
Study Area	Pithoragarh District

C. Study Variables

The independent and dependent variables are examined to determine how outmigration affects rural communities. Migration intensity is the key independent variable, whereas social trust, community participation, agricultural land abandonment, labour sharing, and institutional resilience are dependent. These metrics assess social capital depletion in the studied region.

Table 4. Study variables.

Variable	Indicator
Migration Intensity	Number of migrants per household
Social Trust	Likert Scale (1-5)
Community Participation	Participation in village meetings
Agricultural Land	Area left fallow
Labour Sharing	Frequency of mutual assistance
Institutional Resilience	Participation in local institutions

Data Analysis

Quantitative data were examined utilizing the SPSS program to establish the characteristics of the respondents measured through frequencies, percentages, means, and standard deviations. Chi-square tests were administered alongside linear regression analysis in order to determine migration intensity and the attributes of rural transformation such as agricultural land abandonment and community engagement. Qualitative data, collected from interviews, were analysed through thematic analysis, with the help of which the following themes were found: social isolation, institutional decline, labour sharing, and community resilience. The robustness of the research was ensured by the application of triangulation and mixing the qualitative and quantitative findings of the research [33].

D. Ethical Considerations

A sample of all consenting volunteers was taken for the study. The objectives of the study were made clear to respondents, assuring them that the information gathered will be used for research and will remain non-identifying. Before analysis, personal identifiers of the participants were omitted from the data provided.

5. RESULTS

A. Socio-demographic Profile of Respondents

Certain high-migration villages of Pithoragarh District were sampled. Approximately 150 households were selected. People from diverse age groups, professions, and educational qualifications responded to the questionnaire, aligned around migration and the changes in the rural set-up. Respondents from most of the households selected in the study reported out-migration from their households. Some households reported farming as their primary source of livelihood but were more inclined to depend on remittances and pension payments. Most of the permanent inhabitants of the village comprised elders and women, indicating a demographic change.[34].

Table 5. Sociodemographic of respondents (N=150).

Variable	Category	Frequency	Percentage
Gender	Male	82	54.7
	Female	68	45.3
Age	18–35	29	19.3
	36–50	42	28.0
	51–65	46	30.7
	>65	33	22.0
Education	Primary	28	18.7
	Secondary	49	32.7
	Graduate	51	34.0
	Postgraduate	22	14.6

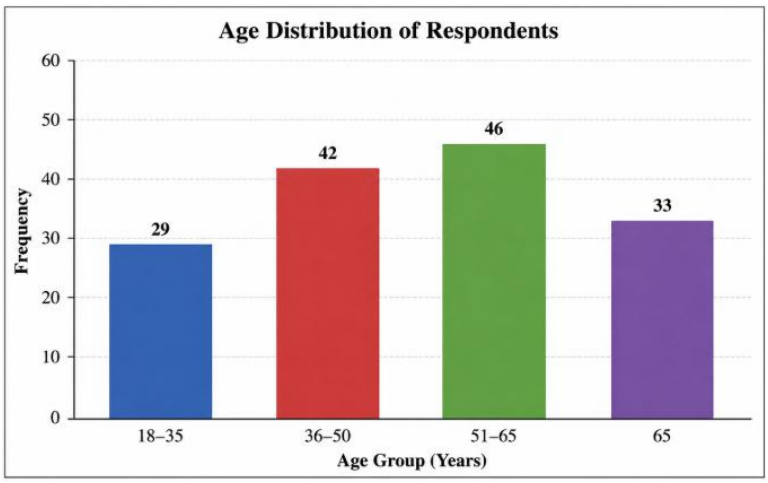


Figure 3. Age distribution of respondents.

B. Migration Pattern

The survey indicates that employment is the most significant contributor to migration among people from Pithoragarh District, followed by aspirations for higher education as well as better employment options. The majority of migrant families have members who live in cities like Delhi, Dehradun, Haldwani, etc. Permanent migration has a higher prevalence than seasonal migration due to the shift in aspirations and larger employment preferences. Remittances increased household income; however, respondents mention barriers to employment, a slowdown in agricultural activities, and limitations in village institutions as the

main effects of migration. The findings suggest that migration is a constant element of rural life rather than a temporary approach in terms of livelihood.

Table 6. Outmigration reasons

Reason	Frequency	Percentage
Employment	68	45.3
Education	39	26.0
Business	17	11.3
Marriage	14	9.3
Other	12	8.1

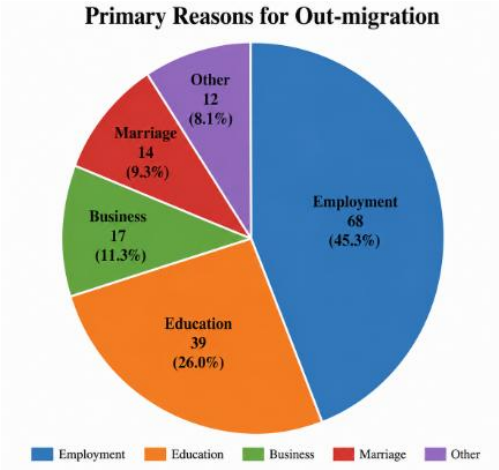


Figure 4. Primary reasons for out-migration**.**

C. Social Capital Indicators

Following prolonged out-migration, the survey found significant changes in community participation and social interaction. The majority of respondents reported less participation in village meetings, traditional labour-sharing activities, and collective development programs. In villages with high migration, respondents saw a decline in interpersonal trust and neighbourhood cooperation. These changes were attributed to a fall in economically engaged youth and conventional community institutions in interviews. The findings indicate that migration has slowly eroded social capital in the studied region.

Table 7. Sampled household social capital indicators.

Indicator	High	Moderate	Low
Social Trust	28	63	59
Community Participation	25	57	68

Labour Sharing	22	51	77
Institutional Participation	20	48	82

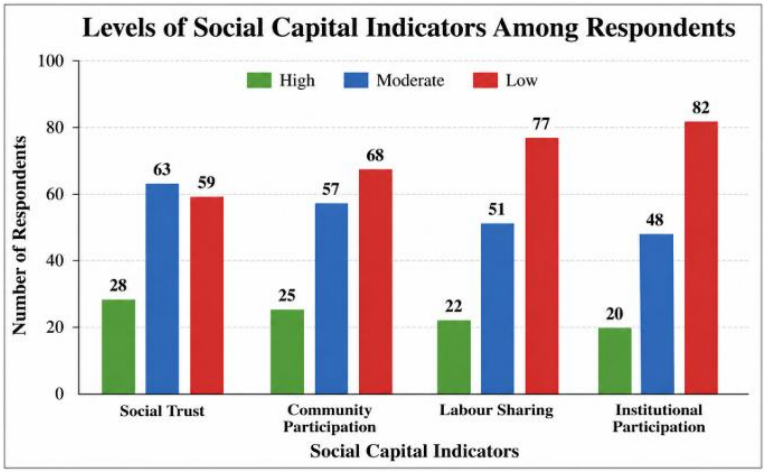


Figure 5. Respondent social capital indicators.

D. Statistical Analysis

The Chi-square test examined migration intensity and community participation. Results indicate a significant correlation ($\chi 2 = 12.84$, $p < 0.05$) between increased out-migration and lower community engagement in villages. The association is consistent with lower community engagement at higher migration intensity; the cross-sectional design does not establish causality. Simple linear regression was used to examine how migration intensity affects agricultural land abandonment. The analysis revealed that the significant regression ($F = 18.52$, $p < 0.001$) accounts for 32% of changes in agricultural land abandonment ($R^2 = 0.32$). The identified positive relationship ($\beta = 0.57$, $p < 0.001$) suggests that the greater the levels of migration, the more likely families are to leave the farmland unutilized. These results demonstrate statistically significant relationships between migration intensity and some indicators of rural transformation.

Table 8. Migration and social capital chi-square tests.

Variables	χ^2 Value	p-value	Interpretation
Migration Intensity × Community Participation	12.84	<0.05	Significant association
Migration Intensity × Social Trust	10.67	<0.05	Significant association
Migration Intensity × Labour-sharing	14.21	<0.01	Significant association

Table 9. Linear regression of migration intensity and agricultural land abandonment.

Predictor	β	Std. Error	t	p-value
Constant	1.84	0.29	6.34	<0.001
Migration Intensity	0.57	0.13	4.30	<0.001

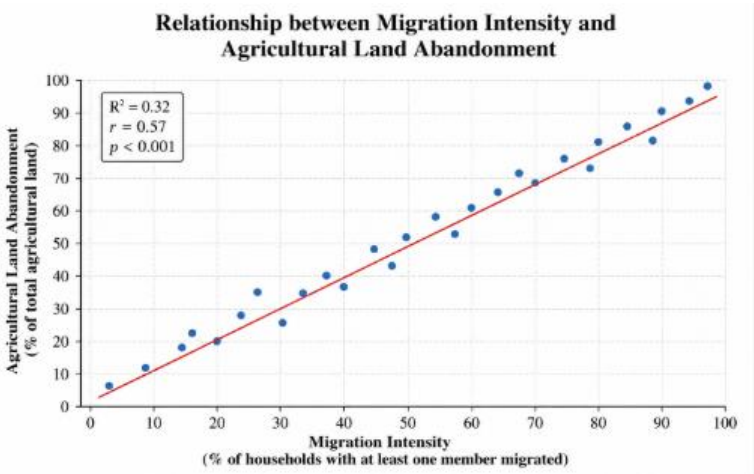


Figure 6. Migration intensity and agricultural land abandonment.

E. Qualitative Findings

The qualitative outcomes indicate the lived experiences of individuals left behind while supporting the quantitative results. Most of those interviewed state that emigration harmed communal farming, their neighbours' relations, and the number of community events. The elderly respondents expressed concern about their social isolation and the dependence on the few active people left behind in order to sustain community life. Women participants said migration increased their agricultural, household, and caregiving responsibilities and decreased their access to traditional support networks.

Several respondents also noted a decline in village meetings and community development programs. Remittances have increased household income, but most respondents said they have not been enough to compensate for the loss of social cohesion and community institutions. These stories support the idea that out-migration has eroded Pithoragarh District's social capital.

6. DISCUSSION

A. Out-Migration and Rural Transformation

Out-migration appears to be a major factor in rural transformation in Pithoragarh District. Remittances have increased family income and educational and job possibilities, but migration has reduced productive labour in rural areas. The district's demographics are shifting due to declining agricultural activity, an ageing population, and an increasing dependence on women and the elderly. Recent studies on the Indian Himalayas show that long-term migration causes agricultural decline and demographic restructuring in mountain villages (Upadhyay, 2024; Discover Sustainability, 2025). Migration is an economic strategy and a major component in rural social and institutional change.

B. Migration and Social Capital

Continued outmigration has reduced social capital in Pithoragarh's chosen villages, the research found. Migration affects social bonds needed for collective action by reducing village meeting participation, work sharing, and trust. The findings confirm Putnam's Social Capital Theory, which prioritises community engagement and social networks for institutional performance and resilience. Cooperation decreases when economically productive individuals leave, weakening village structures and social cohesiveness. Thus, migration impacts rural economies and societies.

C. Comparison with Previous Studies

Our findings support previous Himalayan migration studies that demonstrate persistent outmigration causes rural depopulation, workforce shortages, and agricultural land abandonment. This research project builds on previous studies by exploring social capital loss in a critical border area. This research analyses the impacts of migration on civic engagement, informal support systems, and village institutions. Using qualitative interviews and household survey results, we gain insight into the changes that are occurring in the rural areas of Pithoragarh District.

D. Policy Implications

Policies based on the research results indicate that migration-focused strategies should not be limited to creating jobs and providing financial aid. By increasing the capacity of village institutions, agricultural cooperatives, rural infrastructure, and local entrepreneurship and enhancing educational and healthcare services, the pressure to migrate may decrease, and community resilience may develop. Another method of restoring social capital in the border area of the Himalayas is to promote the participation of women, old people, and youth in local development.

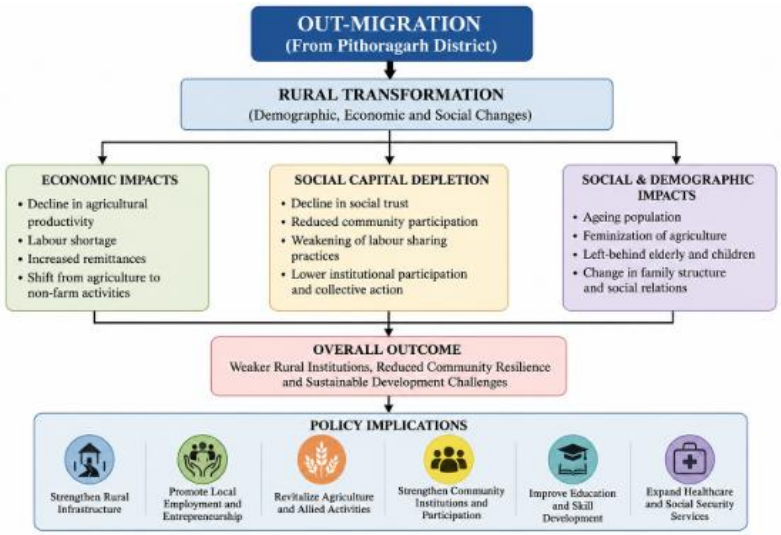


Figure 7. Brief discussion and policy consequences.

7. CONCLUSION

Analysis of outmigration and rural transformation in Pithoragarh District has been performed with regard to loss of social capital. As a result of migration, people's incomes grew due to remittances, education, and employment opportunities; however, it also resulted in problems linked to workforce shortages, abandonment of farmland, ageing of the population and destruction of local institutions.

The results obtained in quantitative and qualitative analyses showed that outmigration has an impact on social trust, collective action, and traditional aid systems in villages.

According to the results of the analysis, migration changes the functioning and organisation of Himalayan settlements both from an economic and social standpoint.

In order to enhance social capital and sustainable rural development of the Himalayan region, people should be enabled to work in their local region, and local infrastructure and community institutions should be upgraded; therefore, it is important to use participatory development programs.

A. Limitations of the study

The study only looked at certain communities in Pithoragarh District; hence, its findings may not be generalised to all areas of the Himalayas. The research employs cross-sectional data and does not take into account any changes in migration behaviour. In addition, the study concentrates on household opinions and social resources, while the larger socioeconomic issues are given consideration only when necessary.

B. Future research

Future research may explore the relationship between migration and social capital over time using longitudinal research approaches. Comparative studies of Himalayan border areas could contribute to understanding rural transformation within the region. Future studies could look at the ways climate-related changes, digital connections, gender roles, and government assistance schemes influence migratory processes and resilience of communities.

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