

Consequences of Rural-to-Urban Migration in Ladakh: A Comprehensive Analysis of Impacts on Areas of Origin and Destination

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Abstract

This research paper investigates the growing trend of rural-to-urban migration in Ladakh, motivated by global pursuits for enhanced opportunities and living standards. Despite its growing significance, the migration phenomenon in Ladakh remains insufficiently examined, lacking reliable data. The study delves into the multifaceted impacts of this migration on both the areas of origin and destination. Detrimental consequences at the origin involve depopulation, abandonment of traditional occupations, disruption of social ties, and the feminization of agriculture. Conversely, positive outcomes include increased income and remittances. Destination areas experience urbanization, heightened population density, housing challenges, the emergence of private education institutions, and environmental pollution as repercussions of migration. Addressing these intricate, context-dependent socio-economic and environmental implications necessitates a comprehensive understanding, urging policymakers, urban planners, and stakeholders to take informed actions.

Keywords: out-migration, origin, destination, depopulation, urbanisation, changing livelihoods.

Introduction

The Ladakh region is located in the northernmost part of India and was formerly a part of the State of Jammu and Kashmir. The trajectory of rural-to-urban migration in Ladakh has triggered profound transformations in the region's livelihood paradigms. Historically, subsistence farming, livestock husbandry, and small-scale trade constituted the pillars of economic sustenance for the mountainous communities (Xu et al., 2009). However, in recent decades, there has been a significant shift away from traditional subsistence agriculture. This

transformation has been primarily catalysed by the burgeoning tourism industry and employment opportunities in the government sector, and the armed forces.

Urban centres are on the rise, with Leh emerging as a prominent city in the Himalayan region (Dame et al., 2019). Over the past two decades, there has been a noticeable increase in the migration of people from various parts of Ladakh to Leh (Goodall, 2004). Between 1981 and 2001, Leh's population tripled in size (Dollfuss, 2012). In the past decade, urbanization has continued its exponential ascent, and the population has increased to about 45,000 residents as of 2019 (Ladakh Ecological Development Group [LEDeG], 2019). This rapid urbanization brings its own set of challenges and opportunities, particularly in the context of Ladakh's unique geographic and environmental constraints. Overall, Ladakh's migration patterns reflect the broader trend of increasing rural-urban migration in developing regions. While this shift has brought about new economic opportunities, it has also led to significant social and cultural changes, including the separation of families and the decline of traditional livelihoods (Kothari, 2021).

Review of Literature

Migration involves a change in residence, a shift in employment and a shift in social relations (Bartram et al., 2014). Migration is a multifaceted phenomenon that brings both new challenges and opportunities for migrants, their social networks, and the host communities they become part of (Lee, 1966; McLeman, 2013). Every act of migration, no matter how short or long, easy or difficult, has an origin, a destination, and a set of intervening obstacles that impede migration or a set of stimulating factors that promotes more migration (Lee, 1966). Two influential theoretical frameworks guide our understanding of migration decisions. The neoclassical microeconomic theory views migration as a rational individual choice, driven by the pursuit of maximizing pecuniary or human capital gains (Massey et al., 1993). In contrast, the new economics of labour migration (NELM) situates migration decisions within the family unit, underscoring the family's central role in the decision-making process. According to this perspective, young family members often undertake migratory journeys seeking improved economic prospects, aiming to enhance their circumstances and contribute to their family's well-being (Rajan & Pillai, 2020). Here, migration choices are rarely individual actions but instead collective decisions involving entire families and households (Stark and Bloom, 1985).

Within the unique geographic context of Ladakh, the historical origins of its present population have long intrigued scholars, sparking diverse theories about when, how, and from where its

inhabitants originated (Dollfuss, 2012). Most of the research has focussed into the nomadic migration and sedentarization (Goodall, 2004; Ahmed, 2003; Chaudhuri 2000). Notably, Goodall (2004) observed that nomadic communities flock to Leh not primarily for wage differentials, which were found to be negligible, but rather to provide their children with education. A growing awareness among nomadic populations regarding the value of modern education has motivated them to relinquish their traditional lifestyles, choosing instead to migrate to Leh to educate their children in a better school.

Migration in Ladakh takes various forms, both seasonal and permanent. Seasonal migrants, frequently employed in the tourism sector, arrive during the summer and stay until autumn, capitalizing on the influx of tourists during these months. Others opt for permanent migration, engaging in activities such as daily wage labour, entrepreneurship in small businesses, restaurant management, or working as drivers throughout the year. Non-farm activities have become the driving force behind migration (Goodall, 2004). The sedentarization of nomadic pastoralists in Ladakh aligns with the global trend towards settlement (Ahmed, 1996; Blaikie, 2001; Goodall, 2004), driven by external factors that have impelled these individuals to forsake their traditional livelihoods and migrate to Leh town.

The ongoing migration from rural to urban regions creates the "Empty Nest" phenomenon, in which young adults abandon their families in rural areas, leaving behind the elderly and socially disadvantaged (Chen, 2009; Leduc et al., 2008; Yao, 2006). Many studies found that with the increasing absence of men, the burden of work has fallen on the women and elderly in agricultural communities. Other consequences in rural areas include declining agricultural production, poverty, depopulation, feminisation of agriculture and deterioration of family or community ties (Deksiso, 2017; Delazeri et al., 2022; Selod& Shilpi, 2021).

Objective

The present paper attempts to understand the consequences of rural-to-urban migration in Ladakh, considering both the areas of origin and destination. This study holds particular significance in the context of Ladakh, where livelihoods are transforming as people shift from the primary sector to the secondary and tertiary sectors.

Methodology

The present study is quantitative in nature. Primary data for this study was collected using a comprehensive interview schedule, featuring a mix of open-ended and closed-ended questions.

The research sample comprised migrants who had settled in four distinct locations: Skalzangling, Nimoling, Kharnakling, and Skampari, originating from four specific regions in Ladakh, namely Sham, Zangskar, Changthang, and Nubra over the past few decades. In total, 285 respondents were interviewed during the data collection period, spanning from June 2018 to December 2019. Additionally, the secondary sources such as district gazetteers, district statistical reports, and census data was used to enhance the research comprehensiveness.

Results

Rural-to-urban migration is a phenomenon that carries significant repercussions, affecting not only the areas of origin but also the destinations where individuals and families seek new opportunities and livelihoods. This migration dynamic gives rise to a myriad of consequences, encompassing economic, social and environmental factors. A brief overview of these consequences is discussed below.

Consequences of migration in the areas of origin

Rural-to-urban migration is a complex phenomenon with far-reaching consequences. It results in demographic changes, causing depopulation in rural areas (MacDonald, 1996). Migration also brings about shifts in gender distribution and labor force dynamics in the places of origin, as highlighted by Imbert and Papp (2014). A noticeable gender bias in migration is evident, with a higher likelihood of young male family members more likely to migrate. This bias can have significant impacts, particularly in small communities. Consequently, rural-to-urban migration leads to workforce shortages in these villages during critical agricultural season (Kandari et al., 2022).

In Ladakh, agro-pastoralism has traditionally been the dominant way of life, but the number of individuals engaged in agricultural labor has steadily declined over time. For instance, in 1971, agricultural labor accounted for 73 percent of the region's workforce, but by 1991, this figure had fallen to below 53 percent (Census, 2011). This shift from agriculture to non-agricultural occupations has resulted in farming no longer being the default occupation for rural households in agrarian regions (Clouse, 2017). In recent years, Ladakh has become increasingly reliant on imported rice and wheat, leading to reduced local cultivation of wheat and barley (Dolker, 2018). Even nomadic tribes, traditionally reliant on livestock, are departing from their age-old occupations and settling in towns and cities (Algaa, 2020). Dollfus (2013) reported an

unprecedented exodus of nomadic pastoralists from their traditional roles, culminating in their migration to Leh in recent decades.

Migration serves as a strategy to diversify family income risk (Rajan & Pillai, 2020). Migrants regularly send remittances to their families, which significantly alleviate poverty in predominantly rural and developing areas of origin (Conway & Cohen, 2008; Puntip, 2009). These remittances enable households to overcome financial constraints, reduce risk, and enhance overall consumption. Another significant consequence of migration in areas of origin is the feminization of agriculture. The 'Feminization of Agriculture' represents a noticeable shift in gender dynamics in rural agrarian communities, with increased involvement of women in agricultural labor and decision-making as a direct result of male out-migration and the diversification of livelihoods (FAO, 2011; Kelkar, 2009; Tamang et al. 2014). The greater participation of men in off-farm wage employment, including seasonal male out-migration to Leh for non-agricultural work, is the immediate cause of the enhanced female engagement in agricultural production. A further consequence of migration is the disruption of social ties, as migrating individuals are often separated from their families and communities, leading to eventual settlement in Leh and the gradual dissolution of extended family and close-knit community life (De-Haan & Zoomers 2003).

The consequences of migration in the areas of origin are diverse and varies depending on the socio-economic setup of the areas of origin. In the specific context of Ladakh there are various consequences as listed below.

Table 1 : Consequences of Migration in the Areas of Origin

Consequences in the areas of origin	Frequency	Percent
Depopulation	99	34.7
Abandonment of traditional occupations	82	28.9
Remittances/ Enhancement of income and spending power	44	15.4
Feminisation of agriculture	42	14.7

Breakage of social ties	18	6.3
Total	285	100.0

The data indicates that a majority of the respondents, specifically 34.7 percent, perceive rural-to-urban migration as the primary cause of depopulation in rural areas of Ladakh. Typically, villages in Ladakh are small, and when a substantial portion of their population migrates, it has significant impact resulting in an overall decline in rural population. This migration predominantly involves young and able-bodied individuals, while the elderly and women are often left behind. Historically, agro-pastoralism has been the predominant occupation and 28.9 percent of the respondents believe that migration has led to the abandonment of traditional occupations. Post-migration, respondents pursue diverse occupations, often motivated by insufficient income from agro-pastoralism. On the positive side, 15.4 percent of respondents perceive migration as having a beneficial impact, as migrants send remittances that provide vital economic support to their families in rural areas. Furthermore, 14.7 percent of the respondents contended that females now bear the responsibility of farming and all related activities as most male members of the family have migrated. Lastly, 6.3 percent of the respondents expressed the view that migration from villages has adversely affected community relations and led to a diminishing significance of social ties previously observed in village life. The extended absence of migrants from their villages and their reduced involvement in day-to-day community activities gradually weaken social bonds and trust among community members over time.

Consequences of migration in the areas of destination

The migration of people from rural to urban areas leads to various consequences at the destination. Urbanization is a significant outcome of rural-to-urban migration (Lall et al., 2006). Urbanization results from a confluence of three principal factors: natural population growth among urban residents, the rate of migration into urban areas, and the reclassification of regions as urban zones. These three factors collectively underpin the emergence of Leh town as a significant urban hub in the Himalayan region. Urbanization thus emerges as both a process and an outcome of migration from rural to urban regions, alongside the natural growth of urban populations. Throughout history, migration has significantly contributed to the global urbanization process, remaining a critical factor in many developing nations. The urbanization

level in Leh district has surged from 12.7 percent in 1981 to 34.2 percent in 2011, as per the Census of 2011.

Another important consequence of rural-to-urban migration is the exponential population growth in urban areas and the stagnant or declining populations in rural areas due to migration to Leh. The town's population has risen from 30,870 in 2011 to 43,440 in 2021, as reported by the LAHDC. Leh is steadily evolving into a major urban center, exemplified by the 2011 Census data indicating a population density of 3,400 people per square kilometre in Leh town. Rural outmigration has triggered a surge in housing construction in and around Leh, contributing to an urban sprawl resembling slums (Norberg-Hodge, 2000). The increasing urban population, driven by migration, has intensified the demand for housing. Typically, the migrant population comprises individuals with low to middle incomes, limiting the affordability of land and houses in the main town and posing challenges for low-income families in achieving home ownership. Since the 1990s, Leh has witnessed the construction of new wards, such as the Housing Colony, Ibex, Nimoling, Skampari, and Murtsey (Müller & Dame, 2016). Between 2003 and 2017, approximately 9,400 new buildings were erected, a number similar to that constructed in the preceding 34 years from 1969 to 2003 in Leh town (Dame et al., 2019). In most of these areas, essential amenities like running water, sanitation, and proper roads are lacking and these areas are vulnerable to natural disasters due to their location in flood-prone areas. Another consequence of rural-to-urban migration in destination areas is the proliferation of private educational institutions. Over the past two decades, the number of private schools in Ladakh, particularly in Leh, has significantly increased. This expansion is largely attributed to the poor performance of government schools in the region. Private schools are predominantly concentrated in and around Leh town, while government schools are primarily located in rural areas.

A decade or two ago, Ladakh was virtually devoid of waste management concerns. Kitchen waste was repurposed to feed livestock, and night soil was converted into manure for use in agricultural fields (Norberg, 2000). However, the scenario has evolved, with Leh town witnessing significant changes. Livestock are no longer kept in the town, flush toilets have replaced dry toilets, and excessive consumption of packaged products has led to a surge in solid waste generation, posing a substantial environmental challenge (Dolma et al., 2020). Water pollution and scarcity have become a stark reality and an increasing number of tourists, military personnel, and migrants from rural Ladakh exacerbates it. Approximately 40 tonnes of waste is generated daily during the summer in Leh town alone (Tramboo, 2021). The disproportionate

discrepancy between the requisite technology and the waste generation in the town is considerable, and early indications of challenges in waste, traffic, air, and water pollution management are apparent (Dolma et al., 2020). The impacts of migration in destination areas are manifold. Specifically in the context of Ladakh, the following consequences are most commonly cited based on the responses from participants.

Table 2: Consequences of migration in the areas of destination

Consequences in the areas of destination	Frequency	Percent
Urbanisation	130	45.6
Increasing population density	57	20.0
Housing issues	44	15.4
Rise of Private educational institution	30	10.5
Pollution	24	8.5
Total	285	100.0

The majority of respondents, i.e., 45.6 percent believed that the substantial migration from rural areas in Ladakh has significantly contributed to increased urbanization in Leh town. This migration is largely driven by a lack of economic opportunities in their places of origin. Upon finding employment or establishing businesses in Leh, a significant portion of migrants settle permanently. Additionally, 20.0 percent of the respondents noted that the migration has led to a rise in population density within Leh town. Housing challenges post-migration were expressed by 15.4 percent of respondents, as migrants often settle in areas with limited facilities and a susceptibility to flooding, as evidenced by the August 2010 flash flood. In such event, areas with a high concentration of migrants experience the most significant loss of lives and property.

Moreover, 10.5 percent of the respondents indicated that migration has fuelled the growth of private educational institutions in and around Leh town. They attributed this expansion to the influx of out-migrants from various parts of Ladakh, with many respondents specifically migrating to ensure their children receive quality education in private schools. Lastly, 8.5 percent of respondents highlighted that mass migration from rural areas to Leh contributes to pollution. Leh town faces notable challenges related to inadequate waste disposal and sewage systems.

Discussion

The research findings unveil the multifaceted consequences of rural-to-urban migration in Ladakh, impacting both areas of origin and destination. Broadly, the migration has profound social, economic, and environmental implications in both the areas of origin and destination. In the areas of origin, social consequences encompass demographic changes, family transformations, cultural shifts, weakened social support networks, altered educational aspirations, and the feminization of agriculture. Economic ramifications include the abandonment of traditional occupations, an increasing reliance on paid labor or labor shortages during the farming season, and increased dependence on remittances. Furthermore, environmental consequences involve shifts in land use and the degradation of fertile agricultural land. In destination areas, rural-to-urban migration yields both positive and negative economic outcomes, fostering productivity, innovation, and infrastructure development, such as the emergence of private educational institutions. However, it also brings about housing issues, increased population density straining resources, and necessitating sustainable urban planning. Socially, migration enriches urban life with diversity but may give rise to income disparities, competition for resources, and social tensions. Environmentally, it poses challenges such as habitat loss, changes in land use, as fertile agricultural land is converted for alternative purposes such as the construction of hotels, guesthouses, parking lots. Additionally, there are concerns about increased water demand, heightened waste generation, groundwater pollution, and air quality issues.

These findings emphasize the intricate interplay of economic, social, and environmental dimensions in the context of migration. They underscore the importance of informed policies to promote sustainable development and address challenges arising from rural-to-urban migration in Ladakh.

Conclusion

In conclusion, the profound and intricate consequences of rural-to-urban migration in Ladakh underscore the imperative for a comprehensive approach. Balancing the benefits and challenges is paramount for the long-term well-being of both rural and urban populations, as well as the preservation of Ladakh's unique cultural and environmental heritage. While restrictive policies and discouraging migration may seem expedient, they risk limiting individual freedom and hindering economic growth. Instead, a more nuanced strategy involves providing essential facilities and employment opportunities in the areas of origin to deter indiscriminate migration. This approach not only mitigates the negative impacts of migration

but also fosters sustainable development in both rural and urban areas. By adopting such a balanced approach, Ladakh can harness the positive aspects of migration while minimizing its adverse consequences, ultimately contributing to greater social, economic, and environmental well-being for all.

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