

Research Article

The Role of Agriculture in Demographic Changes in Bamyan Province, Afghanistan: Sociological Perspective

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Abstract: This study investigates the influence of agriculture on demographic changes in Bamyan Province. Its objectives include analyzing the economic impact on the population, exploring migration patterns, examining demographic shifts, identifying challenges and opportunities for development, and offering policy recommendations for sustainability. Using a mixed-methods approach, the research involved 400 randomly selected farmers for quantitative data, complemented by focus groups and interviews with 20 experts and educated individuals. Ethical standards and confidentiality were maintained through informed consent. Findings indicate that agriculture, as the primary livelihood, faces challenges such as drought, declining yields, and limited government support, which negatively affect farmers' quality of life. After the fall of the republic, agricultural activity increased mainly due to economic necessity and migration back to rural areas amid urban unemployment and economic crises. However, migration to cities and abroad continues because of limited job opportunities and security issues. Climate change and inadequate support further threaten agricultural sustainability, significantly impacting Bamyan's economic and demographic landscape.

Keywords: agriculture; population changes; migration; quality of life; farmers; Bamyan Province

1. Introduction

Agriculture is a vital socioeconomic sector in Afghanistan, significantly influencing demographic changes across various regions, especially in Bamyan Province. As one of Afghanistan's central provinces, Bamyan's rich natural resources and extensive farmland are crucial for sustaining local livelihoods. Social, economic, and demographic shifts in the region are closely linked to the state and transformation of agriculture (Ahmadi, 2025). Understanding this relationship can help policymakers promote sustainable development and improve residents' living conditions.

In Bamyan, agriculture serves as the primary livelihood for many families (Directorate of Economy of Bamyan Province, 2019). Changes in farming practices, crop diversity, and climate conditions directly impact the region's demographic structure. For example, reduced agricultural productivity due to water scarcity, soil erosion, or limited access to modern technology can lead to internal migration as households seek better opportunities elsewhere (Ghobadi et al., 2005). Conversely, improvements in productivity, technical training, and access to new markets can stimulate economic growth, attracting population inflows, increasing household numbers, and encouraging reverse migration from cities to rural areas – fueled by lower living costs, affordable land, and the appeal of organic farming and rural lifestyles (Azar et al., 2021).

Migration driven by agriculture's challenges includes both internal and external movements. Decreased yields often compel families to leave rural areas for cities or abroad in search of better livelihoods (Hakim & Boz, 2019). These shifts impact family structures and demographic patterns in rural communities. Interestingly, Bamyan exhibits a unique trend: a relative increase in reverse migration from urban centers back to villages, driven by Bamyan's farmland potential, access to land, lower urban unemployment rates, and the cost advantages of rural living. Local policies and agricultural support programs can further influence these migration patterns.

Environmental crises, notably climate change and frequent droughts, threaten Bamyan's

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agriculture, causing water shortages, land degradation, and diminished crop yields (Lombamo, 2021). These conditions exacerbate regional population pressures, prompting internal migration, reducing agricultural employment, and increasing unemployment and homelessness. Therefore, analyzing how these environmental and demographic changes interrelate with agricultural development is essential for devising effective policies and interventions to foster resilient communities in Bamyan.

In many rural areas of Bamyan, agriculture is not only a primary source of income but also a key aspect of cultural identity. Changes within this sector can significantly influence the social and demographic structure. For instance, declining agricultural employment may prompt women and young people to seek opportunities in larger cities, leading to shifts in gender and age profiles in rural communities.

This study aims to explore the impact of agriculture on demographic changes in Bamyan. Its primary objective is to analyze the relationship between the agricultural sector and population dynamics in the region. Key research questions include:

- (1) How has agricultural transformation affected the age and gender composition of Bamyan's population?
- (2) What factors influence demographic shifts and internal migration?
- (3) How can the agricultural sector be improved to mitigate its negative effects on the population and support sustainable development?

Ultimately, this research seeks to identify solutions to enhance agriculture in Bamyan, thereby fostering positive demographic changes. By examining these issues, policymakers and researchers can develop effective programs to promote agricultural growth and improve the living conditions of Bamyan's people.

2. Literature Review

The role of agriculture in demographic changes in Bamyan Province, Afghanistan, has emerged as a significant yet under-explored research area. To date, there have been no studies directly addressing this specific theme. Nonetheless, relevant domestic and international research – focused on migration, rural development, and socio-economic factors – serves as a foundational basis for this study.

Migration dynamics from urban to rural areas, particularly in Bamyan and across Afghanistan, are driven by a complex interplay of socio-economic and political factors. Several studies highlight that economic hardships – such as high urban living costs and limited employment opportunities – are primary drivers of rural-to-urban migration. In cities like Kabul, issues such as unemployment, insecurity, and restrictions on human and women's rights significantly contribute to this displacement (Hakim & Boz, 2019). Interestingly, many migrants, after facing disillusionment in urban settings, consider returning to their rural roots, illustrating a paradox of migration patterns.

Internal displacement within Afghanistan – particularly among Internally Displaced Persons (IDPs) – is mainly caused by economic instability, ongoing conflict, and the high costs of living. These challenges often prompt international migration. In this context, local development initiatives – such as creating jobs in non-agricultural sectors and improving infra-structure – are crucial for encouraging IDPs to settle sustainably in rural areas and promote rural development (Ghobadi et al., 2005).

Saleem and Raouf (2011) emphasize that agricultural education, skill development, and extension services significantly influence rural development and social stability, thereby reducing rural-to-urban migration. Similarly, studies from neighboring countries demonstrate comparable trends: in Pakistan, economic migrants often return to rural areas due to lower living costs, agricultural opportunities, and government incentives for rural development (Ali et al., 2015). In Bangladesh, migration patterns are shaped by economic hardships and the availability of non-agricultural jobs, underscoring the importance of sustainable rural livelihoods (Mustafizur Rahman & Chowdhury, 2012).

Research from Iran's Tabriz region underscores that high urban living costs and the benefits of rural life – such as government support, affordable land and housing, organic farming, and greener environments – are significant factors attracting urban residents back to rural areas (Azar et al., 2021).

Numerous studies over the past decade have explored the bidirectional relationship between agriculture and demographic changes in rural communities. These studies – particularly those conducted in South and Central Asia, Latin America, and Africa – reveal that agriculture is not only affected by demographic shifts, but also plays a significant role in

shaping migration patterns and population movements.

In a study conducted in Nepal, Paudel and Paudel (2022) found that the return of migrants following the COVID-19 pandemic contributed to the revitalization of agriculture and changes in demographic structures. This return, when supported by educational and assistance programs, can stimulate local economic dynamism and improve household livelihoods.

In Afghanistan, Yar and Zazia (2024) identified widespread rural migration as a key driver of demographic changes and the weakening of agriculture in rural areas. They emphasized the importance of agricultural support as a strategy for managing migration and stabilizing rural populations. Naseri and Jauhar (2024), focusing on the role of remittances, showed that financial transfers from migrants can serve as a lever for investment in agriculture and its long-term sustainability. Their findings underscore the importance of viewing migration and agriculture as part of a mutually reinforcing cycle.

In Bangladesh, Khanam, Pervez, and Rahman (2024) examined the link between rural-to-urban migration and the decline in agricultural labor. They stressed the need for policies that promote sustainable agriculture in order to alleviate urban population pressures. Similarly, the study by Rana and Qaim (2024) showed that temporary rural migration – particularly among poor house-holds – plays an important role in redistributing the population and reproducing specific pat-terns of mobility. In the same context, some authors (Saha et al., 2024) found that insufficient infrastructure and unbalanced economic development have intensified rural migration. Strengthening small-scale farming and diversifying rural livelihoods, they argue, can help stabilize rural populations and reduce migration pressure.

Beyond Asia, Díaz Baca, Moreno Lerma, Burkart, and Triana Ángel (2024), in case studies from Colombia and Guatemala, emphasized that youth migration from rural areas – driven mainly by a lack of employment and educational opportunities – has led to a crisis in the livestock sector and hindered modernization efforts. The authors highlight the need for sustainable agricultural and livestock policies with a focus on youth and women.

In Pakistan, Fahad, Ali, Urooge, Hanan, and Naushad (2024) concluded that population growth and migration have resulted in the conversion of agricultural lands to non-agricultural uses, disrupting the demographic balance and livelihood resources in rural areas. This shift has heightened the risk of food insecurity and rising unemployment. In southern Ethiopia, Eshetu, Haji, Ketema, and Mehare (2023) argued that migration – especially international migration – reduces household poverty but also changes consumption patterns and the distribution of labor, thereby transforming the economic and demographic structures of rural areas.

Finally, Vercillo and Frayne (2025), in a study from northern Ghana, demonstrated that youth participation in agriculture is not limited to migration alone, as there is a growing trend of young people returning to rural areas. They argue that understanding the role of agriculture in demographic change requires close attention to cultural, gender, and generational dynamics.

Collectively, domestic and international studies suggest that migration in Afghanistan, especially in Bamyan, is driven by economic, social, and political challenges. While reverse migration offers opportunities for rural revitalization, its success depends on strategic investments in education, infrastructure, and agriculture. However, much of the existing literature tends to focus predominantly on agricultural factors, often neglecting the social dimensions that influence demographic shifts.

This study adopts a sociological approach to explore how agriculture impacts demographic changes at the provincial level in Bamyan. Considering Bamyan's unique socio-economic context, the research aims to provide accurate, data-driven insights to inform policymaking and development strategies by government agencies and local organizations at both provincial and national levels.

3. Materials and Methods

This study utilizes a mixed-methods research design, incorporating both quantitative and qualitative approaches, to accurately depict the role of agriculture in demographic changes within Bamyan province. This integrated approach enables the researcher to fully leverage available research capabilities. In the quantitative section, statistical methods are employed to analyze numerical data, while the qualitative section provides a deeper understanding of agriculture's impact on demographic shifts. The goal is to achieve a comprehensive and

accurate understanding of the phenomenon under investigation, ensuring the validity and reliability of the results. The statistical population consists of all farmers engaged in agriculture across the districts of Bamyan province.

According to data from the Directorate of Economy of Bamyan Province (2019), the estimated population is approximately 572,874. Cochran's formula was used to calculate the required sample size, applying a 95% confidence level and a 5% margin of error. Based on this formula, a sample size of 383 was recommended; however, to enhance the study's accuracy, the sample size for the questionnaire was increased to 400. The sampling method employed was simple random systematic sampling.

For the qualitative component, focus groups and structured interviews were conducted with approximately 20 participants, including representatives from local organizations, specialists, and government employees. These in-depth interviews targeted both the main and subtopics of the research. Data collection occurred in July and August 2024 across eight districts in Bamyan province. Quantitative data were analyzed using SPSS, while MAXQDA was utilized for qualitative data analysis. A thematic analysis method was applied concurrently to identify and interpret key themes.

Ethical principles were strictly adhered to throughout the study. Participants were informed about the research's objectives and procedures beforehand, and written informed consent was obtained. All collected information was kept confidential and was used solely for research purposes.

4. Results

4.1. Socio-Economic Profile of Participants

Most of the respondents were men (99%), reflecting the common perception in rural areas that agriculture is predominantly a male responsibility. However, in focus groups and interviews, gender balance was considered. Participants' ages ranged from 18 to 93 years, with an average age of 45.2 years. The majority (77%) were married. Additionally, 77% of the farmers own their own land.

The literacy rate of the participants is depicted in Figure 1, which shows that 65% of the surveyed participants are either illiterate or possess only basic literacy skills. A small number of participants in the focus groups hold higher education degrees.

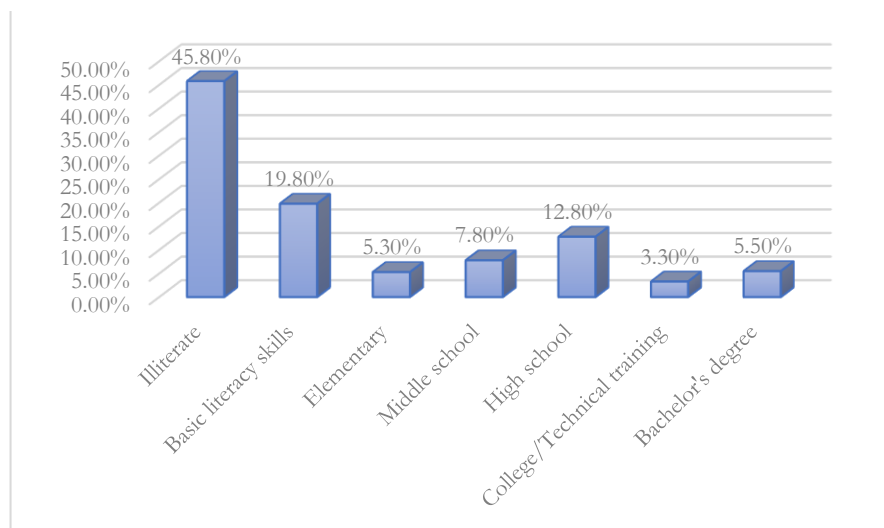


Figure 1. Education level of the respondents.

The data indicates that individuals who are illiterate or have lower levels of education typically engage in agricultural activities, while those with higher education are more likely to pursue non-agricultural jobs that align with their skills. In many cases, people with little or no formal education tend to participate in agriculture because it requires fewer skills and is traditionally seen as a primary source of livelihood in rural areas. In the rural communities of Bamyan province, families are often extended, with an average family size of 8.5 members. Agriculture serves as the primary occupation for most residents, and Figure 2 illustrates the number of adult family members involved in farming. The figure displays the corresponding percentages.

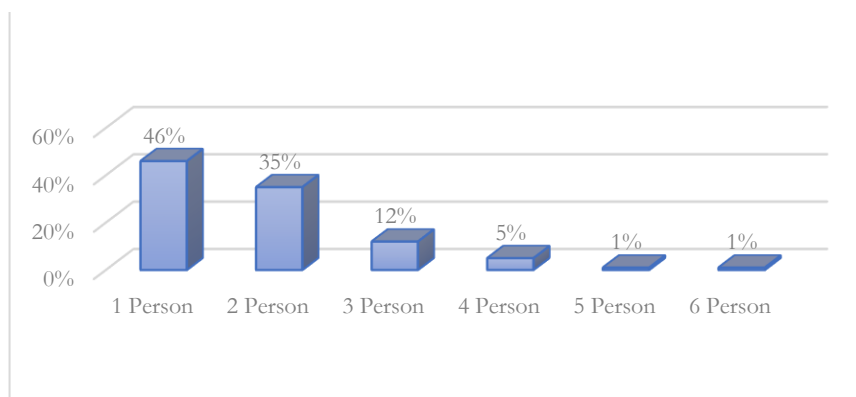


Figure 2. Number of farming household members.

In rural communities, children often assist their parents with farming activities. Data shows the presence of child labour within these families. According to the data, 34.8% of participants reported that their children work with them on their farms. The Central Statistics Organization of Afghanistan reported that in 2011, approximately 57% of child laborers in Bamiyan were engaged in agricultural work (Central Statistics Organization, 2013). When disaggregated by gender, the data indicates that boys are more frequently involved in work than girls, as demonstrated in Figure 3.

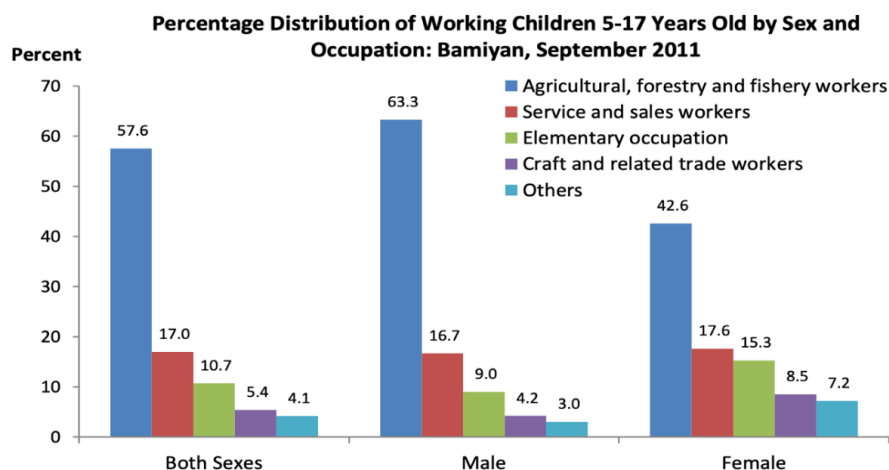


Figure 3. Types of child employment by gender.

Source: Central Statistics Organization, 2013.

In addition to agricultural activities, some family members are engaged in non-agricultural work. According to the data, 19% of participants claim that their families are involved in income-generating activities outside of agriculture, such as shopkeepers, freelance workers, drivers, teachers, government employees, carpenters, cleaners, etc. Rural families are primarily farmers, and the agricultural sector's income is usually analyzed annually because it cannot be disaggregated monthly. Therefore, most families are poor, with 57% having annual incomes less than \$1,000 (table 1).

Table 1. Annual income of a farming family in Bamiyan Province.

Annually Family income	Frequency	Percent
Less than 500\$	68	17%
From 501\$ up to 1000\$	159	40%
From 1001\$ up to 2000\$	104	26%
From 2001 up to 3000\$	42	10%
From 3001 up to 5000\$	13	3%
From 5001\$ up to 10000\$	8	2%
More than 10000\$	6	2%
Total	400	100%

According to statistical analysis, the average annual income of participating families in Bamyan is \$1,472, significantly lower than Afghanistan's GDP per capita of \$415 in 2023 (ALFRED, 2024). With an average household size of 8.5, the per capita income for these families is approximately \$172, less than 50% of the national per capita income, reflecting severe poverty in the province. Over 57% of these families earn less than \$1,000 annually, an amount insufficient to meet the basic needs of an 8-member household, highlighting widespread economic crises and food insecurity.

Bamyan is one of Afghanistan's poorest provinces, with most of its population living in absolute poverty (Ahmadi, 2025). According to reports by international organizations, if political and economic conditions do not improve, the vast majority of the population is at risk of falling below the poverty line. In 2022, it was estimated that nearly half of Afghanistan's population – over 18 million people – would require substantial aid. More than one million children are at risk of malnutrition and hunger. According to Hasell and Arriagada's (2022) report, the poverty line was set at \$2.15 per day in 2022, meaning that each person needs to consume at least \$2.15 daily to meet basic needs. Individuals unable to afford this daily amount are considered to be living in absolute poverty. Based on this poverty line, an analysis of the annual income of participating families indicates that approximately 90% of residents in rural Bamyan live below the poverty line and cannot afford to spend \$2.15 per day.

4.2. General Profile of agriculture in Bamyan Province

In Afghanistan, the quality of life for farmers is closely tied to agriculture, which forms the main economic activity of Bamyan's rural communities. As agriculture grows and develops, the quality of life for farmers would ideally improve. However, data shows that in recent years, the living standards of most farmers have worsened, as clearly illustrated in figure 4.

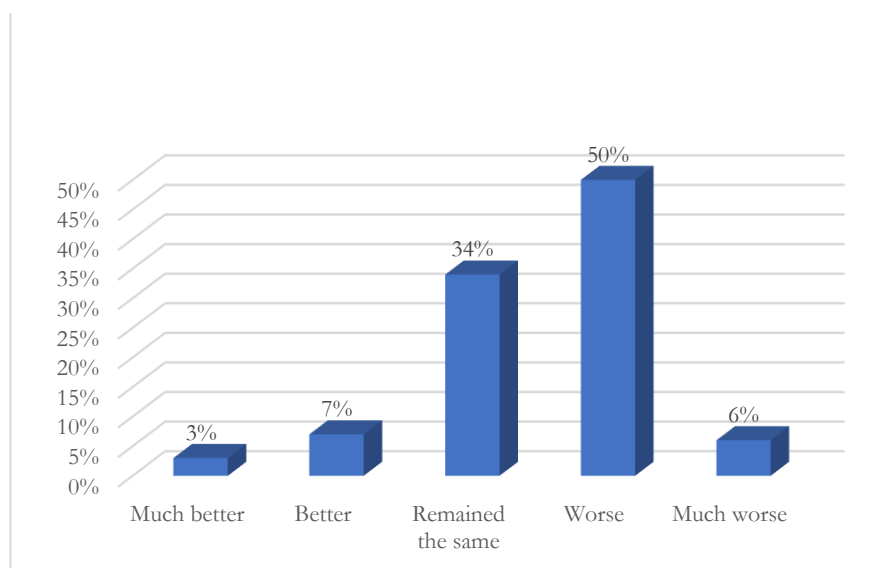


Figure 4. Perceptions of the quality of life of farmers in Bamyan Province.

Based on the opinions of interviewees and focus group participants, the overall living conditions of people in Bamyan have worsened in recent years. The primary factors contributing to this decline include consecutive droughts, a significant decrease in agricultural yields, a lack of job opportunities, the suspension of development projects, and reduced investment. Many people are solely dependent on agriculture and aid from organizations. The recent political transformation has also led to capital outflows, increased unemployment and poverty, and an economic downturn. Women and other vulnerable groups have also been affected economically, psychologically, and socially. The lack of job stability, rising poverty, and decreasing income have made living conditions more challenging.

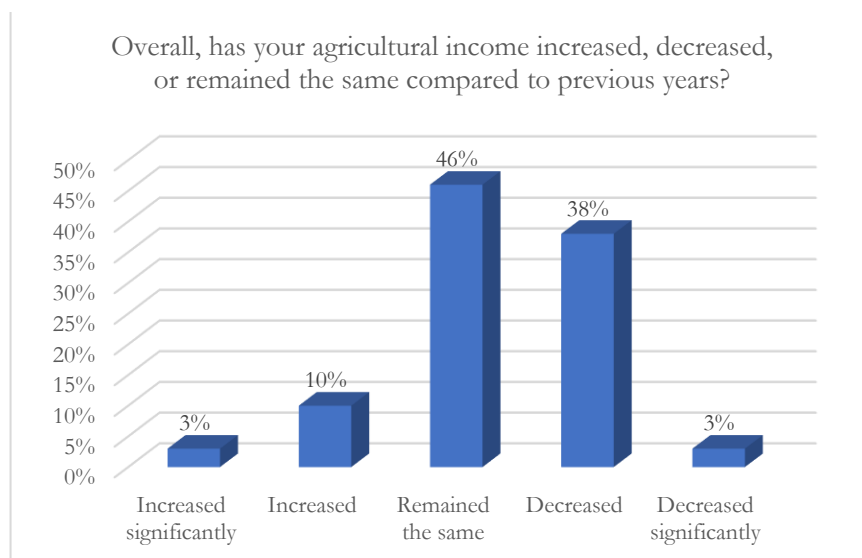


Figure 5. The increase and decrease in farmers' income in Bamyan Province.

The quality of life for farmers depends on their agricultural income. As agrarian income decreases, the quality of farmers' lives also deteriorates. Data shows that most farmers' incomes have declined or remained unchanged in recent years, as illustrated in figure 5.

Based on the data, agriculture has the highest utility at approximately 69%, followed by livestock farming at around 21%, and horticulture at about 10%. The distribution of the usefulness of agriculture, livestock farming, and horticulture across districts is presented in Table 2. According to the data, agriculture is most prevalent in the center of Bamyan province, horticulture is most common in Kahmard district, and livestock farming is most prominent in Wars district. The frequencies for other districts are shown in table 2.

Table 2. The usefulness of agriculture, livestock farming, and horticulture based on district segregation.

Districts * In your opinion, is agriculture and horticulture more beneficial or Livestock in your village or region?				
In your opinion, is agriculture and horticulture more beneficial or animal husbandry in your village or region?				
Districts	Agriculture	Horticulture	Livestock	Total of participants
Center of Bamyan	57	1	2	60
Shibar	36	1	3	40
Yakawlang No: 1	49	4	7	60
Yakawlang No: 2	21	5	14	40
Waras	24	5	31	60
Panjab	35	2	23	60
Saighan	31	4	5	40
Kahmard	22	18	0	40
Total	275	40	85	400
Percent	69%	10%	21%	100%

The political change in Afghanistan after August 2021 exacerbated the economic crisis in society, leading to a significant downturn. Unemployment peaked, and capital flight from the country increased (Ahmadi & Hikmat, 2024). As the economic crisis deepened and unemployment rose, more people turned to agricultural activities. Figure 6 illustrates the level of people's interest in agriculture following the fall of the Republic. The data indicates that people's interest and inclination toward agriculture increased after the collapse of the Republic. Unemployment in urban areas and ongoing economic problems have driven many people toward rural regions.

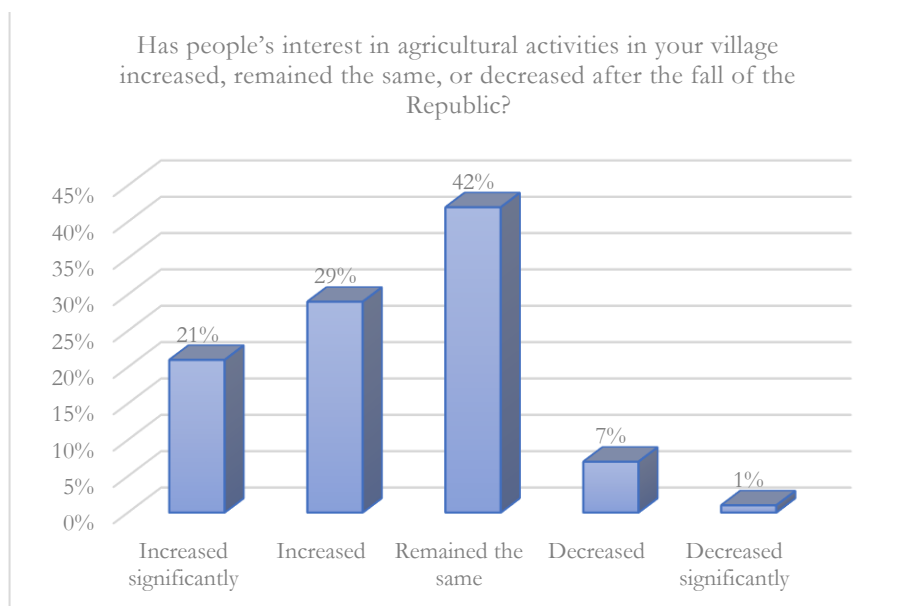


Figure 6. People's interest in agriculture after the fall of the Republic.

Qualitative data suggests that people have increasingly resorted to limited job opportunities. The younger generation, in particular, is often compelled to pursue agriculture due to unemployment and livelihood challenges. Most participants believe that the rise in agriculture is linked to unemployed individuals or those who have lost their jobs turning to this sector. For many families with no other sources of income, agriculture remains the only means of livelihood.

In rural communities of Bamyan, women are typically involved in agricultural activities alongside men. This section highlights the role of women in agricultural development. The most significant activities in which women participate within the agricultural sector are detailed in figure 7.

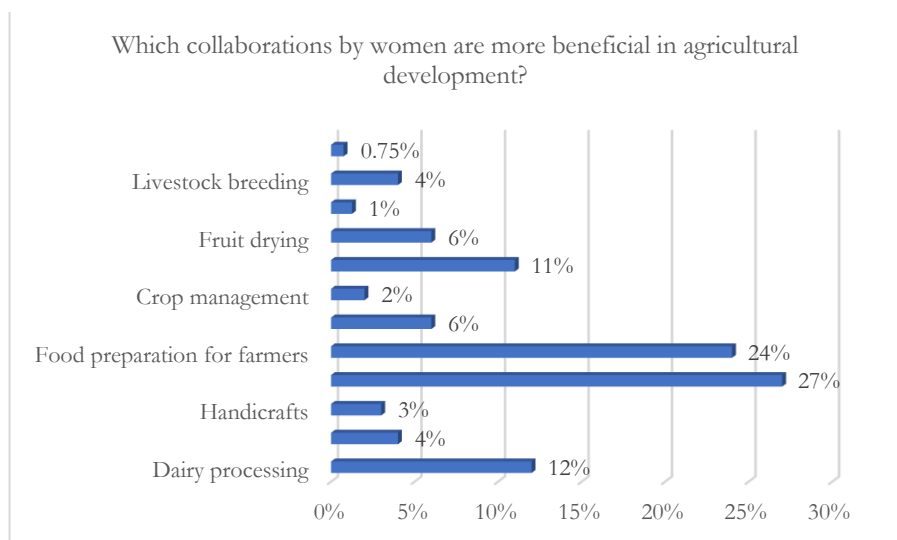


Figure 7. The most important beneficial activities of women in the agricultural sector.

Qualitative data also indicates that women in Bamyan are involved in all stages of agriculture, from planting to harvesting, working alongside men. In many households, women play an equally significant role. They are particularly active in gathering harvests, plowing the land, caring for crops, and packaging. Overall, women's contributions to agriculture and animal husbandry are notable. In addition to agricultural work, women also collect and process animal products and perform household chores.

Despite their essential role in agricultural activities, women's access to agricultural education remains limited. Sabri, Abdulrahimzai, Witteveen, Lie, and Meulen (2017) state that this educational gap reduces productivity and hampers agrarian development. The situation

has worsened since the collapse of the Republic, as educational centers for girls have been shut down (Hikmat & Ahmadi, 2023), further marginalizing women from agricultural training opportunities. Some works (Tavva et al., 2013) demonstrated that gendered divisions of labour – shaped by factors such as age, social taboos, poverty, and labour short-ages – restrict women's participation in agriculture and decision-making. They suggest that agricultural development programs targeting women would be most effective if they focus on livestock-related activities, which align more closely with women's current roles.

5.3. *The Role of Agriculture in Demographic Changes in Bamyan Province*

Agriculture plays a fundamental role in demographic changes in Bamyan, as it provides the primary livelihood for the population and influences migration, household structure, and population growth. Reduced agricultural productivity due to climate change and water scarcity has led some families to migrate to urban areas, contributing to urban population growth. In rural areas, dependence on agriculture often results in larger family sizes to provide the necessary labour for farming activities.

This section examines migration patterns following the fall of the Republic, focusing on movements between urban and rural areas. Over three years, individuals from major cities returned to villages for livelihoods, hoping to earn a living through agriculture. The average number of returnees was 21, with a median of 15, a mode of 20, a minimum of 1, and a maximum of 92. Data in table 9 shows that 58.4% of respondents observed this trend, while 41.6% did not. Additionally, the number of students dropping out and returning to villages to engage in agriculture averaged 5.9, with a median of 4, a mode of 1, a minimum of 1, and a maximum of 40. Among respondents, 33.2% reported this trend, while 66.8% did not. Moreover, families moving back to villages and adopting agriculture averaged 5.5, with a median of 4, a mode of 4, a minimum of 1, and a maximum of 60. This shift was noted by 64% of participants, while 36% reported no change. Focus group discussions identified economic crises, urban insecurity, and the desire for sustainable rural lifestyles as key factors driving migration to villages.

On the other hand, individuals leaving villages averaged 9.5, with a median of 5, a mode of 2, a minimum of 1, and a maximum of 60. This trend was observed by 37.4% of participants, while 62% saw no such change. Additionally, families moving to cities averaged 3.8, with a median of 3, a mode of 2, a minimum of 1, and a maximum of 20. These changes were reported by 34.8%, while 65.2% did not notice such migration. Table 3 highlights that migration to rural areas and engagement in agriculture have increased more significantly than migration to cities. Overall, demographic shifts indicate a clear trend towards rural life and agriculture following the fall of the Republic.

Table 3. Comparison of demographic changes (from rural areas to cities and from cities to rural areas) based on mean, median, mode, minimum, and maximum.

No	Population changes	Maximum	Minimum	Mean	Median	Mode	No change	View changes
1	The number of individuals who returned from the city to the village due to unemployment after the fall of the Republic and chose farming as a profession.	92	1	21	15	20	41.6 %	58.4%
2	The number of students who dropped out of school, returned from the city to the village after the fall of the Republic, and chose farming as a profession.	40	1	5.9	4	1	66.8 %	33.2%
3	The number of families who returned from the city to the village after the fall of the Republic and chose rural life and farming as a profession.	60	1	5.5	4	2	36.0 %	64%

4	The number of individuals who migrated from the village to the city after the fall of the Republic and chose urban life.	60	1	9.5	5	2	62.6 %	37.4%
5	The number of families who migrated from the village to the city and chose urban life.	20	1	3.8	3	2	65.2 %	34.8%

Further, the overall changes – both increases and decreases – in the village population after the fall of the Republic were analyzed from the participants’ perspectives. Figure 8 shows that most participants believe their village’s population has increased since the fall. According to the data, 56% of participants think their village’s population has increased significantly, 25% state that the population has remained the same with no notable demographic changes, and approximately 19% believe it has decreased.

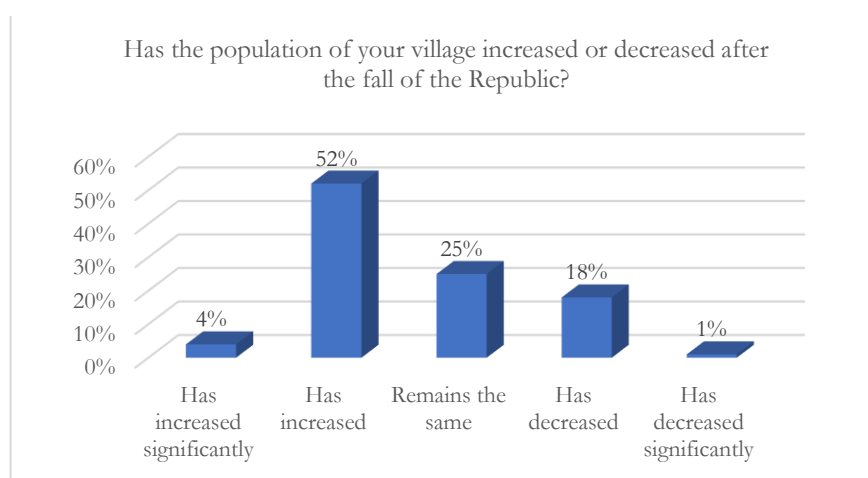


Figure 8. The increase and decrease in population in the villages of Bamyan Province.

This section examines the factors contributing to population growth in the villages. According to figure 9, the most critical factors, listed in order of percentage, are unemployment in cities, poverty, and migration from the city to the villages. The data indicates that the primary drivers of population growth in villages are unemployment and poverty in urban areas. Due to these issues, many people have migrated to rural regions and turned to agriculture as an alternative livelihood. While other factors exist, they account for a smaller percentage (figure 9).

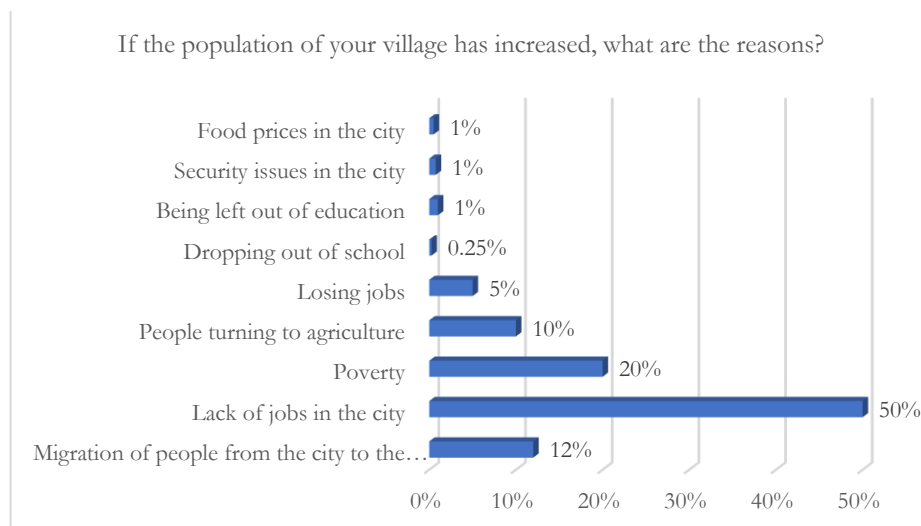


Figure 9. Factors contributing to population growth in villages of Bamyan Province.

On the other hand, several factors contribute to population decline in the village. According to Figure 10, these include lack of employment opportunities within the village, migration to the city, finding work in urban areas, drought, a weak economy and poverty, limited agricultural land in the village, fear of the Taliban government, restricted land ownership, and a lack of housing in the village.

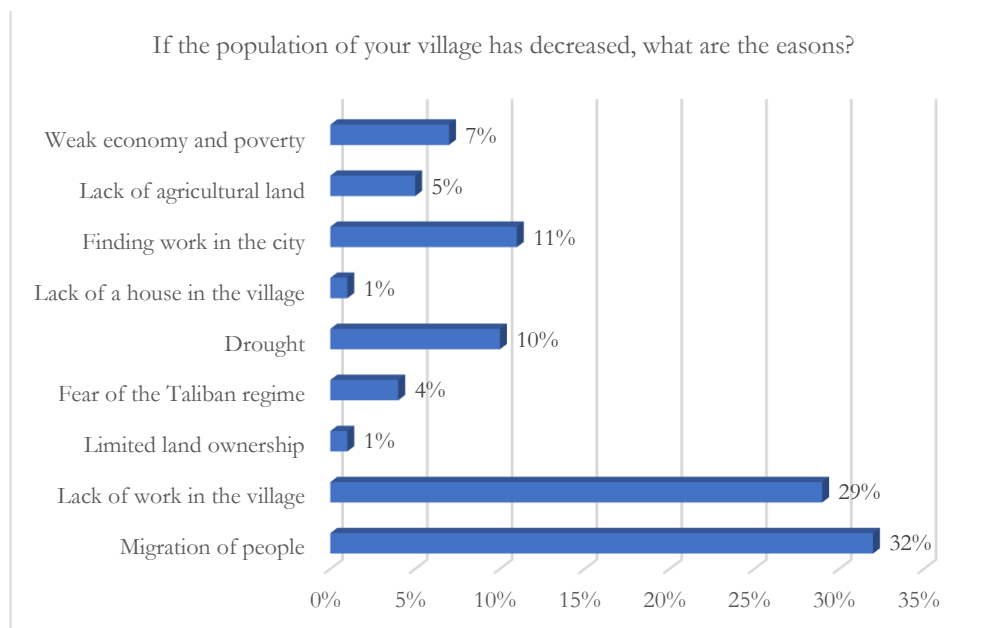


Figure 10. Factors contributing to population decline in villages of Bamyan Province.

Based on information gathered from interviews and focus group discussions, after the fall of the Republic in Afghanistan, the population of villages has increased due to migration from cities driven by unemployment, poverty, economic difficulties, and a lack of job opportunities. Factors such as decreased income in urban areas, harsh living conditions, and high living costs have prompted many people to return to their villages. Conversely, a minority of participants believe that the rural population has decreased, as many young people have migrated to other countries or cities due to economic and security concerns. Based on the available statistics, following the fall of the Republic, demographic shifts have predominantly involved movement from urban to rural areas. Economic challenges in cities have led people to turn toward agriculture and rural livelihoods.

5. Discussion

The intersection of agriculture and demographic change is increasingly recognized as a central dynamic in rural development, particularly in regions facing socio-economic instability. The reviewed literature from South and Central Asia, Latin America, and Africa highlights a clear bidirectional relationship: while demographic shifts such as migration and population redistribution affect agricultural productivity, agriculture itself often shapes migration patterns and the sustainability of rural communities.

The findings highlight the complex relationship between demographic changes, migration patterns, and agricultural development in Bamyan province. The literature and empirical evidence reveal a consistent migration trend from urban to rural areas driven by economic crises, unemployment, and high urban living costs. This reverse migration aligns with global trends observed in regions such as Bangladesh (Mustafizur Rahman & Chowdhury, 2012) and Peshawar, Pakistan (Ali et al., 2015), where lower living costs and rural livelihoods serve as pull factors for urban migrants. In Bamyan, these movements are further supported by the promise of agricultural opportunities, despite ongoing challenges such as drought and reduced government support.

Economic hardships and socio-political instability significantly influence the migration dynamics in Bamyan. Hakim and Boz (2019) noted that urban unemployment and high living costs often drive rural-to-urban migration. However, reverse migration is increasingly occurring as a response to disillusionment with urban living, with migrants returning to rural areas seeking more sustainable livelihoods. This trend aligns with Ghobadi, Koettl, and Vakis

(2005), who emphasized that reverse migration can catalyze rural development if coupled with job creation and infrastructure investments.

Economic pressures in cities have strongly affected migration patterns, with many families returning to rural areas to pursue subsistence farming and sustainable living. This phenomenon is also observed in Afghanistan and Iran, where reverse migration frequently results from urban economic instability and a lack of affordable housing (Azar et al., 2021).

Paudel and Paudel (2022) showed that the return of migrants post-COVID-19 re-energized agricultural practices and shifted rural demographic structures. Their findings suggest that when return migration is supported through educational and institutional assistance, it contributes positively to local economies and livelihoods. A similar dynamic is observable in Bamyan Province, where many families, in response to economic instability and urban unemployment, have returned to their rural origins and re-engaged in agriculture as a survival strategy.

In Afghanistan, Yar and Zazia (2024) emphasized the weakening of rural agriculture due to outmigration and demographic shifts, reinforcing the idea that population loss from rural areas undermines the agricultural sector. These insights align with Bamyan's context, where political and economic changes following the fall of the Republic have compelled residents to either rely heavily on agriculture or migrate in search of better livelihoods.

Naseri and Jauhar (2024) added another layer by analyzing how remittances from migrants can be reinvested in agriculture, thereby contributing to its sustainability. While Bamyan does not appear to experience remittance flows at the same level as other regions, the potential for remittance-driven investment exists and could play a transformative role in agricultural modernization if properly harnessed.

The evidence from Bangladesh, provided by Khanam et al. (2024), shows how rural-to-urban migration depletes the agricultural labor force, necessitating policy interventions to preserve agricultural productivity. Rana and Qaim (2024) highlighted how temporary migration from poor households facilitates cyclical population redistribution and reflects economic coping mechanisms. In Bamyan, the dual nature of migration – as both return to rural areas and departure abroad – reveals similar complexities in demographic flows and labor availability.

Recent findings (Saha et al., 2024) further showed that poor infrastructure and economic disparities accelerate migration, which is evident in Bamyan as well. Here, the degradation of public services and underinvestment in rural development have created conditions that push people either into subsistence agriculture or out of the region entirely. In Latin America, Díaz Baca et al. (2024) emphasized how youth migration – driven by lack of opportunities – disrupts agricultural sectors, especially livestock. This resonates with Bamyan's livestock sector, which faces significant constraints. Policies in Bamyan, as elsewhere, must prioritize youth and women's engagement in agriculture to avoid long-term stagnation.

Some authors (Fahad et al., 2024) highlighted that demographic pressure and migration in Pakistan have led to the conversion of agricultural lands to other uses, threatening food security. While land conversion is less pronounced in Bamyan, the degradation of land due to droughts and the lack of state-led development mirror similar outcomes: declining productivity and increased vulnerability. In southern Ethiopia, international migration reduces household poverty but reshapes rural economies through changes in labor and consumption (Eshetu et al., 2023). This pattern is also applicable in Bamyan, where families benefiting from foreign aid or migration income may alter their economic behaviors, often shifting away from subsistence agriculture.

Vercillo and Frayne (2025) presented a more optimistic view, noting that rural youth are increasingly returning to agriculture. This is paralleled in Bamyan, where some returnees – disillusioned with urban precarity – are re-engaging with farming. However, this trend is fragile and dependent on structural support, including gender-inclusive policies and education for sustainable agriculture.

The findings underscore the critical role of agriculture in Bamyan's demographic and economic landscape. Addressing the sector's challenges requires a comprehensive approach that includes improving education, promoting gender inclusivity, developing infrastructure, and enhancing climate resilience. Drawing lessons from international contexts, Bamyan can implement policies to foster sustainable rural development, mitigate migration pressures, and promote economic stability for its rural population. If these efforts are effectively implemented, they can improve the quality of life for farmers and contribute to the long-term development of Bamyan Province.

6. Conclusions

The agricultural situation in Bamyan Province directly influences farmers' quality of life. As the region's primary economic activity, agriculture faces serious challenges due to successive droughts, reduced crop yields, lack of job opportunities, halted development projects, and decreased investments. These issues have led to declining farmers' incomes and a diminished quality of life. In recent years, political changes have caused capital to drain, while poverty and unemployment have risen, leaving many people reliant solely on agriculture and aid from organizations. Women and vulnerable groups, such as children, have been disproportionately affected by these circumstances.

Given Bamyan's situation, agriculture remains the most profitable sector, contributing approximately 69% to the local economy, with livestock and horticulture accounting for 21% and 10%, respectively. Political and economic shifts following the fall of the Republic have compelled many individuals and families to turn to agriculture as a means of livelihood.

Demographic changes have resulted in notable shifts between urban and rural areas. Data analysis indicates that migration from cities to rural areas has increased. Participants' perspectives suggest that reasons for returning to rural areas include economic crises, job losses in urban centers, high urban living costs, and a renewed interest in agriculture and sustainable living. Conversely, factors driving population decline in rural areas and migration to cities or other countries include the lack of job opportunities, drought, poverty, and security concerns.

Overall, the socio-economic conditions following the fall of the Republic, particularly in the agricultural sector, have played a significant role in shaping demographic changes in Bamyan Province.

The results of this study offer valuable implications for both theoretical development and practical application.

Firstly, the government, relevant organizations, and researchers must prioritize the development of sustainable agricultural practices in Bamyan Province, focusing on climate resilience, water management, and infrastructure improvements. Policies that incentivize innovation in agriculture, such as greenhouse farming and drought-resistant crop cultivation, can help mitigate the adverse effects of climate change. Additionally, targeted interventions that promote gender inclusivity in agricultural activities can empower women, enhance productivity, and foster socio-economic stability.

Secondly, research should also focus on the socio-economic impacts of migration patterns and explore opportunities to improve rural livelihoods through skill development programs, job creation, and better access to financial resources.

Thirdly, collaborative efforts among the government, NGOs, and academic institutions are essential to address the agricultural sector's complex challenges and ensure sustainable development in Bamyan Province.

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