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Journal of Sociological Context 6/2 (August 2025), 213-247 Research Article

Examination of Social and Economic Factors Affecting Agricultural Development in Bamyan Province, Afghanistan

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https://ror.org/00ege8681

Abstract

This study investigates the social and economic factors influencing agricultural development in Bamyan province. Using a mixed-methods approach, the research combines quantitative and qualitative data collected through questionnaires, interviews, and focus groups. The study population includes farmers aged 18 to 93 from eight districts of Bamyan province. While questionnaires were primarily completed by men, interviews and focus groups ensured equal gender representation. Quantitative data were analyzed using SPSS, while qualitative data were analyzed using MAXQDA. Findings reveal that agriculture in Bamyan remains a male-dominated sector, though women contribute significantly to production. Mostly illiterate, farmers face challenges such as economic instability, climate change, and reduced external support. Despite these difficulties, agriculture remains central to the local economy, with key crops including potatoes, wheat, and fodder, alongside livestock and horticulture. However, market inefficiencies and weak structural support limit profitability. The decline in government and organizational assistance has exacerbated economic hardships, restricting access to resources and training. To address these issues, targeted investments in infrastructure, training programs, cooperatives, and market access are essential to enhance farmers' incomes and ensure the sector's sustainability.

Keywords

Agricultural Development, Social and Economic Factors, Farmers' Cooperation, Marketing, Bamyan

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Sosyolojik Bağlam 6/2 (Ağustos 2025), 213-247 Araştırma Makalesi

Afganistan'ın Bamyan İlinde Tarımsal Kalkınmayı Etkileyen Sosyal ve Ekonomik Faktörlerin İncelenmesi

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Öz

Bu çalışma, Bamyan ilinde tarımsal kalkınmayı etkileyen sosyal ve ekonomik faktörleri incelemektedir. Araştırma, anketler, mülakatlar ve odak grup görüşmeleri yoluyla toplanan nicel ve nitel verilerin birleştirildiği karma yöntem yaklaşımını benimsemiştir. Çalışma evrenini, Bamyan'ın sekiz ilçesinden 18 ila 93 yaşları arasındaki çiftçiler oluşturmaktadır. Anketler ağırlıklı olarak erkekler tarafından doldurulmuş olsa da, mülakatlar ve odak grup çalışmaları cinsiyet temsiliyetini dengelemiştir. Nicel veriler SPSS programıyla, nitel veriler ise MAXQDA programıyla analiz edilmiştir. Bulgular, tarımın Bamyan'da erkek egemen bir sektör olarak kaldığını, ancak kadınların üretime önemli katkılar sağladığını ortaya koymaktadır. Çoğunluğu okuma yazma bilmeyen çiftçiler; ekonomik istikrarsızlık, iklim değişikliği ve dış desteklerin azalması gibi çeşitli zorluklarla karşı karşıyadır. Bu zorluklara rağmen tarım, yerel ekonomi için merkezi bir öneme sahiptir. Patates, buğday ve yem bitkileri başta olmak üzere temel ürünler ile birlikte hayvancılık ve meyvecilik faaliyetleri sürdürülmektedir. Ancak pazarlama yetersizlikleri ve zayıf yapısal destekler, kârlılığı sınırlamaktadır. Hükümet ve çeşitli kuruluşlardan gelen yardımın azalması, ekonomik sıkıntıları artırmış ve çiftçilerin kaynak ve eğitim olanaklarına erişimini kısıtlamıştır. Bu sorunların çözümü için altyapı yatırımları, eğitim programları, kooperatiflerin desteklenmesi ve pazarlara erişimin iyileştirilmesi gibi hedefli müdahaleler gereklidir. Bu tür adımlar, çiftçi gelirlerini artıracak ve tarım sektörünün sürdürülebilirliğini güvence altına alacaktır.

Anahtar Kelimeler

Tarımsal Kalkınma, Sosyal ve Ekonomik Faktörler, Çiftçi İşbirliği, Pazarlama, Bamyan

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Introduction

Agricultural development is a critical driver of economic and social progress, playing a key role in ensuring food security, creating employment, and improving the livelihoods of rural communities. In Bamyan province, a predominantly agricultural and livestock region, agriculture is the primary source of income for many families and plays a vital role in strengthening the area's cultural and social identity. However, agricultural development in this province faces numerous social and economic challenges, which must be addressed to ensure sustainable growth and effective policymaking.

One of the most significant social challenges in Bamyan is the constraints imposed by traditional and cultural structures, which often limit women's participation in agricultural activities and decision-making. In rural communities, women typically engage in crop harvesting and livestock management but have limited access to income, land ownership, and agricultural training. This gender inequality results in a substantial portion of human potential remaining untapped, hindering overall agricultural development.

From an economic perspective, the lack of financial resources and access to credit severely restricts farmers' ability to invest in improving production and increasing productivity. Farmers in Bamyan often struggle to cover initial costs, such as purchasing quality seeds, chemical fertilizers, or modern technologies. Additionally, inadequate infrastructure, including advanced irrigation systems and integrated local markets, reduces agricultural productivity and discourages farmers from expanding their activities.

Climate change further exacerbates these challenges, with frequent droughts, irregular rainfall, and rising temperatures disrupting traditional planting patterns. These changes have led to reduced yields, increased food insecurity, and declining incomes for farmers, contributing to internal migration and social instability. Policies focused on raising awareness, promoting drought-resistant crops, and providing financial and technical support could mitigate these impacts.

Another obstacle to agricultural development in Bamyan is the limited access to specialized training in modern farming techniques and technologies. Many farmers continue to rely on traditional methods, which significantly reduce land productivity and limit the competitiveness of Bamyan's agricultural products in domestic and international markets.

Finally, weak policy structures and insufficient support services from the government and non-governmental organizations pose significant barriers to development. The lack of appropriate policies for rural infrastructure, inadequate educational programs for farmers, and poor communication between farmers and decision-makers have all slowed agricultural progress in the province.

This research aims to identify and analyze the social and economic factors influencing agricultural development in Bamyan province. It focuses on the impact of farmers' education, access to financial resources, social cooperation, market infrastructure, and govern-

ment policies on agricultural productivity and sustainability. The study addresses the central research question: What are the social and economic factors influencing agricultural development in Bamyan province? By exploring these issues, this research seeks to provide actionable recommendations for policymakers and stakeholders to promote sustainable agricultural development in the region.

1. Literature Review

The research topic, "Examination of Social and Economic Factors Affecting Agricultural Development in Bamyan Province," addresses a critical yet underexplored area. While no prior studies have specifically focused on this topic in Bamyan Province, several related studies have been conducted in Afghanistan and other countries, providing valuable insights into the challenges and opportunities for agricultural development.

Sayyar et al., in their study on the agricultural sector's impact on Afghanistan's economy, highlight farmers' dissatisfaction with government performance. They note that most farmers engage in horticulture and cereal production, but inefficient water resource management and a lack of government services have hindered progress. Additionally, war and insecurity have significantly impacted agricultural development, both directly and indirectly.[1]

Hassanzoy, emphasizes that only 12% of Afghanistan's land is suitable for agriculture, with less than half of this cultivable land being utilized. The study calls for strategic programs to optimize land use and increase productivity. However, the limited adoption of advanced technologies and inputs, such as chemical fertilizers, remains a barrier. Hassanzoy argues that policies should focus on improving access to sustainable technologies and modern production methods.[2]

Sarhadi et al., stress the importance of agricultural education in sectoral development. They note that Afghanistan's agricultural education system is underdeveloped, with universities and institutions lacking access to modern technologies and scientific resources. Their findings suggest that sustainable agricultural development requires advanced technologies, diversified production systems, and improved market access. Education and business training for farmers are identified as critical steps toward addressing these challenges.[3]

Burian et al., identify key challenges faced by Afghan farmers, including a lack of specialized training, inefficient irrigation systems, and weak market linkages. They also highlight the lack of local authority support for agriculture, which has discouraged traders from

1 Fayaz Ahmad Sayyar et al., Strengthening and Growth of the Agriculture Sector and Its Impacts on the Economy of Afghanistan (Kabul University: National Policy Research Center, Kabul, 2009), 66-68.

2 Najibullah Hassanzoy, "Agricultural Development in Afghanistan: Some Temporal Reflections", *Afghanistan Agricultural Research Journal* 1/1 (September 2013), 1-16.

3 Wakil Ahmad Sarhadi, et al., "Sustainable Agricultural Development in Afghanistan", *Journal of Developments in Sustainable Agriculture* 9/1 (March 2014), 41-46.

connecting with national markets.[4] Similarly, Sabri et al. point out that Afghan women play a significant role in agriculture but are often excluded from education and decision-making, negatively impacting sectoral development.[5]

Internationally, Das and Mondal examine socio-economic factors affecting agricultural production in Bangladesh. Their findings reveal that a lack of machinery, gender inequality, and small farm sizes are major barriers. The study recommends promoting mechanized farming, ensuring gender equality, and leveraging mobile technologies to disseminate information and improve productivity.[6] Ifeanyi-Obi and Matthews Njoku explore livelihood choices in southeastern Nigeria, emphasizing the role of education, income, and age in shaping agricultural practices. They suggest increased government funding to make agriculture more attractive to graduates.[7]

Mirjat et al. analyze socio-economic factors affecting farm productivity in Pakistan's Tando Allahyar District. Their findings indicate that farmers' income, experience, education, and family cooperation significantly impact productivity. These insights can inform policies to reduce food insecurity and improve agricultural strategies.[8]

Despite these valuable contributions, significant gaps remain in the literature, particularly concerning Bamyan Province:

1. Limited Regional Focus: While several studies examine Afghanistan's agricultural sector, none specifically focus on the socio-economic determinants of agricultural development in Bamyan Province. This research aims to fill that gap by providing localized insights.

2. Gender-Specific Analysis: Existing literature acknowledges women's participation in agriculture but lacks in-depth analysis of gender-specific challenges in Bamyan. This study will explore the role of women in agricultural decision-making and access to resources.

3. Climate Change and Agriculture: Most reviewed studies discuss agricultural constraints without integrating climate change as a variable. This research will assess how climate change affects farming practices, livelihoods, and adaptation strategies in Bamyan.

4. Market Accessibility and Policy Implications: While prior research identifies weak market linkages as a challenge, there is little analysis of the policy measures needed to improve

4 Pavel Burian et al., "Concept of agriculture development in Logar Province, Afghanistan", *Agricultura Tropica et Subtropica* 43/4 (2010), 366-372.

5 Ayesha Sabri et al., "Enhancing Women's Participation in Agricultural Education in Afghanistan Through Distance Education by the National Agricultural Education College (NAEC) Afghanistan", *International Women Online Journal of Distance Education* 6/2 (April 2017), 67-78.

6 Susmita Das - Paritosh Mondal, "Socio-Economic Factors Affecting Agricultural Production and Income in Bangladesh", *Journal of Agricultural Socio-Economics (JASE)* 2/2 (August 2021), 56–63.

7 Chinwoke Clara Ifeanyi-obi - E.C. Matthews-Njoku, "Socio-Economic Factors Affecting Choice of Livelihood Activities Among Rural Dwellers in Southeast Nigeria", *IOSR Journal of Agriculture and Veterinary Science* 7/4 (April 2014), 52-56.

8 Abdul Jaleel Mirjat et al., "Socio-economic Factors Affecting Farm Yield in Tando Allahyar District", *International Research Journal of Arts and Humanities (IRJAH)* 47/47 (October 2018), 215-224.

agricultural trade in Bamyan. This study will evaluate potential policy interventions to enhance market access and agricultural productivity.

By addressing these gaps, this study will provide valuable insights into the socio-economic dynamics shaping agricultural development in Bamyan Province, ultimately informing policy decisions and development strategies tailored to the region's needs.

2. Research Methodology

This research adopts an applied approach and employs a mixed-methods design for data collection and analysis. The mixed-methods approach, integrating quantitative and qualitative data, is widely regarded as a reliable research method in social sciences due to its ability to provide comprehensive and nuanced insights. Data were collected from two main sources: quantitative data through questionnaires and qualitative data through semi-structured interviews and focus groups.

The target population includes residents of Bamyan province, a region with unique social and economic characteristics that make it ideal for examining agricultural development challenges. Bamyan province comprises eight districts, and a systematic sampling method with random selection from villages within each district was used to ensure a representative sample. According to the Directorate of Economy of Bamyan Province, the province's estimated population is 572,874.[9] Cochran's formula was applied to determine the sample size, recommending a minimum of 383 participants. To enhance accuracy, the sample size was increased to 400 questionnaires, 10 interviews, and two focus groups (each with five participants). The main data has been collected through questionnaires from various districts, while interviews and focus groups serve a supporting role and will complement the questionnaires.

Data collection was conducted by an experienced research team in July and August 2024. Quantitative data were gathered using structured questionnaires, which included closed-ended and Likert-scale questions to assess farmers' perceptions of economic challenges, access to resources, and government support. These data were analyzed using SPSS software, with descriptive statistical methods employed to identify behavioral patterns and relationships between variables.

Qualitative data were obtained through semi-structured interviews and focus groups, which explored themes such as gender roles in agriculture, climate change impacts, and market accessibility. These data were analyzed using MAXQDA software, employing interpretive and content analysis approaches to identify key themes and insights.

Finally, both quantitative and qualitative data were analyzed simultaneously within the framework of the mixed-methods approach. This integration of diverse data sources and

9 Directorate of Economy of Bamyan Province, *Profile of Bamyan Province: Economic and Social Outlook* (Kabul: Ministry of Economy, Islamic Republic of Afghanistan, 2019), 5-35.

complementary analytical techniques ensured comprehensive and accurate results, contributing to a deeper understanding of the research topic.

Permission for the research was obtained from Bamyan University, Social Sciences Faculty Research Committee for Social Sciences and Humanities with the meeting and decision number 2/2 dated 21.05.2024.

3. Findings

3.1. Socio-Economic Profile of Participants

This study employs a mixed-methods approach to analyze both quantitative and qualitative data, focusing on the social and economic factors influencing agricultural development in Bamyan Province. Ethnographic insights reveal that men predominantly dominate agricultural activities, though focus groups and interviews were conducted with equal gender representation (50% men and 50% women). In contrast, survey respondents were overwhelmingly male (99%), with 88% married and ages ranging from 18 to 93. In Afghan society, primary responsibility for agriculture rests with men, while women participate mainly as assistants in farm work. Traditional social norms and current government regulations further confine many women to household duties and prohibit them from being interviewed by male researchers. Consequently, only one percent of female farmers—those who are heads of households with no adult male family members—were able to take part in the questionnaire through direct interviews. In contrast, the interview and focus-group components included a different group: fifty percent of the female participants were educated women who are not farmers themselves but work in institutions and organizations or are otherwise knowledgeable about agricultural conditions in Bamyan. These women were selected to supplement the questionnaire data by serving as analysts of the social and economic circumstances of rural communities.

Most farmers (77%) are landowners, while the remaining 23% cultivate land belonging to others. Family structures in rural Bamyan are typically extended, with an average household size of 8.5 members. These large families play a key role in the household economy, with multiple generations contributing to agricultural activities.

The majority of participants are illiterate or possess only basic literacy skills (see Figure 1). This low literacy rate underscores the need for accessible and practical training programs tailored to farmers with limited formal education. In contrast, interview and focus group participants were more educated, including individuals with bachelor's, master's, and doctoral degrees. This difference in educational attainment between survey respondents and qualitative participants may reflect the challenges of reaching highly educated individuals through random sampling methods.

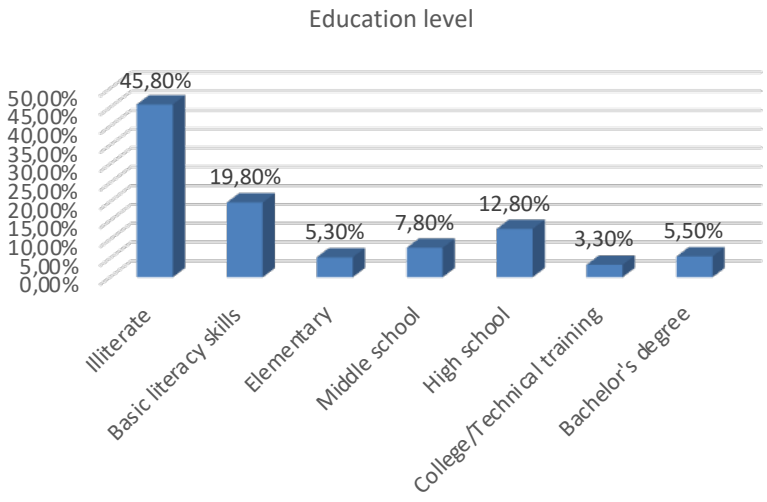

Figure 1: Education Level of Respondents

In rural communities, children often participate in agricultural activities alongside their parents. Data from this study illustrate the prevalence of child labor in Bamyan Province: 34.8% of participants reported that their children work in agriculture, while 65.3% indicated that their children do not. This finding aligns with broader national trends, as the Central Statistics Organization reports that approximately 57% of child laborers in Bamyan are engaged in agricultural activities.[10]

The data also reveal gender disparities in child labor participation. Boys are more likely to be involved in agricultural work compared to girls, as detailed in Figure 5. This gender difference may reflect traditional roles and expectations within rural households, where boys are often prioritized for physically demanding tasks, while girls may be assigned domestic responsibilities.

These findings highlight the significant role of children in the agricultural economy of Bamyan Province. However, the high prevalence of child labor raises concerns about the long-term impacts on children's education, health, and overall development. Addressing this issue requires targeted interventions, such as promoting access to education, raising awareness about the risks of child labor, and supporting families with alternative income-generating opportunities.

10 Central Statistics Organization, Socio-Demographic and Economic Survey Bamyan (Kabul: Central Statistics Organization of Islamic Republic of Afghanistan and UNFPA Afghanistan, 2013), 47.

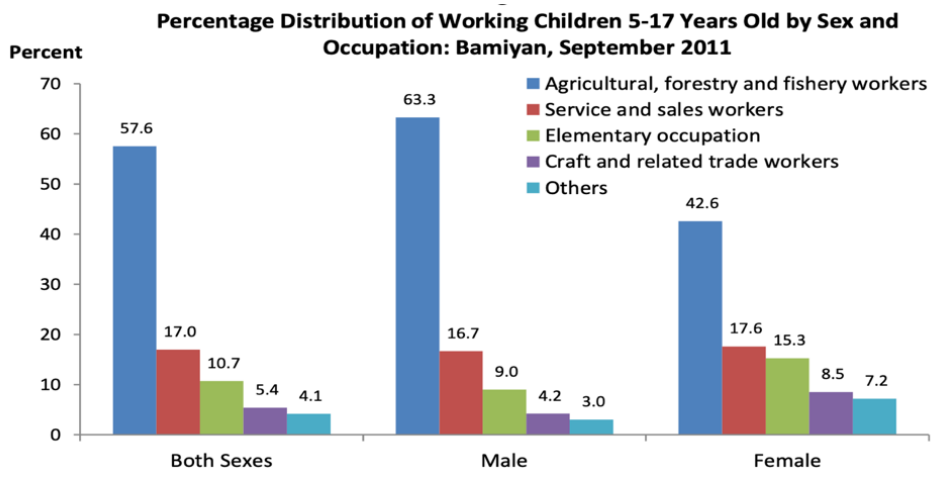

Figure 2: Type and Extent of Child Employment by Gender

Children engaged in agricultural activities become child laborers, enduring the social harms associated with work. They are deprived of certain rights, particularly education, and illiteracy jeopardizes their future economic prospects.[11]

In rural regions, large extended families are common, with households typically consisting of 8.5 members on average. These families primarily engage in subsistence farming for their livelihood. The majority of these households face financial difficulties, with 57% generating less than $1,000 in annual income (see Table 1). The average yearly earnings among the surveyed families amounted to $1,472, which translates to a per capita income of $172 when considering family size. As of 2023, the nation's per capita GDP reached $415.[12] It is worth noting that the per capita income of farming families in Bamyan is roughly half of the national average.

Based on the data, the findings indicate that there is no significant correlation between education and farmers' income, as most farmers have not received formal training in agriculture. Many of the educated individuals are those who either dropped out of school or, after graduation, were unable to find employment and were therefore compelled to engage in farming. These educated individuals generally lack practical experience in agricultural activities and tend to have fewer skills compared to illiterate farmers who have been consistently involved in farming throughout their lives.

11 Ramazan Ahmadi – Mohammad Reza Akbari, "Social Harms of Child Labor in Afghanistan (Case Study of Bamyan City)", *Journal of Social and Political Sciences* 7/2 (June 2024), 186-203.

12 ALFRED, "Gross Domestic Product Per Capita for Afghanistan" (Accessed 20 April 2025).

Table 1: Annual Income of Farming Households in Bamyan 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%

Bamyan Province, one of Afghanistan's poorest regions, faces severe economic challenges, with a significant portion of its population enduring extreme hardship.[13] Global assessments suggest that without substantial political and economic improvements, the majority of the population risks falling into poverty. Recent data from 2022 reveals that nearly half of Afghanistan's population—over 18 million people—requires substantial assistance to meet basic needs. The ongoing crisis has left more than one million children at risk of starvation and malnutrition, highlighting the dire circumstances faced by countless families.

One of the most distressing outcomes of this economic crisis is the reported practice of families resorting to selling their children due to extreme poverty.[14] This tragic reality underscores the depth of desperation and the absence of viable survival alternatives in the region.

According to Hasell's study, the international poverty line for 2022 was set at $2.15 per day, the minimum daily expenditure required to meet basic needs.[15] Those unable to meet this threshold are considered to be living in extreme poverty. In Bamyan Province, approximately 90% of the rural population falls below this line, unable to spend $2.15 per person daily. This staggering statistic highlights the widespread economic deprivation in the region and underscores the urgent need for targeted interventions to address poverty and improve living conditions.

These findings emphasize the critical need for comprehensive economic and social support programs in Bamyan Province. Tackling the root causes of poverty—such as unemployment, inadequate infrastructure, and limited access to education and healthcare—is essential to breaking the cycle of deprivation. Immediate action from both national and international stakeholders is crucial to implementing sustainable solutions and enhancing

13 Ramazan Ahmadi, *Poverty and Social Policies Related to Poverty in Afghanistan: The Example of Bamyan City* (Antalya: Akdeniz University, Social Sciences Institute, Doctoral Dissertation, 2024), 252.

14 Ahmadi, *Poverty and Social Policies Related to Poverty in Afghanistan: The Example of Bamyan City*, 77.

15 Joe Hasell, Our World in Data, "From $1.90 to $2.15 a day: the updated International Poverty Line" (Accessed 10 April 2025).

the quality of life for the region's residents.

3.2. The General Condition of Quality Life of Participants

The living conditions of individuals in a society are directly linked to economic and political circumstances. Economic and political growth and development strengthen the quality of life for people in society, while economic and political issues negatively affect citizens' quality of life. Data shows the quality of life of the residents of Bamyan province. According to the data obtained in recent years, the quality of life for farmers in Bamyan has worsened, and the details, including percentages, can be seen in Table 2.

Table 2: Assessment of Participants' Quality of Life.

The quality of life in recent years		
	Frequency	Percent
Much better	13	3.3
Better	27	6.8
Remained the same	137	34.3
Worse	201	50.3
Much worse	22	5.5
Total	400	100.0

According to interviews and focus group discussions, the quality of life in Bamyan has deteriorated significantly in recent years. Key factors include reduced income, the suspension of development projects, rising unemployment, recurring droughts, and limited access to markets. Compounding these challenges are the impacts of climate change, the withdrawal of investors, ongoing security crises, and shrinking job opportunities, all of which have intensified poverty and economic pressure. Furthermore, social, cultural, and gender equality conditions have also suffered considerably.

In rural areas, livelihoods are heavily dependent on agricultural income, as illustrated in Table 3. However, agricultural earnings in Bamyan Province have declined in recent years, negatively impacting the quality of life for farmers and their families.

Table 3: The Agricultural Income in Recent Years.

The agricultural income in recent years		
	Frequency	Percent
Increased significantly	10	2.5
Increased	40	10.0
Remained the same	185	46.3
Decreased	152	38.0
Decreased significantly	13	3.3
Total	400	100.0

Qualitative data still shows that the agricultural income situation in Bamyan has been influenced by various factors in recent years. Some respondents attribute the growth in agricultural activity to unemployment in other sectors, migration to rural areas, and support from institutions, while most consider the decline in agricultural income to be due to climate change, water scarcity, increased production costs, lack of chemical fertilizers and improved seeds, and reduced crop yields. Some also assess the agricultural situation as relatively stable.

3.3. Social Factors Affecting Agricultural Development

3.3.1. The Role of Government and Institutional Support in Agricultural Development

Government and institutional support play a critical role in agricultural development and improving farmers' livelihoods. Such support leads to increased production, reduced costs, improved product quality, enhanced food security, job creation, and poverty reduction in rural communities.

This section examines the extent of support provided by national and international institutions, as well as the government, and analyzes how farmers benefit from these initiatives. Data reveals that 70.8% of farmers have received some form of assistance, but this support has rarely been sustained. Among these recipients, 93 percent depended on foreign-funded programs that were mostly ad-hoc and of limited effectiveness. The scale of such aid has declined over time, falling short of farmers' expectations. Many international organizations have even shut down their offices in Afghanistan after foreign funding was suspended. Overall, the reduction in support, coupled with the economic crisis following recent political changes, has negatively impacted agriculture and farmers' livelihoods.

Qualitative data indicates that government and institutional assistance includes the distribution of improved seeds, chemical fertilizers, and agricultural equipment, as well as the provision of technical training. Organizations such as the World Food Program (WFP), Aga Khan Foundation, Food and Agriculture Organization (FAO), and Action Aid have not only supplied resources but also improved infrastructure, including storage houses and cold storage facilities. However, since the fall of the Republic in August 2021[16] , government and international institutional support has declined significantly due to political, economic, and security challenges.

Government aid and institutional support remain vital for agricultural development in Bamyan. Evidence shows that such assistance has positively impacted agricultural productivity, increased farmers' incomes, and contributed to economic growth. Moreover, these

16 Ramazan Ahmadi – Chaman Ali Hikmat, "The fall of the Republic Government in Afghanistan and the current Taliban Rule: A survey of public attitudes", *Research in Social Sciences and Technology* 8/4 (November 2023),172-195.

initiatives have sparked greater interest in agriculture among the local population and fostered healthy competition among farmers.

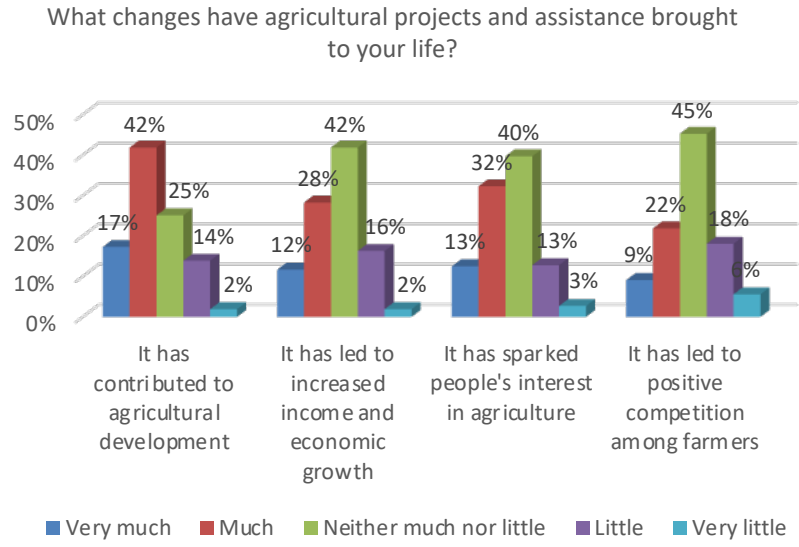

Figure 3: Impact of Government and Institutional Supports on Agriculture Development

3.3.2. Farmers' Needs for Agricultural Development in Bamyan Province

Farmers in Bamyan require financial resources, improved seeds, modern tools, and technical training to advance agricultural development. Key challenges include the lack of irrigation infrastructure and adequate storage facilities for agricultural products. Government support in areas such as marketing, advisory services, and incentive policies for sustainable farming is essential. Additionally, investments in agricultural technology and fostering collaboration between farmers and institutions are crucial to increasing productivity and improving livelihoods.

Based on participants' responses, the most critical needs for agricultural development are prioritized as follows:

- Improved seeds (37%)
- Chemical fertilizers (36%)
- Sufficient water (7%)
- Animal manure (6%)
- Agricultural machinery (5%)

Other needs, though less frequently cited, include canal repairs, agricultural training, construction of water dams, product marketing, storage facilities, pest control agents, and the distribution of improved fruit saplings.

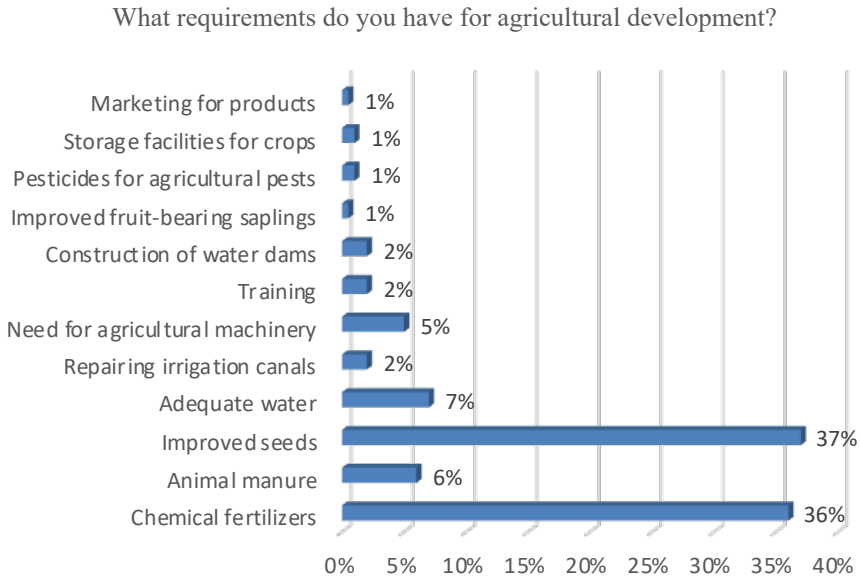

Figure 4: Farmers' Needs for Agricultural Development

3.3.3. Assessment of Farmers' Financial Capacity for Agricultural Development

Farmers have many needs in the agricultural sector, but due to economic difficulties, they are unable to meet these needs on their own. Data shows that most participants lack the capacity to fulfill their agricultural needs to promote growth and development in their farming activities. Instead, they require collaboration from the government and national and international organizations.

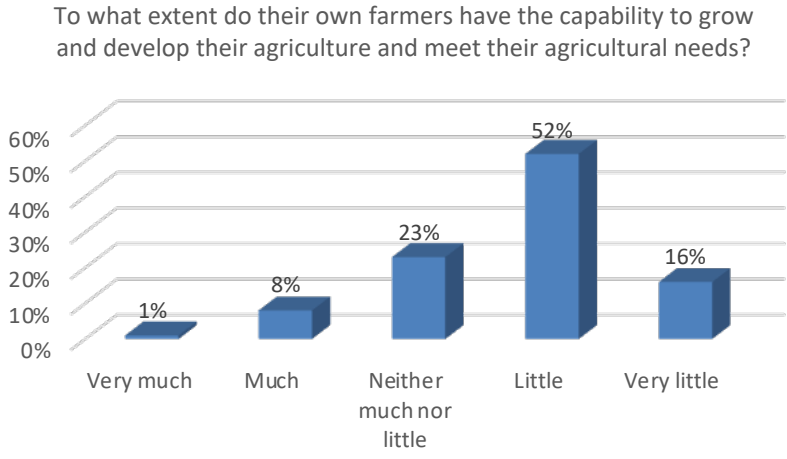

Figure 5: The Capability of Farmers to Meet Agricultural Needs

3.3.4. The Role of Extension in Agricultural Development

Agricultural extension is one of the most critical activities in agricultural development, playing a decisive role in advancing farming practices. Within this framework, leading and skilled farmers are essential, as they introduce innovative methods and serve as role models for others. Data from participant responses highlights the presence of such farmers in Bamyan Province, with 41.1% of farmers confirming that their villages have skilled and leading farmers who guide others in agricultural activities. Additionally, 31% of farmers reported learning useful agricultural practices and training from their peers and neighbors.

The data also reveals the types of crops and agricultural activities farmers in Bamyan prefer. According to the statistics:

- 52% grow potatoes,
- 30% grow wheat,
- 6% grow chickpeas,
- 5% grow beans,
- 3% grow barley,
- 2% practice crop rotation, and
- 2% plant fruit trees.

These preferences reflect the most common agricultural activities in the region.

Furthermore, the data identifies the factors influencing farmers' choices of crops and activities. The primary reason, cited by 59% of farmers, is the potential for higher income and productivity. Other reasons include the provision of food, the suitability of the land for cultivation, the lack of success with other crops, and the low water requirements for the chosen activities.

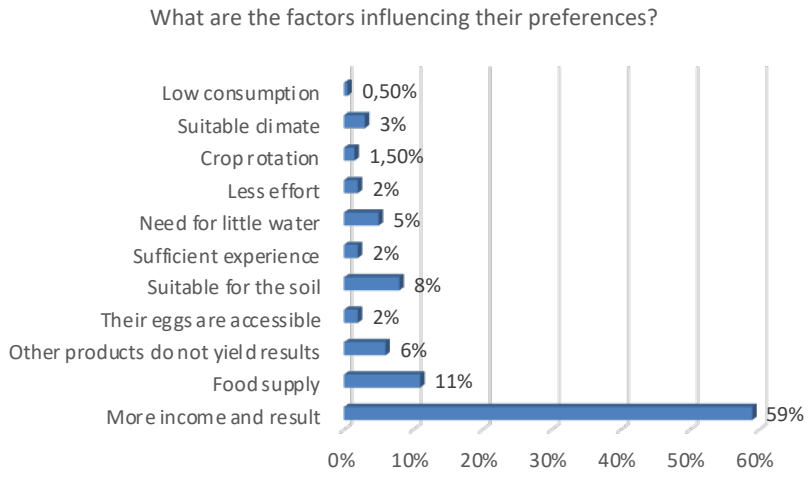

Figure 6: Factors Influencing the Preference for Planting Agricultural Crops

3.3.5. The Role of Agricultural Education in Agricultural Development

Agricultural education is a process that equips farmers and individuals with the knowledge, skills, and information needed for the effective management of agricultural activities. Its primary goal is to enhance farmers' capabilities, enabling them to increase production, reduce costs, and improve their quality of life.

This section examines the extent to which farmers have received agricultural training from the government and institutions. Data reveals that only 28% of farmers have participated in such training, while the majority have not yet had access to formal agricultural education.

Although agricultural training plays a critical role in agricultural development, the above statistics indicate that only a small percentage of farmers have benefited from it. When asked about their interest in agricultural training, 96% of farmers expressed a desire to improve their farming skills through education, while 4% showed no interest.

Among the limited number of farmers (28.1%) who have received agricultural training, the majority (69%) reported that it significantly contributed to increasing their income and agricultural productivity (see Figure 7). These findings underscore the positive impact of agricultural education on farmers' livelihoods and agricultural development.

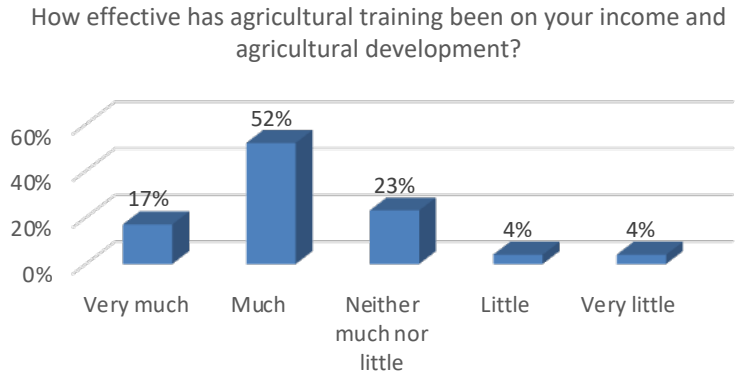

Figure 7: Impact of Agricultural Training on Farmers' Income and Agricultural Development

Qualitative data also show that agricultural training has a significant positive impact on farmers' income and agricultural development. Many participants believe that practical and hands-on training, especially in areas like planting, harvesting, irrigation, storage, and the use of modern technologies, can create substantial differences. If these trainings are provided correctly and specialized, farmers will be able to reduce pest damage, increase crop productivity, and improve their income.

3.3.6. The Role of Social Institutions in Agricultural Development

In Bamyan, there are committees and organizations that support farmers, but their activities are limited. Local committees and NGOs such as AKF provide farmers with advice and financial support, and the Agriculture Department also offers advisory services in the Bamyan center. However, most respondents have stated that the activities of these committees have declined or disbanded after the change of government. In some areas, farmers are solving their problems independently with community-based consultations.

Data shows the existence of committees or institutions in the village and region that provide advice to farmers on agricultural matters and assist in making informed decisions about the economic aspects of farming. Statistics indicate that 98% claim that no such committees or institutions exist at the village or regional level to offer advice or support in agricultural matters.

Data still shows the presence of agricultural cooperatives in Bamyan province. According to the responses of the participants, 92% of farmers claim that there is currently no agricultural cooperative at the village level, while only 8% claim that an agricultural cooperative exists.

Table 4: Presence of Advisory Committees or Organizations for Farmers

No	Questions	Yes	No
1	Do you have a village or regional committee or institution to assist and advise you on agricultural matters or support farmers and make decisions on production, distribution, and consumption of agricultural products?	2%	98%
2	Are there cooperatives in your area?	8%	92%

Therefore, the weak presence of advisory institutions and cooperatives slows down agricultural development in rural areas, and farmers cannot address their agricultural needs on their own.

3.3.7. Cooperation and Solidarity Among Farmers for Agricultural Development

Cooperation and solidarity among farmers play a crucial role in improving livelihoods and sustainable development in farming communities. By forming cooperative groups, farmers can share resources, increase productivity, and address challenges such as climate change and market fluctuations. These collaborations also provide access to financial resources, technical training, and better markets, while strengthening trust and social cohesion.

This section analyzes the degree of solidarity among farmers in rural communities, and data generally shows the level of cooperation and collaboration among farmers based on the Likert scale. According to the data, 42% (very much and much options) claim that there is solidarity among farmers, 22% are indifferent, and 36% (little and very little options) of respondents believe that coordination and cooperation among farmers do not exist. Addi-

tionally, data shows the level of collective activities among farmers for agricultural development in Bamyan Province. The data indicates that the level of collective activities among farmers for agricultural development is relatively low (see Figure 8).

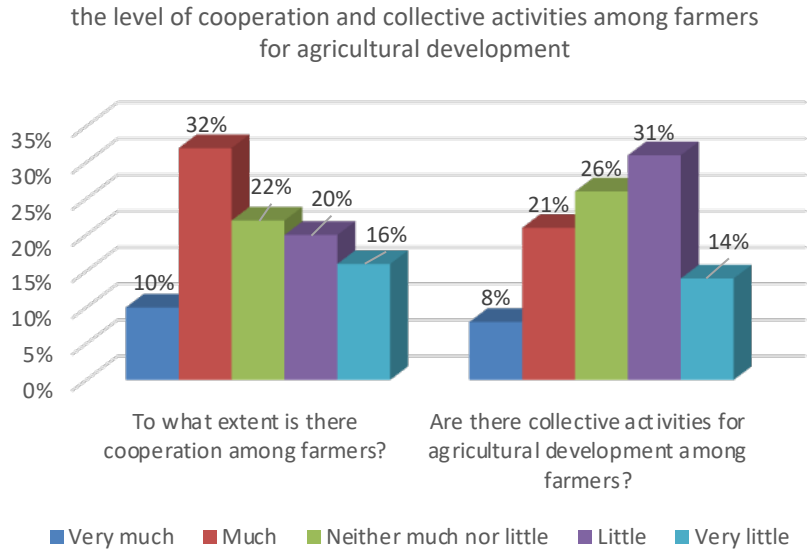

Figure 8: The Level of Collective Activities Among Farmers for Agricultural Development

Qualitative data shows that collective cooperation for agricultural development in Bamiyan has declined. However, collaboration in areas such as knowledge exchange, resource sharing, irrigation, crop harvesting, and sales is still occasionally observed among farmers. Activities like the Farmer's Festival and agricultural exhibitions, which once provided opportunities for cooperation, have now decreased, and the lack of resources and support hinders their expansion.

Also, this section indicates the structure of socio-agricultural regulations such as the water chief, herd leader, and Shepherd at the village and regional level. Data shows that 24% of the participants believe such socio-agricultural regulatory structures exist. However, 76% of the respondents claim that such structures do not exist at the village and regional level. Also, data illustrates the regulations regarding the use of natural resources such as water, firewood, grazing areas, non-fruit trees, green areas, and pasturelands. According to the statistics, 48% of farmers believe that there are regulations for the use of natural resources at the village and regional levels, while 52% of participants claim that such regulations do not exist at the village level.

Table 5: The Extent of the Existence of the Socio-agricultural Structure in Bamyan Province.

No	Questions	Yes	No
1	Are there traditional social structures in agriculture such as water chief, herd leader, and shepherd in your area?	76%	24%
2	Are there regulations for the use of natural resources (Water, firewood, pasture, non-fruit trees, green areas, etc.) in your area?	48%	52%

3.3.8. Farmers' Coordination in Selling Products and Marketing

Farmers' coordination in selling products through cooperatives and agricultural groups can enhance their bargaining power, facilitate access to different markets, and help improve their economic and social conditions by reducing costs and ensuring a more equitable distribution of income.

This section shows the level of coordination among farmers for selling agricultural products. Only 4% of farmers coordinate for collective sale of products, while 96% sell their products individually without coordination. Also, data shows the level of coordination among farmers in determining the prices of agricultural products. 4% of farmers coordinate with each other to set the prices of agricultural products and make joint decisions. However, 96% of farmers do not coordinate with each other in determining the prices and make individual decisions about the prices of their products.

Table 6: Coordination of Farmers for Selling Agricultural Products

No	Questions	Indicators	Percent
1	Is there coordination among farmers in selling agricultural products? In other words, do they sell their products collectively and coordinated, or does each person sell their products individually?	Coordinated and collective sales of products by farmers.	4%
		Individual sale of products without coordination.	96%
2	Is there coordination among farmers in determining the prices of agricultural products, or is it decided individually?	There is coordination in determining the prices of agricultural products.	4%
		There is no coordination among farmers in determining prices and rates.	96%

Market access is one of the most pressing challenges for farmers in Afghanistan—especially in Bamyan Province. Mountainous terrain, rugged or non-existent roads, insufficient infrastructure, the ongoing economic crisis, and international sanctions all hinder farmers from earning the expected returns on their produce. The situation is exacerbated by the absence of agricultural cooperatives, a political structure that offers little support to rural producers, weak coordination among farmers, and their reliance on local middlemen[17].

17 Ramazan Ahmadi, "Opportunities and Challenges in Agricultural Product Marketing: A Sociological Analysis of Bamyan Province, Afghanistan", *Journal of Economics, Innovative Management and Entrepreneurship* 3/1 (March 2025), 56-72.

3.3.9. The Role of Women in Agricultural Development

Women play an important role in agricultural development, especially in rural areas, where they actively participate in planting, harvesting, processing products, managing household resources, and raising livestock. Improving women's access to education, technology, and financial resources can contribute to increased productivity and sustainable development. However, limitations such as the closure of schools and universities for women[18] , restrictions on women's employment, restricted access to larger markets, lack of marketing training, and insufficient support reduce their ability to fully capitalize on this role.

Data illustrates the level of participation and contribution of women in agricultural development in Bamyan province. According to the statistics, women have a significant role in agricultural development (see Figure 9).

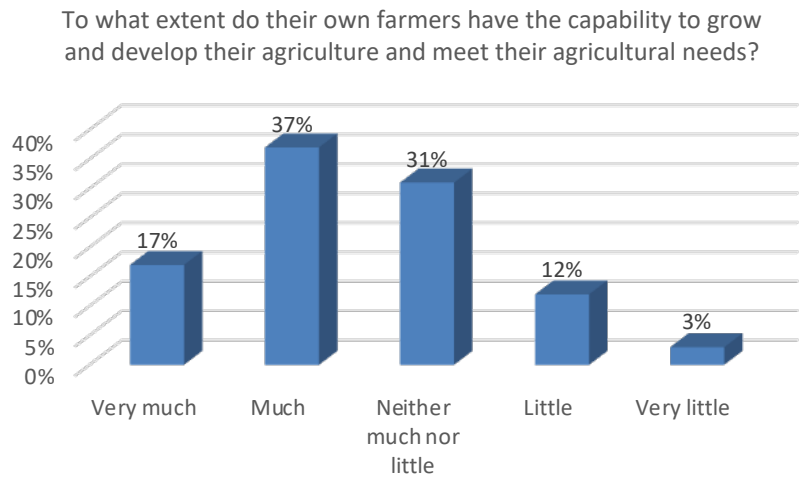

Figure 9: Women's Contribution to Agricultural Development

The most important activities and the participation of women in agriculture that contribute to agricultural development are displayed, ranked by priority. These include land preparation (27%), preparing food for farmers (24%), dairy processing (12%), harvesting crops (11%), drying fruits (6%), crop cutting (6%), animal husbandry (4%), potato farming (4%), handicrafts made from sheep wool (3%), care of agricultural products (2%), and other activities, each accounting for less than 1%.

18 Chaman Ali Hikmat - Ramazan Ahmadi, "The Impact of University Closures on Students' Motivation After the Fall of the Afghan Government by the Taliban", *Journal of Social and Political Sciences* 6/4(December 2023), 47-59.

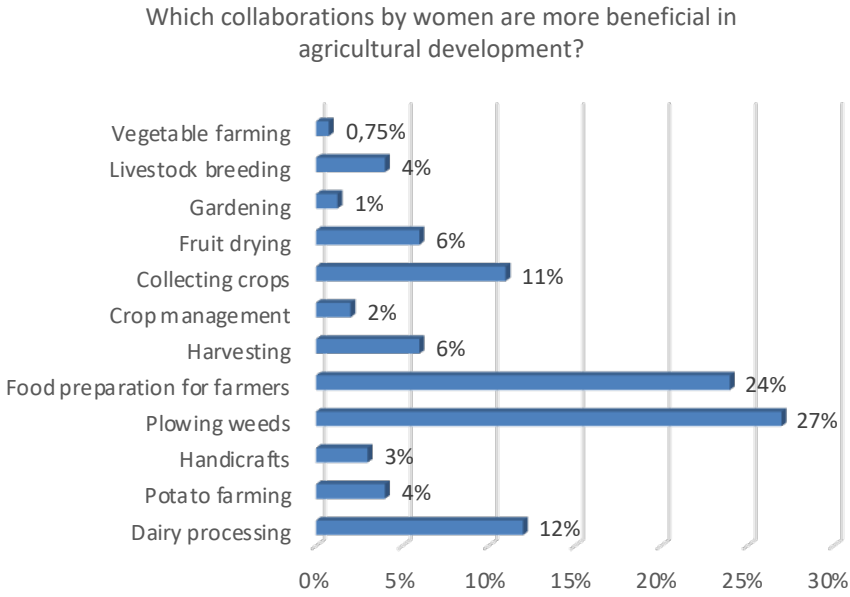

Figure 10: Key Beneficial Activities of Women in the Agricultural Sector

According to qualitative data, women in Bamyan collaborate with men in all stages of agriculture, from planting to harvesting and processing products. Their main activities include planting, harvesting, collecting products, raising livestock, and caring for animals. The extent of their participation varies, and in some areas, they are fully involved in all agricultural and livestock tasks.

3.4. Economic Factors Effecting Agricultural Development

3.4.1. The Role of Crops in Agricultural Development

In Bamyan province, people are usually more engaged in agriculture, but alongside it, they are also involved in gardening and animal husbandry. In this section, the effectiveness of agriculture, animal husbandry, and gardening is presented in Table 7, and the data shows that the effectiveness of agriculture is 68.8%, gardening is 10%, and animal husbandry is 20.8%.

Table 7: Comparison of the Effectiveness of Agriculture, Animal Husbandry, and Gardening

In your opinion, is agriculture and horticulture more beneficial or animal husbandry in your village or region?			
		Frequency	**Percent**
Valid	Agriculture	275	68.8
	Horticulture	40	10.0
	Animal husbandry	83	20.8
	Others	2	.5
	Total	400	100.0

In Bamyan province, the most important agricultural products, in order of priority, are wheat and potatoes in the first place, followed by fodder for animals, barley in the third place, and beans in the fourth. Table 8 shows the percentage of crops grown in Bamyan and the interest of farmers in cultivating them.

Table 8: Agricultural Crop Cultivation in Bamyan Province

No	**Agricultural crops**	**Percent**	
		Yes	**No**
1	Wheat	89.5%	10.5%
2	Barley	52.8%	47.3%
3	Potato	89.5%	10.5%
4	Beans	30.5%	69.5%
5	Chickpeas	4.3%	95.8%
6	Forage (clover, alfalfa, etc.)	70%	30%
7	Saffron	0.3%	99.8%
8	Cucumber	4.5%	95.5%
9	Okra	2.5%	97.5%
10	Cauliflower	1.8%	98.3%
11	Fava bean	2.8%	97.3%
12	Bitter vetch	11%	89%
13	Lentil	10%	90%

Farmers in Bamyan province are engaged in horticulture alongside agriculture. Data shows the percentage of people employed in horticulture, with 43% of farmers involved in both agriculture and horticulture. Data shows the percentage of each fruit tree, with the most important being apples and apricots.

Table 9: Importance of Fruit Trees in Bamyan Province

No	Fruits	Percent	
		Yes	No
1	Apple	85.7%	14.3%
2	Apricot	73.4%	26.6%
3	Plum	16.9%	82.6%
4	Berry	22.1%	77.9%
5	Grape	18.6%	81.4%
6	Almond	16.8%	83.2%
7	Peach	12.8%	87.2%
8	Pear	15.8%	84.2%
9	Walnut	22.2%	77.8%
10	Cherry	17.4%	82.6%

Also, data shows the usefulness of agricultural products in relation to the income and earnings of farmers, which can be observed in detail. According to the statistics, the most useful product is potatoes, followed by wheat in the second place, fodder in the third, beans in the fourth, and barley in the fifth place. Other products also exist, but they have a smaller share, which can be seen in the table.

Table 10: The Usefulness of Agricultural Products on Farmers' Income

No	Which of your products has been most beneficial to your income and productivity?	Very much	Much	Neither much nor little	Little	Very little	I don't cultivate it
1	Wheat	46.80%	37.50%	3.50%	0.80%	0%	11.50%
2	Barley	6.30%	13.80%	21.80%	4%	5.80%	48.50%
3	Potato	61.80%	21.80%	4.30%	1.30%	0.30%	10.80%
4	Beans	8.30%	10.50%	8.80%	2.30%	1.30%	69%
5	Chickpeas	0.30%	2%	1.50%	0.80%	0.50%	95%
6	Forage (clover, alfalfa, etc.)	16%	25.30%	17.50%	2.50%	5.30%	33.50%
7	Saffron	0.30%	0.30%	0.30%	0.30%	0%	99%
8	Cucumber	0%	0.50%	1%	0.80%	2%	95.80%
9	Okra	0%	0.30%	0.30%	0.80%	0%	98.80%
10	Cauliflower	0.00%	0.50%	0.30%	0.80%	0%	98.50%
11	fava bean	0%	1.50%	0.80%	0.30%	0.80%	96.80%
12	bitter vetch	0.30%	3.50%	3.80%	0.80%	0.55	91.30%
13	Lentil	1.50%	2.30%	3%	0.30%	1%	92%

3.4.2. The Role of Machinery in Agricultural Development

Agricultural machinery plays a crucial role in agricultural development and has a significant impact on productivity, cost reduction, and improvement of production quality.

Data shows that 29% of farmers use tractors and machinery for planting crops, 34.8% use animal-drawn equipment, and 36.3% of farmers use both systems for crop planting.

Table 11: Farmers' Use of Tractors and Machinery

Now as compared to before, do you use tractors and machinery for planting crops or plow with oxen?			
		Frequency	**Percent**
Valid	Use tractors and machinery	116	29.0
	Plow with oxen	139	34.8
	Sometimes both systems.	145	36.3
	Total	400	100.0

Furthermore, in the threshing section, 78.8% of farmers use a threshing machine, 10.8% of farmers use traditional methods with animals, and 10.5% of farmers use both systems.

Table 12: Threshing Methods of Farmers in Bamyan Province.

Now as compared to before, do you use a thresher machine for threshing or traditional tools with animals?			
		Frequency	**Percent**
Valid	Use a thresher machine	315	78.8
	Traditional tools with animals	43	10.8
	Sometimes both systems.	42	10.5
	Total	400	100.0

3.4.3. The Role of Agricultural Innovation on Agricultural development

Innovation in agriculture can have a significant impact on increasing farmers' income. These innovations include the introduction of new technologies, improvements in planting and harvesting methods, the use of more resilient seeds, and optimal management of water and soil resources. By adopting these technologies, farmers can increase their production and reduce production costs.

In this section, the question about innovation in farming methods was asked, and according to the statistics, 16% of participants have introduced innovations to their farming methods in recent years and 84% of participants have not introduced innovations. The innovations those are introduced by 16% of participants in their agricultural practices indicate that the most important innovation is, first, crop rotation; second, the use of improved seeds; third, fertilizing the crops; fourth, growing beans; and fifth, land plowing. Other innovations, in order, include soil transformation, growing asafetida, proper irrigation, land

tilling, and planting lentils, which have also been adopted by farmers, though to a lesser extent (see Figure 11).

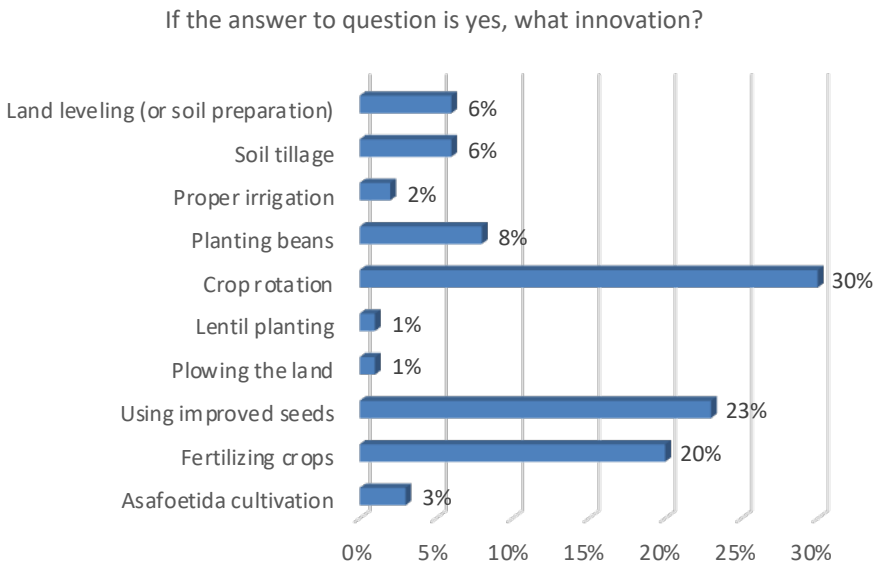

Figure 11: The Type of Innovation in Agricultural Activities

This section analyzes the extent of the positive impact of innovation on increasing agricultural income. Data shows that 96% of participants (very much and much options) claim that innovation has had a significant impact on increasing their agricultural income and productivity (see Figure 12).

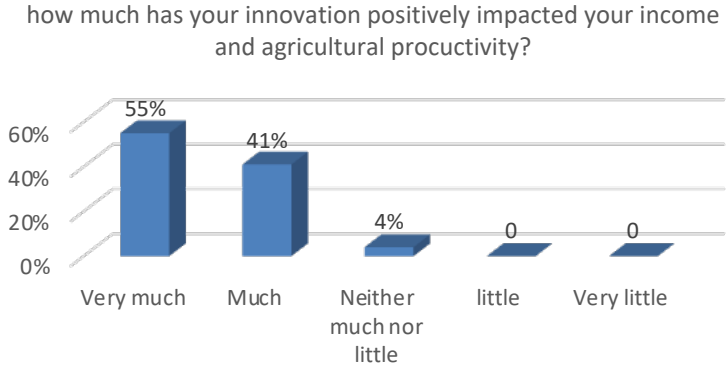

Figure 12: Positive Impacts of Innovation on Farmers' Income and Agricultural Productivity

According to qualitative data, in recent years, farmers in Bamyan province have made innovations in agriculture. These innovations include the use of improved seeds for potatoes and wheat, chemical fertilizers, and modern techniques in growing various crops such

as beans, lentils, and vegetables. Additionally, the creation of storage facilities for preserving crops, the construction of greenhouses and poultry farms, and the use of agricultural machinery like tractors and threshers are other significant agricultural development. However, some believe that the innovations are still limited compared to the needs of farmers, and many farmers continue to use traditional methods.

3.4.4. The Role of New Crops on Agricultural Development

New crops play a crucial role in agricultural development by increasing productivity, improving farmers' income, and strengthening food security. The introduction of improved seeds, climate-resistant crops, and modern agricultural technologies can enhance production levels and reduce dependence on unfavorable natural conditions. Additionally, new products create broader marketing opportunities, boost farmers' competitiveness, and contribute to economic development in rural communities. According to data, 20% of farmers have experienced planting a new crop and 80% of participants have not experienced planting a new crop. The farmers have recently planted the new crop highlighting the highest percentage related to the cultivation which is bean by 59%. The next crops cultivated by farmers include asafetida, carrots, lentils, okra, mung beans, cucumbers, rice, tomatoes, and chickpeas (see Figure 13).

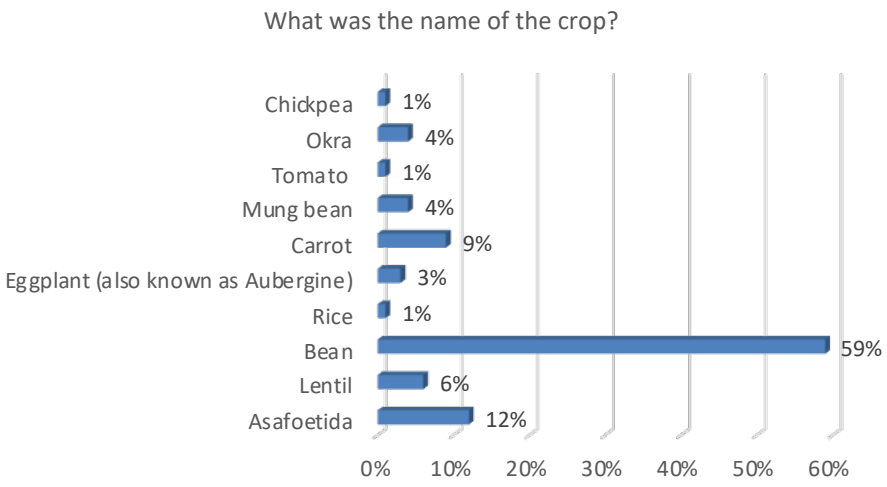

Figure 13: Name of the Newly Cultivated Crop

The effectiveness of the new crops grown by farmers is analyzed in Figure 10. The statistics show that 63% (very much and much options) of the participants claim that the new crops were very beneficial, while only 4% of the participants were dissatisfied with the new crop and did not achieve the desired income (see Figure 14).

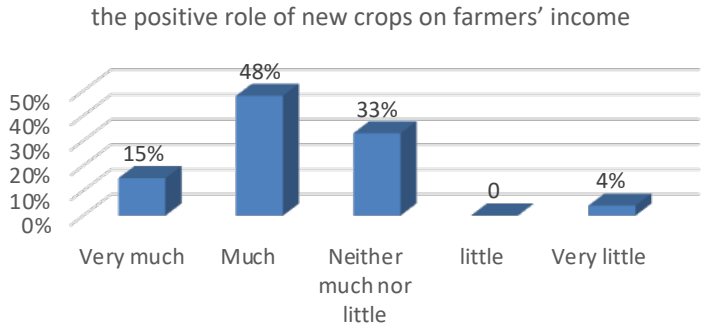

Figure 14: The Effectiveness of Agricultural Products on Farmers' Income

3.4.5. The Role of Marketing in Agricultural Development

Marketing plays a vital role in agricultural development by enabling farmers to access markets, increase the value of their products, and raise their income. Effective marketing reduces product wastage, enhances competitiveness through efficient supply chains, and raises awareness among farmers about market demands and quality standards, making production more targeted and sustainable. Furthermore, digital marketing and e-commerce contribute to strengthening the rural economy and improving farmers' livelihoods.

This section analyzes the marketing of agricultural products in Bamyan Province. Figure 15 examines factors such as:

- Opportunities for selling agricultural and livestock products in the market,

- Market conditions for selling products,

- Achieving expected profits,

- Consumption of agricultural products within the community, and

- Market demand for agricultural and livestock products.

The data reveals that most participants hold a negative view of the opportunities for selling agricultural and livestock products, market conditions, and achieving expected profits. However, they have a positive view of the consumption of agricultural products within the community, as these products fulfill basic livelihood needs. Despite this, farmers are unable to achieve the expected profits from selling their products, highlighting the challenges in the current marketing environment.

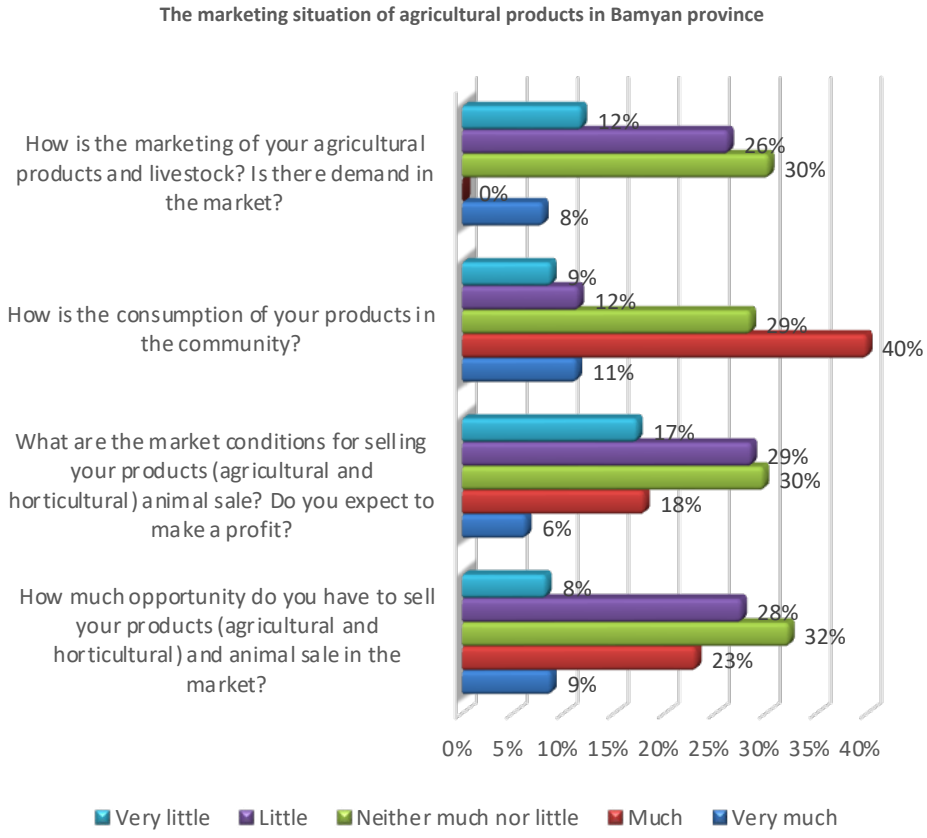

Figure 15: Analysis of the Status of Agricultural Product Marketing in Bamyan.

Similarly, the data shows that 4% of farmers have access to local and national markets to sell their products, while 96% of farmers do not have access to these markets and sell their products to local and regional middlemen and traders in their village or area.

According to qualitative data, farmers in Bamyan face significant challenges in selling their products. Due to storage limitations and lack of access to suitable markets, they are forced to sell their products at low prices during harvest time. The absence of effective marketing, insufficient connection with national and international markets, and reliance on local middlemen are some of the reasons for this situation. Additionally, the cold weather conditions in Bamyan create limited opportunities for sales, and many farmers, due to unfamiliarity with international standards and lack of proper infrastructure, are unable to export their products at competitive prices. Product marketing in Bamyan is traditional and unprofessional, and issues such as lack of storage facilities, inadequate packaging, and failure to use modern tools hinder the growth of this sector.

3.4.6. Effective Economic Policy for Agricultural Development

Government policies play a vital role in supporting farmers, improving rural livelihoods, and promoting economic growth. By focusing on the development of agricultural infrastructure, providing financial assistance, promoting modern technologies, and offering specialized training, these policies facilitate access to both domestic and international markets. In Afghanistan, given the current crises, the formulation of comprehensive policies aimed at strengthening infrastructure, supporting small-scale farmers, and facilitating access to financial resources is essential to foster agricultural development, reduce poverty, and enhance food security.

This section displays the existence of effective government policies for marketing agricultural products. According to the respondents, only 1% claim that there is an effective government policy for marketing agricultural products, while 99% of participants believe that there is no effective government policy in place for marketing agricultural products, and the market conditions for agricultural products are not conducive. Also data shows that there is no government policy to support farmers in creating local, national, and international markets, and only 1% of the participants claim that such a policy exists.

Figure 13: Presence of an Effective Government policy for Marketing Agricultural Products

No	Questions	Yes	No
1	Is there an effective government policy regarding the marketing of agricultural products?	1%	99%
2	Are there government policies to support farmers and facilitate local, national, and international markets for agricultural products?	1%	99%

The lack of effective government policies for marketing agricultural products and creating local, national, and international markets in Bamyan reduces farmers' motivation to produce more and of higher quality, making their income uncertain and unpredictable. This situation, coupled with increased waste and limited access to larger markets, places additional economic pressure on farmers and creates significant barriers to the development and modernization of agriculture.

4. Discussion

4.1. Socio-Economic Factors Influencing Agricultural Development in Bamyan

The findings of this study highlight the intricate relationship between socio-economic factors and agricultural development in Bamyan. Similar to global studies[19][20], the socio-economic conditions of farmers, including income levels, education, and access to resources, sig-

19 Das - Mondal, "Socio-Economic Factors Affecting Agricultural Production and Income in Bangladesh", 56–63.

20 Ifeanyi-obi - Matthews-Njoku, "Socio-Economic Factors Affecting Choice of Livelihood Activities Among Rural Dwellers in Southeast Nigeria", 52-56.

nificantly impact agricultural productivity. The limited use of modern agricultural technology, as observed in Afghanistan[21], Bangladesh[22], and Nigeria[23], further reinforces the need for targeted policies that facilitate farmers' access to modern equipment and resources.

4.2. Gender and Agricultural Development

The study reveals that while agriculture is predominantly managed by men, women play a significant role in agricultural activities, particularly in processing and storage. However, cultural barriers and limited access to agricultural education hinder their full participation, echoing findings by Sabri et al.[24]. Gender inequality in agricultural development, as also noted in Bangladesh[25], suggests the necessity of policy interventions to ensure equitable access to agricultural resources and education for women.

4.3. Education and Knowledge Transfer in Agriculture

Consistent with Sarhadi et al., this study highlights the lack of agricultural education and extension services in Bamyan, which negatively impacts productivity. Only 28% of farmers have received training, underscoring the urgent need for expanded access to educational programs. International examples, such as those cited by Mirjat et al., demonstrate that increasing educational opportunities for farmers enhances productivity and sustainability. Agricultural extension programs, led by skilled farmers and supported by institutions, could bridge the knowledge gap and facilitate the adoption of modern technologies.

4.4. Climate Change and Agricultural Sustainability

Climatic changes, prolonged droughts, and limited market access have significantly reduced agricultural productivity in Bamyan, mirroring trends observed in other developing agricultural economies.[26] The reliance on traditional farming methods exacerbates farmers' vulnerability to climate-induced challenges. This study emphasizes the importance of climate adaptation strategies, such as improved irrigation systems, crop diversification, and sustainable practices, to mitigate the adverse effects of climate change.

4.5. Role of Government and Institutional Support

The study confirms that agricultural development in Bamyan heavily depends on external assistance, with 93% of support coming from non-governmental organizations. Sim-

21 Hassanzoy, "Agricultural Development in Afghanistan: Some Temporal Reflections", 1-16.

22 Das - Mondal, "Socio-Economic Factors Affecting Agricultural Production and Income in Bangladesh", 56–63.

23 Ifeanyi-obi - Matthews-Njoku, "Socio-Economic Factors Affecting Choice of Livelihood Activities Among Rural Dwellers in Southeast Nigeria", 52-56.

24 Sabri et al., "Enhancing women's participation in agricultural education in Afghanistan through distance education by the National Agricultural Education College (NAEC) Afghanistan", 67-78.

25 Das - Mondal, "Socio-Economic Factors Affecting Agricultural Production and Income in Bangladesh", 56–63.

26 Sayyar et al., "Strengthening and Growth of the Agriculture Sector and Its Impacts on the Economy of Afghanistan", 66-68.; Burian et al., "Concept of agriculture development in Logar Province, Afghanistan", 366-372.

ilar to findings by Burian et al., the lack of sustained government intervention and strategic policies has hindered progress. While government support during the republican era contributed to agricultural development, recent political and economic challenges have drastically reduced aid, exacerbating financial hardships for farmers. To foster sustainable growth, policies must prioritize long-term investments in agricultural infrastructure and extension services.

4.6. Market Access and Economic Policies

Farmers in Bamyan face significant barriers to accessing national and international markets due to inadequate infrastructure and weak market coordination. Studies by Burian et al.[27] and Das and Mondal [28] indicate that the absence of structured marketing systems and storage facilities forces farmers to sell their products at lower prices. The lack of cooperatives and regulatory frameworks further limits their bargaining power. Encouraging collective sales and forming agricultural cooperatives could enhance market participation, reduce reliance on intermediaries, and improve income distribution.

4.7. Technological Innovation and Adoption

Despite the availability of innovative agricultural practices, only 16% of farmers in Bamyan have adopted modern techniques such as crop rotation and improved irrigation. This aligns with global patterns where traditional practices dominate in the absence of institutional support.[29] Given the positive impact of technological innovations on productivity, increasing awareness and accessibility of modern practices should be a policy priority.

4.8. Implications and Policy Recommendations

- Enhance Agricultural Education: Expand training programs and extension services to improve farmers' knowledge and productivity.
- Promote Gender Inclusion: Ensure women's access to agricultural education and resources to strengthen their role in the sector.
- Build Climate Resilience: Implement adaptation measures, such as improved irrigation and drought-resistant crops, to mitigate climate risks.
- Strengthen Government and Institutional Support: Increase financial aid and infrastructure investment to support sustainable agricultural development.
- Improve Market Access and Cooperatives: Develop cooperatives and structured marketing systems to enhance farmers' bargaining power and income stability.
- Encourage Technology Adoption: Promote modern agricultural technologies through incentives and awareness programs to boost productivity.

27 Burian et al., "Concept of agriculture development in Logar Province, Afghanistan", 366-372.

28 Das - Mondal, "Socio-Economic Factors Affecting Agricultural Production and Income in Bangladesh", 56–63.

29 Mirjat et al., "Socio-economic Factors Affecting Farm Yield in Tando Allahyar District", 215-224.

This study identifies key socio-economic challenges affecting agricultural development in Bamyan and proposes actionable solutions. Addressing issues such as limited education, market access, gender inequality, and climate change requires a multi-faceted approach involving government action, institutional support, and community-driven initiatives. By implementing strategic policies and fostering sustainable practices, Bamyan can enhance its agricultural productivity and build economic resilience.

Conclusion

This study employed a mixed-methods approach to analyze the social and economic factors influencing agricultural development in Bamyan Province. Key findings reveal that agriculture, primarily managed by men with significant contributions from women, remains the backbone of Bamyan's economy. Farmers, averaging 44 years old and largely illiterate, face numerous challenges, including economic instability, climate change, and declining external support. Potatoes, wheat, and fodder dominate crop production, while livestock farming and horticulture provide supplementary income. However, structural inefficiencies and marketing challenges hinder profitability.

Government and organizational support have historically been crucial, particularly during the republican era. However, following the political transition, only limited support has been provided to farmers through international organizations. Over time, this assistance has significantly decreased, leaving farmers with scarce resources and growing economic hardships. Furthermore, foreign aid has often been short-term and ineffective, failing to meet farmers' expectations. In fact, many international organizations have closed their offices in Afghanistan due to the suspension of foreign funding. Although the limited agricultural training has been effective, participation rates are low, and the lack of collective coordination among farmers reduces their market impact. The absence of advisory institutions and cooperatives further weakens the sector.

The findings highlight the urgent need for targeted interventions to address these challenges. Policymakers must prioritize investments in modern agricultural infrastructure, such as irrigation systems, storage facilities, and mechanization. Expanding training programs and strengthening cooperatives can enhance knowledge-sharing and collective bargaining power. Additionally, improving access to national and international markets through better logistics and pricing mechanisms is essential for boosting farmers' incomes.

Future agricultural development in Bamyan hinges on policy reforms, increased financial support, and local capacity-building initiatives. Without such measures, economic vulnerabilities will persist, and farmers will continue to rely on traditional methods with limited market access. However, with strategic interventions—such as promoting sustainable practices and technological innovations—the agricultural sector in Bamyan can achieve greater productivity, economic resilience, and food security for future generations.

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