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WAYS OF ENHANCING AND IMPROVING THE AGROTOURISM POTENTIAL OF THE BUKHARA REGION

Abstract

This article examines the development of agritourism in the Bukhara region of Uzbekistan and identifies practical directions for its improvement. The aim of the study is to determine the principal obstacles to agritourism development and to elaborate evidence-based recommendations adapted to local conditions. The research was carried out in 2023–2024 across six districts of the region and combined a structured survey of 450 farm managers and 320 local residents, semi-structured interviews with 45 experts, a SWOT analysis, statistical processing of regional data for 2019–2023 in SPSS Statistics 26.0, and comparative analysis of foreign and domestic experience. The results show that, despite the region possessing the natural, agricultural and cultural resources required for agritourism, its potential remains underused because of systemic constraints: insufficient infrastructure (78% of respondents), a shortage of qualified personnel (65%), a lack of financial support (82%) and weak marketing (88%). Correlation analysis revealed a strong positive relationship between infrastructure development and the number of agritourism facilities ($r = 0.82$, $p < 0.01$). On this basis, seven interrelated priority directions are proposed. The study concludes that a systemic, coordinated approach can increase the number of agritourism facilities several-fold by 2030 and substantially raise rural incomes.

Keywords

agritourism, rural tourism, tourism infrastructure, agriculture, tourist services, tourism development, Bukhara region, regional economy.

Introduction

In recent years, the Republic of Uzbekistan has placed considerable emphasis on developing its tourism sector, and agritourism has emerged as a new and promising direction. Presidential Decree No. PF-5326 of 5 February 2018, “On measures for the accelerated development of tourism”, together with the Tourism Development Strategy for 2019–2025, provided the legal and institutional foundations for promoting agritourism as a distinct branch of the national tourism economy [9, 10]. Agritourism is increasingly recognised in international practice as an effective instrument for developing rural areas, diversifying the rural economy, securing employment for the rural population and raising household incomes [1, 2].

The Bukhara region is distinguished by its rich historical heritage, ancient architectural monuments and well-developed agriculture. The area offers significant opportunities for agritourism: a favourable climate, deep-rooted farming traditions, and established branches such as cotton growing, viticulture and melon cultivation. However, this potential is far from being fully realised, and the mechanisms that would convert agricultural and cultural assets into sustainable tourism products remain underdeveloped.

The theoretical and empirical literature provides a useful frame for the present study. Phillip, Hunter and Blackstock (2010) developed an influential typology of agritourism, defining it as a form of tourism that allows visitors to become acquainted with farming, to relax on working farms and to consume natural products [3]. Flanigan and colleagues (2014) analysed agritourism from the perspectives of both providers and visitors, establishing a relationship between service quality and the satisfaction of customer needs [4]. Barbieri and Mshenga (2008) studied the influence of firm and owner characteristics on the performance of agritourism farms and found that the length of time in business, the number of employees and farm size positively affect performance, underscoring the role of human and organisational resources [5] — a finding

consistent with the present study, in which the survey identified a shortage of qualified personnel as one of the principal problems.

In the post-Soviet space, Borodina (2020) analysed agritourism as a promising direction for rural development, emphasising its role in diversifying the rural economy, creating new jobs and raising local living standards [6]. Within the Uzbek context, Nazarov and Yuldasheva (2021) examined the prospects for rural tourism and concluded that, although the country possesses considerable potential, problems such as insufficient infrastructure, weak marketing strategies and underdeveloped state-support mechanisms persist [7]. Akhmedov (2022) investigated tourism-infrastructure development in the Bukhara region specifically, noting that, despite the area's heritage and agricultural potential, roads, accommodation and utilities remain insufficiently developed [8] — observations corroborated by 78% of the respondents in the present study.

The review indicates that, while foreign and domestic studies of agritourism exist, comprehensive analyses combined with practical recommendations for a specific territory such as the Bukhara region are scarce. The scientific novelty of this work is that, for the first time, a complex analysis of agritourism development is carried out using the example of the Bukhara region, and improvement directions adapted to local conditions are proposed. Accordingly, the objective of the study is to identify the principal obstacles to agritourism development in the region and to elaborate practical proposals for overcoming them.

Materials

The study was conducted in 2023–2024 in six districts of the Bukhara region — Bukhara, Olot, Jondor, Peshku, Qorako'l and Vobkent — selected to reflect the region's agricultural and geographical diversity. The objects of the study were farms, entrepreneurs engaged in providing agritourism services, and local residents. The subject of the study comprised the socio-economic mechanisms and problems of agritourism development in the region.

Primary empirical material was collected from March 2023 to February 2024. The quantitative material was obtained through a structured questionnaire of 25 items administered to 450 farm managers and 320 representatives of the local population. The qualitative material was drawn from semi-structured interviews with 45 experts representing the regional Tourism Development Department, the Department of Agriculture and entrepreneurs active in agritourism. Secondary material consisted of official statistical data of the Statistics Department of the Bukhara region for 2019–2023, covering tourism investment, agricultural exports and the number of tourism facilities. The composition of the empirical base is summarised in Table 1.

Table 1 – Composition of the empirical base of the study

Source of data	Method	Sample / coverage
Farm managers	Questionnaire	450 respondents
Local residents	Questionnaire	320 respondents
Sectoral experts and entrepreneurs	Interview	45 experts
Regional statistical records	Statistical analysis	2019–2023 (5 years)
Foreign and domestic destinations	Comparative / case study	6 destinations

Methods

To achieve the research objectives, a combination of scientific methods was applied. General scientific methods were used throughout: analysis and synthesis to decompose the research object into its constituent parts and to generalise the findings [11]; induction and deduction to draw conclusions from the particular to the general and vice versa [12]; and observation and comparison to study practical situations and to compare the experience of different territories [13].

The questionnaire survey served as the principal instrument for collecting quantitative data, a method widely used in the social sciences and in tourism research [14, 15]. The questionnaire consisted of 25 structured items aimed at identifying opportunities for agritourism development,

existing problems and unmet needs. Respondents were selected using random sampling [16]. The reliability of the instrument was assessed using Cronbach’s alpha, which equalled $\alpha = 0.87$, indicating high internal consistency [17].

Semi-structured in-depth interviews enabled the collection of qualitative data and a deeper understanding of the problems [18]. Interviews with 45 experts lasted 45–60 minutes and were recorded as audio. The resulting material was processed using thematic analysis [19]. SWOT analysis was employed to systematically assess the region’s strengths, weaknesses, opportunities and threats; this is a widely used tool in strategic planning and in the tourism field [20, 21]. In the course of the SWOT analysis, expert assessments and survey results were generalised and their interrelationships evaluated through matrices [22].

Statistical analysis was used to process quantitative material and draw conclusions. On the basis of data from the Statistics Department of the Bukhara region, the dynamics of tourism and agricultural indicators for 2019–2023 were analysed [23]. Data were processed in SPSS Statistics 26.0 [24], applying descriptive statistics (mean, standard deviation, frequency distribution), correlation analysis (Pearson coefficient) and regression analysis [25]. Through comparative analysis and the case-study method, foreign experience (Italy, Spain, Türkiye) and domestic experience (the Samarkand, Kashkadarya and Fergana regions) were examined [26, 27]. To ensure the reliability and validity of the results, the principle of triangulation was applied: findings obtained through different methods — survey, interview and statistical analysis — were cross-compared [28]. The study was conducted in accordance with national and international ethical standards, and the confidentiality of respondents’ data was guaranteed [29].

Results

The survey conducted among 450 farm managers and 320 local residents across the six districts made it possible to identify the principal obstacles to agritourism development [14, 16]. Of the respondents, 78% indicated insufficient road and utility infrastructure, 65% pointed to a shortage of qualified personnel, 82% noted a lack of financial support, and 88% identified weak marketing strategies as the main barriers. The high value of Cronbach’s alpha ($\alpha = 0.87$) confirmed the reliability of these results [17]. The distribution of the principal barriers is shown in Figure 1 and detailed in Table 2.

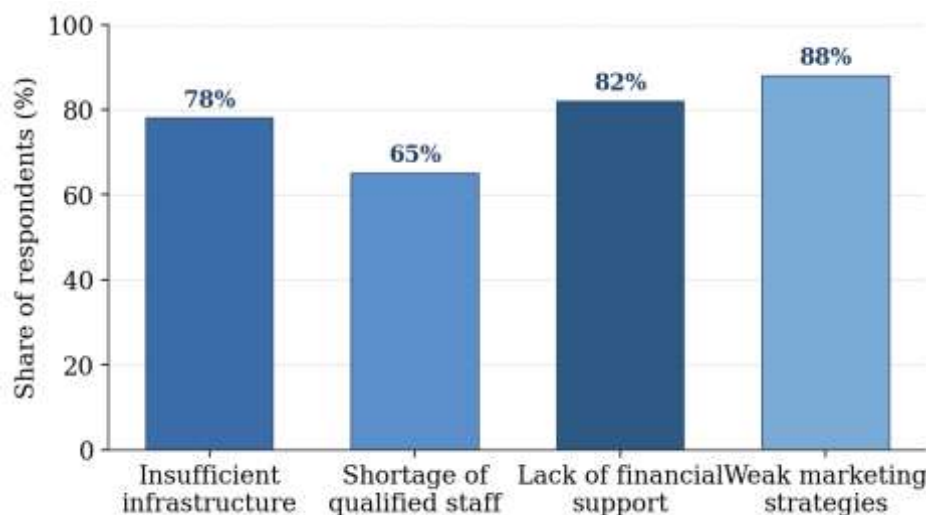


Figure 1 – Principal barriers to agritourism development reported by respondents, %

Table 2 – Principal barriers to agritourism development by respondent share

Barrier	Respondents, %	Rank
Weak marketing strategies	88	1
Lack of financial support	82	2
Insufficient infrastructure	78	3
Shortage of qualified personnel	65	4

The in-depth interviews with 45 experts, processed through thematic analysis [18, 19], confirmed the need for a complex approach. Representatives of the Tourism Development Department highlighted weak marketing (only 12% of regional facilities have an official website); representatives of the Department of Agriculture pointed to technical and technological deficiencies; and entrepreneurs emphasised difficulties in obtaining credit.

The SWOT analysis [20, 21, 22] revealed the region's strengths: 142,000 hectares of cotton-growing farms, 28,000 hectares of vineyards, 15,000 farms producing 450,000 tonnes of fruit and vegetables a year, 2,300 craftspeople engaged in traditional handicrafts, and 78 historical villages. Among the weaknesses were the failure of 67% of accommodation and catering facilities to meet national standards and the absence of digital technologies and modern marketing tools. Opportunities included state-support programmes, the attraction of foreign investment and digital transformation, while the threats were intensifying competition and the impact of economic shocks. The matrix is presented in Table 3.

Table 3 – SWOT analysis of agritourism development in the Bukhara region

Strengths	Weaknesses
142,000 ha of cotton-growing farms; 28,000 ha of vineyards; 15,000 farms, 450,000 t of produce/year; 2,300 craftspeople; 78 historical villages	67% of facilities below national standards; absence of digital technologies; weak modern marketing tools; shortage of qualified personnel
Opportunities	Threats
state-support programmes; attraction of foreign investment; digital transformation; growing demand for rural experiences	intensifying inter-regional competition; impact of economic shocks; seasonality of demand; climate and resource pressures

Statistical analysis of the regional data for 2019–2023, performed in SPSS Statistics 26.0 [23, 24, 25], revealed clear positive dynamics. Investment in the tourism sector rose from 45 billion UZS in 2019 to 127 billion UZS in 2023 (a 2.8-fold increase), while exports of agricultural products grew from 23 million USD to 58 million USD (a 2.5-fold increase). These trends are shown in Figure 2 and summarised in Table 4. Descriptive statistics and correlation analysis (Pearson $r = 0.82$, $p < 0.01$) demonstrated a strong positive relationship between infrastructure development and the number of agritourism facilities. Regression analysis predicted that a 10% improvement in road quality would increase the number of tourists by 14–16%.

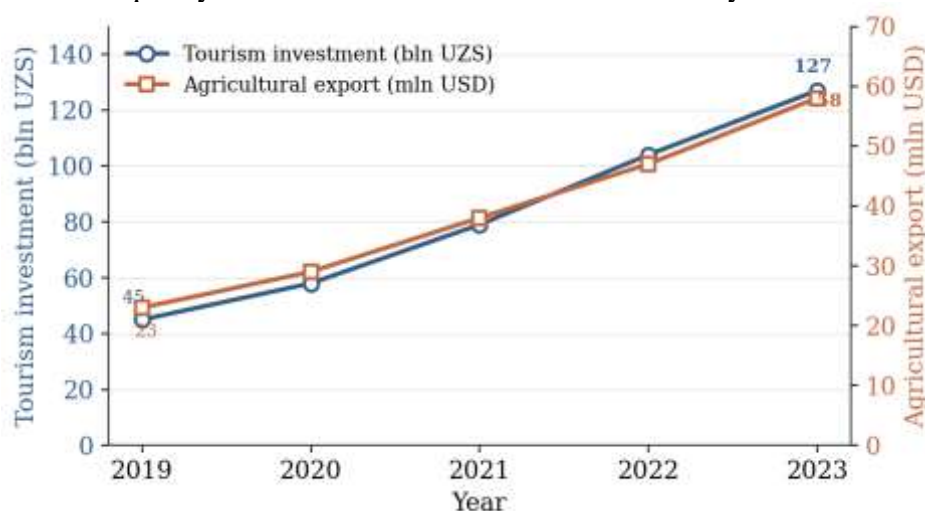


Figure 2 – Dynamics of tourism investment and agricultural exports in the Bukhara region, 2019–2023

Table 4 – Dynamics of key indicators of the Bukhara region, 2019–2023

Indicator	2019	2020	2021	2022	2023
Tourism investment, bln UZS	45	58	79	104	127
Agricultural exports, mln USD	23	29	38	47	58

Comparative analysis and case studies [26, 27] of foreign experience (Tuscany in Italy, Andalusia in Spain and Cappadocia in Türkiye) and domestic experience (the Samarkand, Kashkadarya and Fergana regions) provided additional insights. The Italian experience showed that high-quality roads and communications can increase tourist numbers three- to four-fold; the Turkish experience demonstrated that targeted training and certification programmes can improve service quality by 45–60%; and the Spanish experience indicated that digital marketing can raise the share of foreign tourists several-fold. The Samarkand experience confirmed the effectiveness of state-support mechanisms such as concessional credit and tax incentives. On the basis of triangulation [28], the convergent evidence indicates that, although the region possesses substantial potential, systemic constraints prevent its full utilisation.

Discussion

The findings confirm and extend the existing literature. The dominant role of infrastructure among the identified barriers is consistent with the classical view that tourism infrastructure is a fundamental determinant of destination competitiveness [30, 31], and with Akhmedov's (2022) observations on the Bukhara region [8]. The strong correlation between infrastructure and the number of agritourism facilities ($r = 0.82$) provides a quantitative basis for prioritising infrastructure investment. Synthesising the survey, interview, statistical and comparative evidence, seven interrelated priority directions for developing agritourism in the region are proposed.

First, modernisation of rural roads and utility infrastructure should be implemented over 2025–2027. As classical tourism-planning research has shown, infrastructure underpins destination competitiveness [30, 31], and the Tuscan case demonstrated that transport investment increased visits to rural tourism facilities 3.4-fold. For the Bukhara region, the modernisation of some 450 km of roads in the six districts, together with improvements to electricity and water supply, is envisaged.

Second, human-capital development should be prioritised by establishing an agritourism training centre and training at least 500 farmers and entrepreneurs a year. Human-capital theory [32] and the concept of investment in agricultural education [33] have demonstrated the positive effect of upgrading workforce skills on economic performance, and Barbieri and Mshenga (2008) found that workforce size and business longevity positively affect agritourism farm performance [5]. The curriculum should cover hospitality, marketing, financial management and ecological agriculture.

Third, financial-support mechanisms should be created, including concessional credit at an annual rate of 7–10%. The theory of imperfect credit markets [34] underlines the importance of financial support for small rural enterprises, and the experience of the European Union's LEADER programme shows that preferential lending can increase the number of rural tourism enterprises substantially over five years. For the Bukhara region, microloans of up to 500 million UZS for terms of three to five years are recommended.

Fourth, digital transformation should be used to secure market access. A single regional agritourism portal and mobile application, integrating online booking and payment, should be developed. The capacity of information technology to transform the tourism industry is well established [35], and the Andalusian experience showed that a digital marketing strategy can sharply raise the share of foreign tourists. The portal should be available in four languages (Uzbek, Russian, English and German) and include virtual tours, customer reviews and GIS mapping.

Fifth, a quality-assurance and certification system should be introduced. National standards and a multi-stage certification mechanism for agritourism facilities should be elaborated, building on ISO 9001 quality-management principles and international tourism-certification practice. Research on corporate social responsibility in tourism highlights the value of credible, stakeholder-

oriented sustainability practices [36]; standards should address accommodation, catering, excursion services and ecological requirements.

Sixth, a cluster-based approach should be adopted by creating clusters for producing environmentally clean products in cooperation with local residents. Cluster theory [37] and the concept of rural development [38] emphasise the role of clusters in raising innovation and competitiveness, and the Cappadocian ecological-agriculture cluster increased the added value of local products several-fold. In the Bukhara region, clusters for organic grapes, fruit and vegetables, and handicrafts are advisable.

Seventh, the investment climate should be improved. A system of tax incentives for foreign and domestic investors during the first three years — including profit-tax exemption and reductions in property tax — is proposed. Research on fiscal policy shows that tax incentives can help attract investment under appropriate conditions, although their effectiveness depends on sound design and a stable macroeconomic and regulatory environment [39, 40], and the experience of CIS countries suggests that three- to five-year tax incentives can support a marked rise in tourism investment. Taken together, these seven directions form a coherent, systemic package: infrastructure development, human-capital improvement, financial support, digital transformation, standardisation, cluster development and investment promotion reinforce one another and generate a synergistic effect.

Conclusion

The study has shown that the Bukhara region possesses considerable potential for agritourism — abundant natural resources, a rich cultural heritage and a strong agricultural base — yet this potential remains underused because of systemic constraints relating to infrastructure, personnel, finance and marketing. By integrating survey, interview, statistical and comparative evidence through triangulation, the research identified these constraints quantitatively and established a strong link between infrastructure development and the growth of agritourism facilities.

On this basis, seven interrelated priority directions were elaborated: modernisation of infrastructure, development of human capital, creation of financial-support mechanisms, digital transformation, introduction of standardisation and certification, formation of ecological clusters, and improvement of the investment climate. These measures are mutually reinforcing and adapted to local conditions. Forecasts indicate that their full implementation over 2025–2030 could increase the number of agritourism facilities in the region several-fold, attract 150,000–200,000 tourists a year and raise the value of agricultural products by 35–40%. Further research could focus on piloting the proposed model in selected districts and on developing quantitative tools for monitoring its socio-economic impact.

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Muassislar:
Buxoro davlat universiteti
“Economic science” mas'uliyati cheklangan jamiyati

<p style="text-align: center;">"IQTISODIYOT VA TURIZM" xalqaro ilmiy va innovatsion jurnali</p> <p style="text-align: center;">2026-yil 3-son (29)</p> <p style="text-align: center;">2021-yildan chiqa boshlagan.</p> <p style="text-align: center;">OBUNA INDEKSI: 200117</p> <p style="text-align: center;">Manzil: Buxoro shahri, M.Iqbol ko'chasi, 11-uy, 2-bino, 403-xona.</p>	<p style="text-align: center;">ilmiy va innovatsion nashri</p> <p style="text-align: center;">Jurnal oliy o'quv yurtlarining professor- o'qituvchilari, ilmiy tadqiqotchilar, ilmiy xodimlar, magistrantlar, talabalar, akademik litsey va kasb-hunar kollejlari hamda maktab o'qituvchilari, shuningdek, keng ommaga mo'ljallangan.</p> <p style="text-align: center;">Jurnalda nazariy, ilmiy-metodik, muammoli maqolalar, fan va texnikaga oid yangiliklar, turli xabarlar chop etiladi.</p> <p style="text-align: center;">Nashr uchun mas'ul: Gavhar XIDIROVA Muharrir: Navruz-Zoda Baxtiyor Negmatovich</p>	<p style="text-align: center;">Jurnal tahririyat kompyuterida sahifalandi. Chop etish sifati uchun bosmaxona javobgar.</p> <p style="text-align: center;">Bosishga ruxsat etildi 01.06.2026 Bosmaxonaga topshirish vaqti 08.06.2026 Qog'oz bichimi: 60x84. 1/8 Tezkor bosma usulda bosildi. Shartli bosma tabog'i – 12,0 Adadi – 100 nusxa Buyurtma №391. Bahosi kelishilgan narxda.</p> <p style="text-align: center;">“Sadriiddin Salim Buxoriy” MCHJ bosmaxonasida chop etildi. Bosmaxona manzili: Buxoro shahri M.Iqbol ko'chasi 11-uy.</p>
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