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IMPROVING LABOR MANAGEMENT IN SMALL BUSINESSES IN THE AGRICULTURAL SECTOR¹Baltashev J. M., ²Tasbaev K. A.¹Karakalpakstan Institute of Agriculture and Agrotechnologies,²Researcher at Berdaq Karakalpak State University

Introduction. The agricultural sector remains one of the fundamental pillars of regional economic stability, particularly where small enterprises and private farming entities constitute the primary drivers of production and employment. Strengthening labor management systems within these structures is essential not only for enhancing operational efficiency and market competitiveness, but also for ensuring sustainable rural livelihoods and social well-being. In the context of increasing economic transformation and technological modernization, the rational organization and strategic governance of human resources in small agricultural businesses acquire heightened significance.

Notwithstanding their substantial contribution to food security and local development, small-scale agricultural enterprises frequently encounter structural and managerial constraints. These include restricted financial capacity, seasonal variability of labor demand, insufficient professional training, informal employment practices, and limited implementation of contemporary human resource management mechanisms. Such challenges often lead to suboptimal allocation of labor resources, reduced productivity, and weakened adaptive capacity in competitive agrarian markets.

The present research is devoted to the scientific substantiation of mechanisms aimed at improving labor management in small businesses operating within the agricultural sector. Particular emphasis is placed on the development of organizational and economic approaches that promote efficient workforce planning, professional competence enhancement, performance-based motivation systems, and the integration of innovative managerial technologies. The study seeks to formulate theoretically grounded and practically applicable recommendations for optimizing labor utilization, increasing labor productivity, and reinforcing the sustainability of small agricultural enterprises at the regional level. To achieve these objectives, a комплекс methodological framework is employed, incorporating systematic analysis, comparative evaluation, economic-statistical assessment, and synthesis of empirical data. Through a comprehensive examination of existing labor management practices, the research identifies prevailing deficiencies and structural imbalances, while proposing strategic measures designed to elevate the effectiveness of human capital deployment in small-scale agricultural production. Ultimately, the improvement of labor management serves as a decisive factor in strengthening the competitiveness, resilience, and long-term development prospects of the agricultural small business sector.

Research Methodology. This study examines labor organization and human resource utilization in small agricultural enterprises and private agribusinesses at the territorial level in the Republic of Karakalpakstan. The following methodological approaches were employed:

- **Analytical and statistical methods** - Population distribution, economically active population, and employment data were analyzed to assess labor potential and workforce efficiency.
- **Comparative analysis** - The relationship between total employment, overall population, and economically active population was examined to identify regional disparities and workforce deployment patterns.
- **Systemic approach** - Institutional and organizational constraints limiting effective labor management were identified, along with opportunities to improve human resource governance in small agricultural enterprises.
- **Geographical analysis** - Spatial distribution of the workforce was assessed, highlighting high labor concentration in Nukus city and the districts of Amudarya, Beruniy, and Turtkul, as well as lower labor potential in peripheral districts. This methodology provided the basis for formulating scientifically grounded recommendations to improve labor management efficiency in small-scale agricultural businesses.

Main part. At present, small-scale enterprises and private agribusiness entities constitute an essential component of the socio-economic transformation of the Republic of Uzbekistan. Within the agricultural sector in particular, these хозяйствующие субъекты play a decisive role in expanding productive capacity, strengthening food security, and stabilizing rural employment. The advancement of effective labor management systems in small agricultural businesses is therefore directly associated with sustainable regional development, poverty reduction, and the enhancement of living standards among the rural population.

This research examines the contemporary condition of labor organization and human resource utilization in small agricultural enterprises at the territorial level, with specific attention to structural characteristics, productivity indicators, and managerial efficiency. The study evaluates existing institutional and organizational constraints that hinder optimal workforce deployment and identifies latent opportunities for improving labor governance mechanisms. The principal objective is to formulate scientifically grounded recommendations aimed at reinforcing regional economic growth, raising employment rates, and improving social welfare through more rational and productive use of human capital in agriculture. Small agricultural businesses serve as a catalyst for inclusive economic progress by absorbing surplus labor, generating income sources, and fostering entrepreneurial initiative in rural areas [1]. The effective coordination of labor processes in this sphere not only reduces underemployment but also enhances fiscal revenues, stimulates innovation in farming practices, and promotes technological modernization. Consequently, strengthening labor management frameworks, increasing workforce productivity, and eliminating systemic inefficiencies represent urgent strategic priorities. The regional case of the Republic of Karakalpakstan demonstrates distinct demographic and labor market features that significantly influence the performance of small agricultural enterprises [2]. An assessment of territorial population

distribution indicates a pronounced concentration of residents in Nukus, as well as in the districts of Amudarya District, Beruniy District, and Turtkul District. These territories collectively account for a substantial proportion of the region's population, thereby shaping the spatial distribution of labor resources available to agricultural producers. Intermediate demographic shares are observed in Kungirat District, Khojaly District, Chimboy District, and Ellikkal'a District, whereas the remaining districts exhibit comparatively lower demographic weight.

From the standpoint of labor management in small agricultural businesses, particular emphasis must be placed on the economically active segment of the population, as this cohort directly participates in value creation and regional gross product formation. Analytical evaluation of the distribution of the active workforce reveals a dominant concentration in Nukus city, with relatively elevated shares in Amudarya, Beruniy, and Turtkul districts. Moderate proportions are characteristic of Kungirat, Khojaly, Chimboy, and Ellikkal'a districts, while several peripheral districts display limited labor potential. Patterns of employment largely mirror these territorial disparities, indicating an uneven allocation of productive labor across the region. Such asymmetry necessitates the refinement of labor management strategies, including improved workforce planning, targeted skills development, and differentiated employment policies tailored to the specific socio-economic conditions of each district.

Overall, enhancing labor management in small agricultural enterprises requires a territorially differentiated and analytically substantiated approach [3]. By aligning workforce planning with demographic realities and regional economic structures, it becomes possible to increase labor productivity, strengthen the competitiveness of agrarian small businesses, and ensure balanced socio-economic development within the Republic of Karakalpakstan and the broader Republic of Uzbekistan.

Table 1. Territorial Distribution of Labor Potential in Small Agricultural Enterprises of the Republic of Karakalpakstan (2015-2025 Average)

Region / District	Proportion of Total Population	Economically Active Population Share	Participation in Employment
Republic of Karakalpakstan	Full	Full	Full
Nukus	Highest urban concentration	Leading share of active workforce	Highest employment in agriculture and business
Amudarya	Significant rural population	Above-average labor activity	Strong engagement in small agricultural enterprises
Beruniy	Large agricultural base	High proportion of economically active residents	Active participation in agribusiness
Bozатов	Sparse population	Limited active workforce	Low engagement in entrepreneurial activities
Qoraozak	Small population clusters	Minor share of workforce	Modest labor contribution
Kegeyli	Moderate population	Moderate workforce activity	Medium participation in enterprises
Kungirat	Average population density	Average labor force involvement	Balanced employment distribution
Kanlikol	Low population	Small active workforce	Limited engagement in production
Muynak	Small population clusters	Minor workforce	Minimal entrepreneurial activity
Nukus District	Urban-adjacent	Moderate active population	Medium employment contribution
Taxiatosh	Moderate population	Moderate workforce participation	Medium labor involvement
Takhtakupir	Sparse population	Low active workforce	Limited employment
Turtkul	Considerable population	Above-average workforce	Active in small-scale agriculture
Khojaly	Moderate population	Average workforce	Medium engagement in enterprises
Chimboy	Moderate population	Moderate workforce activity	Balanced participation
Shumanay	Low population	Limited labor activity	Minimal engagement
Ellikkala	Relatively large population	Average active population	Moderate employment participation

In the preceding section, the aggregate labor potential of the Republic of Karakalpakstan was examined. However, for practical purposes, it is essential to identify which specific indicators most accurately reflect the workforce capacity relevant to small agricultural enterprises. To this end, a comparative assessment is undertaken, focusing on the interrelationship between total employment, the overall population, and the economically active segment of the population. Such an approach is necessary due to pronounced regional disparities, where differences between the highest and lowest values may exceed a factor of fifteen [4]. These variations complicate the objective evaluation of labor potential and hinder the formulation of effective strategies for workforce deployment across the republic's cities and districts. Consequently, the efficiency of labor utilization is analyzed by examining the dependence of employment levels

on the size of the economically active population, providing a more precise measure of the potential workforce available to small-scale agricultural businesses.

Table 2. Comparative Indicators of Workforce Utilization in Small Agricultural Enterprises of the Republic of Karakalpakstan (2015-2025 Average)

Region / District	Workforce Utilization Relative to Active Population	Workforce Utilization Relative to Total Population
Entire Republic	Benchmark	Benchmark
Nukus	Slightly above benchmark	Significantly above benchmark
Amudarya District	Marginally higher than average	Moderately higher than average
Beruniy District	Approximately at benchmark	Slightly below average
Bozatov District	Slightly below benchmark	Above average
Qoraozak District	Slightly below benchmark	Below average
Kegeyli District	Near benchmark	Below average
Kungirat District	Slightly below benchmark	Above average
Kanlikol District	Slightly below benchmark	Significantly below average
Muynak District	Marginally above benchmark	Moderately above average
Nukus District	Near benchmark	Moderately above average
Taxiatosh District	Near benchmark	Moderately above average
Takhtakupir District	Slightly below benchmark	Below average
Turtkul District	Approximately at benchmark	Below average
Khojaly District	Near benchmark	Significantly below average
Chimboy District	Near benchmark	Moderately above average
Shumanay District	Slightly below benchmark	Below average
Ellikkala District	Approximately at benchmark	Near average
Regional Average	Slightly below benchmark	Slightly below benchmark

Within this methodological framework, a coefficient value of zero is generally considered normative. Deviations from this baseline, however, signal the existence of a relationship between the analyzed variables. Coefficients approaching unity reflect a low proportionality of the dependent indicator and suggest limited direct correspondence.

Empirical observations in the Republic of Karakalpakstan indicate that the ratio of employed individuals relative to the economically active population consistently exceeds the ratio relative to the total population. Across the examined regions, the mean ratio of employment to the active workforce was slightly above zero, while the corresponding ratio relative to the total population remained marginally higher [5]. These findings highlight that the effective utilization of labor potential in small agricultural enterprises is closely linked to the spatial distribution of labor resources across cities and districts. Accordingly, strategic planning for the development of small enterprises must prioritize the labor factor, emphasizing the alignment of workforce allocation with regional capacities [6]. Furthermore, evaluating employment levels at the district and city level allows for a more precise assessment of labor potential efficiency, enabling identification of the available workforce that can sustain the growth and expansion of small businesses and entrepreneurial initiatives in the agricultural sector.

Main results. The analysis of labor potential in small agricultural enterprises reveals significant territorial disparities in workforce distribution. Nukus city demonstrates the highest concentration of labor, while substantial shares of the active workforce are also observed in the districts of Amudarya, Beruniy, and Turtkul. In contrast, peripheral districts such as Kanlikol, Bozatov, and Qoraozak exhibit lower labor availability, highlighting uneven access to human resources across the region. The ratio of employed individuals relative to the economically active population consistently exceeds that relative to the total population, further reflecting regional differences in labor utilization. Effective deployment of the workforce in small agricultural enterprises is strongly influenced by this spatial distribution, with districts such as Nukus, Amudarya, and Muynak achieving higher workforce absorption, whereas other areas lag behind. This uneven utilization has direct implications for small business development, as efficient labor management contributes to increased employment, fosters innovation in agricultural practices, enhances local budget revenues, and supports technological modernization within the sector.

Conclusion and Recommendations. Small agricultural enterprises and private agribusinesses play a pivotal role in driving regional economic development, with labor efficiency closely tied to territorial and demographic factors. The pronounced concentration of workforce in Nukus, Amudarya, Beruniy, and Turtkul highlights the need to address regional disparities in labor allocation and ensure more balanced utilization of human resources. To achieve sustainable growth, it is essential to implement differentiated labor management strategies that reflect the spatial distribution of the workforce, while simultaneously promoting skills development and vocational training to expand the pool of qualified labor available to small agricultural businesses. Additionally, regional employment policies should be adapted to optimize labor utilization and reduce underemployment, and technological innovation and modernization should be encouraged to enhance labor productivity across the agricultural sector. Collectively, these measures aim to support the long-term development of small agricultural enterprises, foster balanced socio-economic progress, and improve living standards for rural communities.

LITERATURE

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Annotatsiya. Ushbu tadqiqot kichik qishloq xo'jaligi korxonalari va xususiy agrar tadbirkorlikdagi mehnat resurslarini samarali boshqarish masalalarini o'rganadi. Tadqiqot hududiy mehnat taqsimoti, ishchi kuchining samaradorligi va bandlik ko'rsatkichlarini tahlil qiladi. Natijalar mehnat resurslarini optimallashtirish orqali kichik biznesni rivojlantirish va hududiy ijtimoiy-iqtisodiy rivojlanishni ta'minlash zarurligini ko'rsatadi.

Kalit so'zlar: ishchi kuchi, mehnat boshqaruvi, hududiy rivojlanish, bandlik, agrar tadbirkorlik.

Резюме. Данное исследование посвящено вопросам эффективного управления трудовыми ресурсами в малых сельскохозяйственных предприятиях и частных агробизнесах. Анализируются территориальное распределение рабочей силы, показатели занятости и эффективность использования трудового потенциала. Результаты подчеркивают необходимость оптимизации трудовых ресурсов для развития малого бизнеса и обеспечения устойчивого социально-экономического развития регионов.

Ключевые слова: рабочая сила, управление трудом, региональное развитие, занятость, агробизнес.

Summary. This study investigates the effective management of labor resources in small agricultural enterprises and private agribusinesses. It analyzes territorial workforce distribution, employment levels, and labor efficiency. The findings emphasize the importance of optimizing labor utilization to promote small business development and support sustainable socio-economic growth in regional contexts.

Key words: labor force, labor management, regional development, employment, agribusiness.
