



IQTISODIYOT & TARAQQIYOT

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LABOR RESOURCES – THE MAIN FACTOR OF NATIONAL DEVELOPMENT

Qurbonov Tolmasjon Namoz ugli

Student, Faculty of Economics,
Samarkand Institute of Economics and Service

Ilmiy rahbar:

Mustafoev Golib Sultonmurodovich

Doctor of Economic Sciences (DSc),
International Islamic Academy of Uzbekistan

Abstract. This article scientifically analyzes the role of labor resources in the economic development of the country, the issues related to their quantity and quality, as well as the impact of human capital development on national progress. It highlights the formation of labor resources in Uzbekistan, their regional distribution, urbanization processes, and the development of the labor market. Conclusions and proposals have been developed to eliminate the imbalance of labor resources between rural and urban areas, accelerate urbanization, and digitize the labor market. The study of foreign and local literature on labor resources has enhanced the scientific value of the research.

Key words: labor resources, human capital, economic growth, labor market, urbanization, employment, efficiency, demographic development, innovative education, labor policy, economic development.

Annotatsiya. Ushbu maqolada mamlakat iqtisodiy rivojlanishida mehnat resurslarining roli, ularning miqdoriy va sifat jihatlarini bilan bog'liq masalalar hamda inson kapitali rivojlanishining milliy taraqqiyotga ta'siri ilmiy asosda tahlil qilingan. O'zbekistonda mehnat resurslarining shakllanishi, ularning hududlar bo'yicha taqsimlanishi, urbanizatsiya jarayonlari va mehnat bozorining rivojlanishi alohida yoritilgan. Qishloq va shahar hududlari o'rtasidagi mehnat resurslari nomutanosibligini bartaraf etish, urbanizatsiya jarayonlarini jadallashtirish hamda mehnat bozorini raqamlashtirish bo'yicha xulosalar va takliflar ishlab chiqilgan. Mehnat resurslariga oid xorijiy va mahalliy adabiyotlar tahlili tadqiqotning ilmiy ahamiyatini oshirgan.

Kalit so'zlar: mehnat resurslari, inson kapitali, iqtisodiy o'sish, mehnat bozori, urbanizatsiya, bandlik, samaradorlik, demografik rivojlanish, innovatsion ta'lim, mehnat siyosati, iqtisodiy rivojlanish.

Аннотация. В данной статье научно проанализирована роль трудовых ресурсов в экономическом развитии страны, проблемы, связанные с их количественными и качественными характеристиками, а также влияние развития человеческого капитала на национальный прогресс. Особое внимание уделено формированию трудовых ресурсов в Узбекистане, их региональному распределению, процессам урбанизации и развитию рынка труда. Разработаны выводы и предложения, направленные на устранение дисбаланса трудовых ресурсов между сельскими и городскими территориями, ускорение процессов урбанизации и цифровизацию рынка труда. Изучение зарубежной и отечественной литературы по проблематике трудовых ресурсов повысило научную значимость проведенного исследования.

Ключевые слова: трудовые ресурсы, человеческий капитал, экономический рост, рынок труда, урбанизация, занятость, эффективность, демографическое развитие, инновационное образование, трудовая политика, экономическое развитие.

INTRODUCTION

Labor resources represent the most significant and invaluable asset of any country. The effective and purposeful utilization of these resources serves as a fundamental driver of national economic growth. Labor resources constitute the decisive factor that defines a country's production potential, determines its economic development trajectory, and shapes its competitiveness within the global economy. Extensive scientific research conducted worldwide confirms that labor resources hold a leading position among the productive forces of a nation. In other words, a country's economic potential, its participation in the international division of labor,



and its competitiveness in domestic and international markets primarily depend on the quantity and quality of its labor resources. Therefore, among all types of production factors—including material, natural, and other resources—labor resources are recognized as the key determinant of economic development due to their high efficiency and transformative potential.

A country's position in the global economy, as well as its role in the international division of labor, is determined not only by the number of labor resources but also by their quality, particularly the level of professional knowledge, skills, and competencies of the workforce. In today's rapidly evolving global economic environment, the competitiveness of a national economy is measured not only by the volume of products and services it produces but also by their level of innovativeness, quality, and added value. Consequently, strengthening labor resources, modernizing the system of education and vocational training, and enhancing research and innovative capacity are among the crucial strategic priorities for ensuring Uzbekistan's sustainable, inclusive, and innovation-driven economic growth.

LITERATURE REVIEW

A high-quality product can be created only by a qualified and competent workforce — a universally accepted principle in economic theory. Therefore, any strategic approach aimed at improving product quality must initially focus on enhancing the quality of labor resources, particularly by strengthening the knowledge and skills of employees. The issue of improving workforce quality has occupied a significant place in the history of economic thought. Representatives of the classical school of economics, such as Adam Smith and David Ricardo, emphasized the role of labor in production, while Alfred Marshall, a key figure of the neoclassical school, highlighted the qualitative aspects of labor. Marshall emphasized that the efficiency of labor resources depends on factors including education, experience, and health, which collectively determine productivity.

The concept of human capital, however, began to take shape as an independent scientific theory in the 1960s. The most substantial scientific breakthrough in this field is associated with the work of Nobel Prize laureate and American economist Gary Becker. In his 1964 publication "Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education" [1], Becker provided theoretical and empirical justification for human capital—defining it as the accumulated knowledge, skills, experience, and health of the workforce—and recognized it as a key driver of economic growth. Becker considered elements such as physical and intellectual abilities, competencies, and labor activity as essential components of human capital. According to him, developing these qualities and effectively utilizing them in the production process requires investments in education, training, and skill enhancement. Such investments, directed toward the formation of human capital, yield significantly higher economic returns compared to investments in other production factors, as confirmed by numerous empirical studies.

Sh. Mustafakulov, in his article "Issues of Considering Labor Potential in Ensuring Comprehensive Development of Regions" [2], argues that when assessing the labor potential of a region, it is crucial to account for the broader category of labor resources. He explains that labor resources include not only individuals of working age but also those younger or older than the working-age population who are employed, alongside segments of the permanent population not directly involved in economic activity. This broader definition, according to the author, allows a more comprehensive and accurate assessment of the labor potential of a region.

Similarly, D. Boltaboev, in his work "Labor Resources and Issues of Their Efficient Use" [3], examines the issues of organizing and managing labor resources to ensure their optimal and productive utilization. The author concludes that increasing the efficiency of labor resources requires a systematic approach to their management. According to Boltaboev, all structural units within an organization should take part in managing labor resources, and modern management approaches should be actively applied. He emphasizes that every employee's professional activity should positively contribute to the performance of organizational units, thereby improving the efficiency of the organization as a whole.

RESEARCH METHODOLOGY

This research comprehensively examines the importance of labor resources in the economic development of the country, including their qualitative composition, regional distribution, and efficiency factors. The scientific and methodological foundation of the study is based on economic theory, demographic analysis, labor economics, human capital theory, and international research practices.

The methodology of the study applies the following scientific approaches:

- Comparative analysis method — used to assess Uzbekistan's labor market indicators in comparison with economically developed countries, such as Germany, the United States, and France.



•Systematic approach method — applied to analyze labor resources as an integral structural element of the economic system, in interrelation with production, education, migration, and social infrastructure.

•Statistical analysis and time series methods — used to examine the dynamics of labor resources, including their distribution across urban and rural areas, employment levels, and natural population growth during the period 1995–2024.

•Extrapolation method — applied to forecast key demographic and labor market indicators up to 2030, based on existing statistical and economic data.

•Inductive and deductive analysis methods — applied to derive specific conclusions from general theoretical concepts and to form generalized scientific patterns based on empirical economic results.

As a result, this research scientifically analyzes the role of labor resources in economic growth, identifies priority directions to improve their qualitative characteristics, and evaluates the impact of urbanization processes on economic efficiency.

ANALYSIS RESULTS

Countries endowed with rich natural and human resources possess significant opportunities to ensure the continuity of goods and services production and to strengthen their economic position in the global economy. In particular, nations with a sufficient quantity and high quality of labor resources are capable of effectively responding to modern economic challenges and adapting to rapidly changing internal and external environments. This enables them to achieve strong positions in international economic relations, enhance competitiveness, and ensure sustainable socio-economic development.

In today's world, global demand for high-quality goods and services is increasing at an accelerating pace, and this trend is projected to intensify further. Such tendencies are supported by empirical evidence and reflect the dynamic development of the world economy. The growing volume of production and the increasing global population — and, accordingly, the number of consumers — serve as fundamental drivers of this trend. For instance, in 1960, the world population was approximately 3 billion, while today it exceeds 8 billion, and demographic growth is expected to continue in the upcoming decades [4]. Furthermore, demand is influenced not only by population growth but also by the continuous increase in human needs. Therefore, the issue of limited resources, particularly those restricted by the Earth's natural capacity, necessitates the efficient and rational use of material resources.

In this regard, the most effective solution is to use scarce and valuable material resources with maximum efficiency and high productivity, producing goods and services with increased quality and added value while minimizing resource expenditure. Such an approach ensures sustainable economic growth and supports national development strategies aimed at modernization and innovation.

“As of 2025, Uzbekistan's population has reached approximately 38 million, of which labor resources constitute about 58%, representing 21.8 million economically active individuals” [5]. In terms of population size, Uzbekistan ranks 40th globally and third among CIS countries after Russia and Ukraine. Based on these demographic and economic indicators, several key analytical conclusions can be drawn regarding the current state and future potential of Uzbekistan's labor resources.

First, Uzbekistan is among the countries with a high level of labor potential. By the beginning of 2024, the number of labor resources had reached about 19.5 million, representing approximately 58–60% of the population. The annual growth of labor resources averages 200–250 thousand individuals, primarily due to the increasing share of youth and graduates of educational institutions. This demographic advantage serves as a strong foundation for long-term economic development when effectively supported by labor market reforms, job creation, and professional training programs.

According to official data (2023), the unemployment rate was 8.8%, equivalent to about 1 million individuals, who represent additional labor capacity capable of contributing to economic growth and increasing the country's GDP through productive employment opportunities. Moreover, more than 1.2 million citizens were employed abroad [6]. Ensuring favorable working conditions and competitive wages within the national labor market may lead to a gradual return of qualified workers, thereby strengthening the domestic labor market and contributing positively to national economic development. Thus, the primary strategic task is not increasing the quantity of labor resources, but rather ensuring their efficient utilization, supporting job creation, expanding professional qualifications, and modernizing the labor market.

Second, Uzbekistan is implementing large-scale reforms to enhance the quality of labor resources and develop human capital. Comprehensive changes are being introduced in the education system, including improving teaching quality, updating curricula, and integrating innovative approaches to training highly qualified and competitive specialists. As a result, Uzbekistan is progressively strengthening its position among countries demonstrating advanced educational performance, with literacy indicators comparable to global standards.



These measures serve as an effective basis for shaping a knowledge-based economy and increasing the country's competitiveness in the global labor market.

One of the key demographic characteristics of Uzbekistan's national economy is the concentration of a significant share of the population and labor resources in rural areas. This feature leads to structural differences in the distribution of labor resources between urban and rural regions. When compared to developed countries, such a structure reflects the need to strengthen the role of cities in shaping a modern and efficient economic model. In many developed Western countries, the majority of labor resources are concentrated in urban areas, facilitating the rational placement of production capacities, the development of infrastructure, and the efficient utilization of labor potential. A high level of urbanization generally ensures greater labor market activity and stronger economic performance indicators. From this perspective, one of Uzbekistan's important strategic objectives is to enhance national economic efficiency by optimally redistributing labor resources, encouraging urbanization processes, and developing modern urban infrastructure.

Since independence, Uzbekistan has introduced large-scale reforms aimed at ensuring a balanced distribution of labor resources between urban and rural areas and aligning urban development with modern urbanization standards. Within the framework of these reforms, urbanization processes have been accelerated, infrastructure projects have been expanded, and transport and communication systems have been improved. At the same time, targeted programs have been implemented in rural regions to increase employment opportunities, broaden economic activity, and improve living conditions. As a result, noticeable improvements have been made in achieving interregional balance in the labor market. Economic activity disparities between urban and rural areas have gradually narrowed, employment rates have increased, and the quality of social infrastructure has improved. These positive developments have become important drivers of sustainable development, regional economic equality, and the efficient utilization of labor resources (Table 1).

Table 1. Dynamics of Labor Resources in the Republic of Uzbekistan, 1995–2024 [7]

Years	Total Labor Resources (thousand persons)	Urban		Rural	
		number, thousand people	Share, %	Number (thousand persons)	Share, %
1995	12296,8	5472,1	44,5	6824,7	55,5
2000	12469,0	5211,6	41,8	7257,4	58,2
2010	16726,0	9134,1	54,6	7591,9	45,4
2020	19158,2	10471,7	54,6	8686,5	45,3
2021	19334,9	10252,6	53,0	9082,3	47,0
2022	19517,5	10394,1	53,3	9123,4	46,7
2023	19739,6	10525,8	53,3	9213,8	46,7
2024	20085,2	10738,1	53,5	9347,1	46,5

In terms of the share of labor resources within the total labor force, Uzbekistan demonstrates structural characteristics that differ from those of many Western countries. This demographic pattern has been shaped by deep-rooted and objective socio-economic factors. One of the most influential factors is the historical legacy of the former socialist economic system, under which Uzbekistan's economy was primarily oriented toward supplying raw cotton for external industrial needs. As a result, industrial development progressed at a more gradual pace, and a large portion of the workforce remained concentrated in rural areas. This specialization contributed to an agrarian structure of the economy, influencing long-term demographic and labor market outcomes. Additionally, varying levels of infrastructure development, the gradual pace of urbanization, and evolving labor market mechanisms have played a role in shaping the current geographical distribution of labor resources.

It should be emphasized that the purpose of this research is not to examine the historical causes of regional labor distribution. Instead, the primary objective is to determine which political and economic strategies can ensure the most efficient organization and management of labor resources under current demographic conditions, in which nearly half of these resources are concentrated in rural regions.

Based on the findings, it is reasonable to accelerate urbanization processes and gradually increase the share of the production workforce in urban areas. Concentrating production capacity in cities provides broader opportunities for the efficient use of labor potential, promotes innovation, and strengthens national socio-economic development. At the same time, migration from rural to urban areas remains a gradual and multifaceted process. Relocating households may require substantial expenditures and adjustments, which can



limit the ability of some individuals to move. Therefore, public policies should focus on expanding accessible employment opportunities and improving quality of life in urban areas to promote natural and sustainable internal migration.

Moreover, natural population growth rates in rural areas remain considerably higher than in urban regions, and this demographic tendency is expected to continue in the foreseeable future (Table 2).

Table 2. Natural Population Growth in Uzbekistan, 1995–2024 (per 1,000 population) [8]

Years	Total Population			Urban Areas			Rural Areas		
	Birth	Death	Natural Growth	Birth	Death	Natural Growth	Birth	Death	Natural Growth
1995	27,3	6,2	21,1	22,2	7,4	14,8	30,5	5,5	25,0
2000	21,3	5,5	15,8	17,7	6,6	11,1	23,5	4,8	18,7
2010	22,0	4,8	17,2	19,6	5,1	14,5	24,5	4,5	20,0
2020	24,6	5,1	19,5	22,7	5,6	17,1	26,6	4,7	21,9
2021	25,9	5	20,9	23,9	5,5	18,4	28	4,5	23,5
2022	26,2	4,8	21,4	26	5	21,0	26,4	4,6	21,8
2023	26,4	4,7	21,7	25,9	5	20,9	27	4,4	22,6
2024	24,9	4,6	20,3	23,9	5,1	18,8	25,9	4,1	21,8

According to our analysis, this trend will likely result in a faster increase in the number of labor resources in rural areas compared to cities. This requires proactive management of urbanization policies, strategic planning of infrastructure development, and expanded vocational training to ensure that the growing labor potential is effectively integrated into productive sectors. Properly managed, this demographic dynamic can support balanced regional development, increase employment opportunities, and strengthen national economic efficiency.

When selecting state economic or administrative instruments aimed at redistributing labor resources between urban and rural areas and optimizing their proportional structure, it is important to take into account the current economic and demographic realities of the country. Agriculture continues to remain one of the leading sectors of Uzbekistan's national economy. In 2024, the share of agriculture in the gross domestic product amounted to 16.5%, while the industrial sector accounted for 27.3% [9]. Considering such structural features, the effective allocation of labor resources between cities and rural regions requires policies that reflect the real economic needs and demographic characteristics of the country.

In 2024, around 3.4 million people were employed in agriculture, representing 25.8% of total employment. In comparison, the industrial sector employed approximately 1.7 million people, or 12.9% of total employment [9]. Compared to developed countries, agricultural employment in Uzbekistan remains relatively high. For example, agricultural employment constitutes 3.2% in Germany, 2.7% in the United States, 3.7% in France, and 4.3% in the Netherlands [10]. These indicators highlight the potential for further improving labor productivity in agriculture, accelerating technological modernization, and gradually reallocating labor resources toward higher value-added sectors. Accordingly, one important direction of state policy is to effectively manage labor resources in rural areas, systematically expand employment opportunities in industry and services, and promote infrastructural development.

Despite diversification efforts, agriculture is expected to maintain its significance as one of the key sectors of the national economy over the long term. The number of people employed in agriculture (including forestry) increased from 3,093 thousand in 2000 to 3,240.7 thousand in 2024, an increase of 147.7 thousand persons, or 4.7% [11]. The average annual growth rate of employment in this sector has been around 3–4%. Simple extrapolation suggests that by 2030, employment in agriculture may reach approximately 4.0–4.5 million people. If related rural industries such as construction, services, and rural-based manufacturing employ an additional 4.5–5.0 million people, then the total population living in rural areas could amount to at least 18.0–22.0 million.

Another important factor to consider when forecasting rural population and the concentration of labor potential in rural areas is Uzbekistan's geographical location, climate, and the fertility characteristics of its land resources. These provide the country with the ability to produce large volumes of high-quality agricultural products rich in essential microelements. Thus, Uzbekistan holds a comparative advantage in agricultural production on the international market. As economic and investment opportunities expand, initiatives aimed



at fully utilizing this potential will intensify. From this perspective, efficiently addressing sectoral constraints, rationally managing available resources, and developing practical measures for directing labor potential toward productive agricultural activities are among the key policy priorities.

Moreover, demand for agricultural goods produced in Uzbekistan is increasing not only within the domestic market, where consumption needs are consistently rising, but also in the international market. This expanding external demand further enhances the importance of the agricultural sector and increases the need for qualified labor resources in this field. Attracting labor resources to agriculture, ensuring their productive employment, and strengthening the competitiveness of the sector are therefore considered strategic directions of the country's economic development.

In conclusion, it can be stated that in the long-term perspective, the number of labor resources in rural areas and their share within the total labor force may gradually decrease. However, this ratio is not expected to reach the levels observed in many developed Western countries. Therefore, the effective utilization of labor resources in rural regions — which currently constitute an important segment of the national labor market — and ensuring decent employment for individuals who choose to live and work in rural areas will remain relevant both in the near and distant future. Achieving this requires expanding agricultural development, strengthening related industries, improving rural infrastructure, and creating new sustainable jobs.

The quantity and quality of labor resources determine the productive potential of a country. More precisely, it is through the effective use of labor resources that real opportunities arise to ensure national socio-economic progress. However, transforming these opportunities into tangible results — such as efficiently utilizing Uzbekistan's significant labor potential and increasing gross national output — requires targeted policies, systematic reforms, and sound management of labor resources. Such development cannot occur automatically; it requires coordinated effort and strategic governance.

Global experience demonstrates that in the current environment of rapidly intensifying international competition, a country's position within the world economy is defined not only by the number and quality of its labor resources but also by how efficiently this potential is managed and utilized. Under market economy conditions, economic entities — enterprises, companies, organizations and others — are free to purchase various resources, including labor, in both domestic and international markets. At the same time, in the context of globalization, the primary challenge is not the acquisition of labor resources, but using them productively, generating high returns, and applying resources in a rational and innovative manner.

Moreover, as unemployment has risen in many parts of the world, ensuring access to a qualified and competitive workforce has become strategically important for businesses. This underscores the necessity of improving labor resource management and directing labor potential purposefully, efficiently, and in accordance with modernization and economic priorities. Strengthening these mechanisms will enhance economic competitiveness and support the sustainable development of Uzbekistan's national economy.

CONCLUSION AND RECOMMENDATIONS

In conclusion, under market economy conditions, fully realizing the country's labor potential and transforming it into a key driving force of socio-economic development is of essential importance. Income serves as a decisive indicator in turning labor potential into a real source of increasing national wealth and improving the living standards of the population. Income not only stimulates economic growth but also enhances labor productivity, ensures social stability, and contributes to the development of human capital. Therefore, strengthening mechanisms that incentivize labor resources is necessary to increase their efficiency and promote sustainable socio-economic progress.

Based on the above analyses and findings, the following policy recommendations are proposed:

First, to improve human capital development strategies, it is essential to widely introduce innovative educational programs into the education system, align youth competencies with international standards, expand the activities of professional retraining centers, and ensure that qualification enhancement systems are based on international accreditation.

Second, to ensure a balanced interregional labor distribution, labor flows should be regulated based on internal equilibrium by expanding industrial and service sectors in rural areas and increasing employment opportunities in these spheres.

Third, to digitalize the labor market by developing an integrated labor resources database and automating employment and job-matching mechanisms through modern technologies, including artificial intelligence.

Fourth, to strengthen policies aimed at encouraging the return of citizens working abroad by creating favorable employment conditions, providing tax incentives, and expanding opportunities for investment and entrepreneurship upon their return.



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