

# Employment of the Rural Population: The Basis for Sustainable Development of the Regions of Kazakhstan

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**Abstract:** The article considers the problems of employment of the rural population, identifies trends in the labor market. Based on the data of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, the indicators of employment and unemployment of the rural population were analyzed and systematized. The factors, influencing the level of employment in rural areas, are identified and the need for the development of alternative types of employment, diversification of the agriculture-based economy, innovative transformations in rural area in order to improve the well-being and quality of life of the rural population are justified. The use of artificial intelligence, the emergence of "smart greenhouses", "smart farms" have a dual impact on the rural labor market. On the one hand, innovative technologies will contribute to an increase of labor efficiency, automation and mechanization of production processes, and an increase in farmers' earnings. On the other hand, the introduction and use of innovative technologies require competitive qualified personnel.

## 1 INTRODUCTION

Employment is not only the most important economic category, but also one of the main indicators of the labor market. Indicator - the level of employment characterizes not only the degree of involvement of the labor force in the production process, job security, but also the social status of the employee. Unemployed people do not have a steady source of income, do not achieve their potential and experience stress about this.

Insurance of productive employment, reduction of unemployment, regulation of the labor market, assistance to socially vulnerable groups of the population are among the list of problems, requiring concerted efforts from the state, entrepreneurs and society as a whole.

As noted by the leader of the nation N.A. Nazarbayev in his speech "Social modernization of Kazakhstan: Twenty steps to the Society of Universal Labor" all the values of world civilization, all economic and cultural wealth are created by human

labor. The state is not an endless donor, but a partner, that creates conditions for the growth of the well-being of citizens. An alternative to the ideology of consumption should be the idea of creating a Society of Universal Labor (Nazarbayev, 2012).

Kazakhstan determined the main priorities of social modernization, aimed at creating an effective system for obtaining professional skills and qualifications in demand in the labor market, developing mass entrepreneurship, creating an effective model of employment agency services, and adopted the state program for the development of productive employment and mass entrepreneurship "Enbek" for 2017-2021 (State Program, 2018).

## 2 RESEARCH METHODOLOGY

Problems of insurance of productive employment are central to state economic policy and are of polemical character. Employment affects all aspects of a person's life, determines the level of his income and

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quality of life. Mass unemployment, low salaries destabilize the situation in society, cause conflicts and negatively affect the satisfaction with the daily living needs of the population. The subject of our study is the employment of the population in rural areas, which is especially need for scientific research.

As a methodological basis for research, the dialectical method was used, which studies the processes of employment in continuous development, taking into account qualitative and quantitative changes, and causation. The main indicators of the labor market in different periods of time were studied using the historical method. The levels of employment and unemployment among the urban and rural population were studied using the economic and statistical method. The method of system analysis allowed to consider economic phenomena in mutual connection, identify factors of influence and justify the prospects for insuring productive employment of the rural population of Kazakhstan.

### 3 RESULTS OF RESEARCH

Each state, depending on its capabilities, availability of resources, taking into account the mentality of the population and established traditions, solves the problem of employment. There is a clear interrelation between the level of employment and the level of

economic development of a country. Poor countries have limited employment and good income opportunities.

With the administrative-planned economy, every citizen of the country was provided with social guarantees in the form of employment, stable salary, and measures were taken to combat mooching. At that time, in the agricultural sector, there was a need to attract additional labor, which allowed to perform the entire volume of agricultural seasonal work on time.

An extremely difficult situation developed in the CIS countries during the transition period, especially in rural areas. Low incomes, mainly hand manual work, insufficient level of housing improvements, lack of attractive vacancies, underdevelopment of the rural labor market, caused an intensive outflow of the rural population, which negatively affected employment and the distribution of labor force (Bondarenko and Tatarova, 2019; Maksumhanova et al., 2020). It was necessary to reorganize to market principles of activity, to take into account the ratio of labor demand and labor supply.

Employment in agriculture declined at a faster rate, than in the economy as a whole (Nefedova, 2019). There was an overflow of labor and capital from agriculture to other spheres of economic activity. Along with various forms of full, productive, precarious, seasonal employment, unemployed persons and self-employed workers appeared.

Table 1: Index of employment of the urban and rural population of Kazakhstan, thousand people.

Indicators	1991	2000	2005	2010	2015	2019
Urban population						
Employed population	4876.6	3792.0	4077.9	4240.4	4858.5	5132.1
Employees	4669.2	2541.8	3192.8	3443.7	4069.0	4312.4
Self-employed workers	207.4	1250.2	885.1	796.7	789.5	819.7
Unemployed population	-	530.8	402.7	282.3	260.0	258.8
Rural population						
Employed population	2839.6	2409.0	3183.1	3873.8	3574.9	3648.8
Employees	2720.3	962.6	1447.7	1965.7	2225.9	2369.2
Self-employed workers	119.3	1446.4	1735.4	1908.1	1349.0	1279.6
Unemployed population	-	375.6	238.1	214.2	194.2	181.9
Note: compiled on the basis of data from the source (Employment in Kazakhstan, 2020)						

So, in 2000, the number of unemployed people already amounted to 906.4 thousand people, including among the urban population - 530.8 thousand people and among the rural population,

375.6 thousand people, respectively. The number of self-employed persons increased sharply. In 2019, the analyzed indicators were as follows: the number of labor force in Kazakhstan was 9221.5 thousand

people, the number of employed population was 8780.8 thousand people, the number of employees was 6681.6 thousand people, the number of self-employed workers was 2099.2 thousand people and the number of unemployed was 440.7 thousand people.

Since 2000, there has been a clear trend towards an increase in the number of self-employed people among the rural population. In 2010, this indicator was 1908.1 thousand people. This state of matters can be explained by the fact, that large enterprises in the agricultural sector stopped to function and former workers of state farms, collective farms were forced to shift their efforts to personal subsidiary plots, make products on their subsidiary plot and sell them on the local market.

It should be noted, that in 2019 the share of self-employed workers among the urban population was 15.9%; among the rural population - 35.1%. The unemployment rate in 2019 compared to 2000 decreased 2.7 times, which is explained by measures, taken at the state level to stabilize the socio-economic situation in the country, the development of small and medium-sized businesses, and the activation of entrepreneurial activity.

Since the main producers of agricultural products during the transition to the market were agricultural enterprises, individual entrepreneurs and peasant or farm holdings, as well as households, the structure of employment of the rural population have been changing during the analyzed period, which is due to the role of the category of holdings in ensuring food security.

Meanwhile, during the transition period, due to aggravated problems, in some areas, there was a degradation of villages. The level of employment signals material well-being, the opportunity of ensuring a good lifestyle. To develop a set of measures to improve the socio-economic situation in rural areas, a detailed analysis of the factors influencing the current trend in the labor market of rural residents is required (Postnova et al., 2020).

Rural areas significantly differ in their location, level of development, demographic and social conditions. For this reason, it is necessary to analyze their strengths and weaknesses, opportunities and threats, develop a strategy and tactics for development, take into account trends in employment and formation of sources of income (Bryden and Bollman, 2000).

To solve actual problems in rural areas, an integrated approach is recommended, that provides for an increase in employment and incomes of the population through the development of alternative

forms of employment, diversification of the economy, improvement of rural areas, and the introduction of innovations (Khanmagomedov, 2020).

In recent years, much attention has been paid in Kazakhstan to agricultural, medical, and coastal tourism. The urban population shows interest in resting in the countryside, rents premises, goes on gastronomic and entertainment tours. During the pandemic, the demand for medicinal products made from mare's milk increased. There was an opportunity to come to the farm and take a health-improving treatment. Among the entertainment services, horseback riding, hunting, fishing, folk crafts, and national cuisine are popular (Tikhonova and Shik, 2008).

During the summer season, the flow of tourists, who want to improve their health and recuperate on the unique lakes Alakol, Balkhash, the Caspian Sea, and other water reservoirs is growing every year, which makes it possible for rural residents to diversify their sources of income. In a pandemic, Kazakhstanis preferred to rest at home. Moreover, the entrepreneurs were well prepared for the beach season, observed all the prescribed sanitary norms and rules, and offered catering and accommodation services in facilities of various comfort levels.

The services of pantotherapy, treatment with honey products are in constant demand in the East Kazakhstan region, bordering the Altai Territory of the Russian Federation, ecological and ethnographic types of tourism are being developed.

Meanwhile, Kazakhstan adopted state programs of the development of the tourism industry for 2019-2025, the development of the agro-industrial complex for 2017-2021, which will enhance the development of rural areas, create new job sites, diversify the agricultural economy, reduce migration flows from the village to the city, improve the well-being of the rural population (State Program.2019-2025; State Program 2017-2021).

The state program should be considered as an important strategic planning document, in which, based on an analysis of the current situation, problems are identified, goals and tasks, measures of state support are formulated, priorities and directions are justified, bodies, responsible for the development and implementation, sources and amounts of funding are established.

But the remoteness of rural settlements from cities, insufficiently high quality of the Internet, weak marketing and advertising campaigns, and a shortage of qualified personnel slow down the process of the implementation of the set goals and tasks.

Thus, when characterizing the labor force by the level of education in urban and rural areas, significant differences are observed. If the national average share of people with higher education in 2019 was 37.36%, then the value of this indicator among the rural population is 1.9 times lower, than among the urban

population. On the contrary, among the rural population the share of the labor force with a secondary general education is 4.3 times higher than among the urban population. Thus, it can be concluded, that there is a shortage of highly qualified personnel among the rural population.

Table 2: Allocation of Kazakhstan's labor force by education level in 2019, in percentage.

Education level	All population	Urban population	Rural population
Labor force - total	100.0	100.0	100.0
Including:			
Higher	37.36	46.48	24.53
Incomplete higher	1.33	1.62	0.92
Secondary professional (vocational)	42.19	41.75	42.82
Basic vocational	4.50	3.96	5.26
Secondary general	13.68	5.78	24.79
Basic general	0.88	0.37	1.59
Primary general	0.06	0.04	0.09
Note: calculated on the basis of data from the source (Employment in Kazakhstan, 2020)			

There is a close relation between education level and employment. With an increase in the education level, the share of the employed population is increased and the share of economically inactive persons is decreased (Agranovich, 2019). The education level of a person gives him certain competitive advantages.

As a result of the research, it was revealed, that the education level among the urban population is higher than among the rural population. This fact can be explained by the lag of the village behind the city in terms of the development of intellectual abilities,

cultural and social living conditions, the level of mechanization, and automation of labor.

To deepen scientific research in order to identify the relation between the level of education and employment of the rural population, the following groups were distinguished by the education level: Group I - primary general education; Group II - basic general education; Group III - secondary general education; Group IV - Basic vocational education; Group V - secondary professional (vocational) education; Group VI - incomplete higher education; Group VII - higher education.

Table 3: Relation between education level and employment of the rural population of Kazakhstan, 2019.

Groups by the education level	I	II	III	IV	V	VI	VII
Labor force, thousand people	3.5	60.9	949.6	201.5	1640.2	35.3	939.7
Unemployed population, thousand people	0.4	4.0	50.5	9.1	74.5	2.2	41.1
Employed population, thousand people	3.1	56.9	899.2	192.4	1565.7	33.0	898.5
Allocation of the employed population by education groups, %	0.09	1.56	24.64	5.27	42.91	0.91	24.62
Allocation of the unemployed population by education groups, %	0.22	2.20	27.78	5.00	40.98	1.21	22.61
The ratio of the employed to the labor force, %	88.57	93.43	94.69	95.48	95.46	93.48	95.62
Note: calculated on the basis of data from the source (Employment in Kazakhstan, 2020)							

As the data in Table 3 show, 42.91% of the employed rural population have secondary professional (vocational) education; 24.64% - secondary general education; 24.62% - higher education. Among the unemployed population, the largest share of 40.98% falls on the group of persons with secondary professional (vocational) education, on the group of persons with secondary general education - 27.78%; on the group of persons with higher education - 22.61%; on the group of persons with basic vocational education - 5.0%.

In terms of the level of employment, calculated as the ratio of the number of employed to the number of labor force for each education group, there is an interrelation between the education level and the employment level. The highest value of the indicator, 95.62%, is observed in the group with higher education, the smallest, 88.57%, in the group with primary general education.

Since digital technologies and artificial intelligence are actively used in fields and farms, "smart greenhouses" have appeared, resource-saving technologies are being introduced, and labor requirements in rural areas have been increased sharply. On the other hand, thanks to innovative technologies, it is possible to ensure a breakthrough, economic growth and an increase in labor productivity in agricultural enterprises, and, as a consequence, an improvement in the quality of life of the population.

## 4 RESULTS AND DISCUSSION

Innovative technologies will allow to solve the problems of the village, that have accumulated over the years, in the shortest possible time. The nature of labor will change, from hard, predominantly hand, it will become automated, mechanized. Due to a decrease in labor intensity, an increase in profitability, the agricultural sector will turn into a more attractive object for investment.

Natural and climatic conditions, availability of agricultural land, traditions and customs of the people, historically established specialization and division of labor give grounds to consider agriculture as a driver of sustainable development of the country.

Currently, the rural population of the country has realized, that it is economically profitable to run an agribusiness. Food is vital goods for every person. In a pandemic, restrictive measures were not imposed on the activities of agricultural enterprises. On the contrary, food demand and prices have risen.

If we take into account the potential for diversification of the agricultural economy, then there are free-market niches, which, with proper business management, can bring a sizeable income.

## 5 CONCLUSIONS

In connection with the digitalization of the economy, representatives of agricultural professions are in demand in the labor market, but who already have additional competencies in the field of computer literacy, processing large amounts of statistical data, robotics, innovative equipment, and products.

And from this we can conclude, that the employment of the rural population in the future will be influenced by professional aptitude, competitiveness, innovativeness, knowing digital technologies. Therefore, currently the most important task is to bring the labor demand and labor supply in compliance, to increase the competitiveness of the domestic labor force, to prepare them for functioning in a new technological order.

Diversification of the economy, development of alternative forms of employment will create additional job sites, improve the quality of life of the population in rural areas, reduce unemployment, ensure the preservation and development of rural areas.

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