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Impact of Social Economy on the Environmental Protection

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Abstract:

Global challenges and threats, which inevitably affect the entire world community, naturally enhance the interdependence of states, require their joint actions aimed at solving social and economic problems of the world economy. As a result, the influence of social policy in the field of organizing and financing the social sphere, where environmental protection is an important factor, increases. Many processes occurring in the modern economy contribute to an increase in the importance of employers in solving modern problems of sustainable socio-economic development, both nationally and internationally. The level where rising unemployment rates have a significant negative impact on environmental priorities.

Keywords: environment protection; social policy; economically active population (EAP); labor market; labor mobility; workforce; skilled labor force; employment; unemployment.

JEL Classification: Q55; Q56.

Introduction

While the state seeks to create favorable conditions for the overall development of the country's main indicators, social problems must be approached with the utmost seriousness and professionalism. The current financial and economic problems have left people in most countries of the world in shock. In this context, the role of the state as the main legal regulator is very important, creating a solid legal basis for any changes.

Fundamental changes in the socio-economic situation in the world and new challenges that accompany them require a theoretical understanding of their consequences for the development of the social sphere, while providing positive aspects for environmental protection. In this context, the methods and levels used to meet the social needs of the population and, accordingly, the goals and mechanisms of social policy are of particular importance. This is especially important in Kazakhstan, where the agenda includes issues of creating a social

protection system, mechanisms for resolving social conflicts and harmonizing interests in accordance with the current situation. A viable social policy that meets the needs of the country's socio-economic development is one of the key prerequisites for the country's successful economic and political development, where the main task of social policy is to achieve a certain balance in social life.

1. Literature Review

The development of the social economy and the implementation of investment projects have an ambiguous effect on the state of the environment. So, for example, under certain conditions, the growth of gross domestic product (GDP) can lead to a decrease in emissions of pollutants. Therefore, the construction of special models and the analysis of factors affecting various types of pollution is becoming increasingly important.

The works of Berg A.G., Osiry J.D (2018) describe the role of the social economy is determined by its influence on the processes of reproduction of the labor force, the increase in labor productivity, the educational and qualification indicator of labor productivity of the staff, on the level of scientific and technical improvement of productive forces, which can have a certain impact on environment, cultural and spiritual life of the population. The social economy, aimed at improving working and living conditions, the formation of physical education and sports, provides a decrease in morbidity and thereby has a tangible effect on reducing economic losses in production, emissions into the environment.

Studying the Russian experience of state social policy, one can consider the studies of Chernysheva T.K. and Ilyanov D.S. (2019), who proved the hypothesis that the achievement of the established national development goals of Russia can be facilitated by the use of mechanisms used in China (Zhang 2017), subject to adaptation them to modern Russian conditions. Thus, the task of increasing labor productivity in the country, according to the authors, should be considered as one of the key factors for returning the lost economic potential. In this regard, it is necessary to modernize the economy, in particular in the industrial sector and the social security sector, through innovative technologies, as well as the involvement of a new labor force in the economy, followed by the automation of jobs that have a positive impact on the ecosystem.

Also, the emphasis is on the fact that in a fairly prosperous country like Germany, there is currently a problem with providing citizens with affordable housing from a financial point of view. Although the inhabitants of Germany have a largely high purchasing power, nevertheless, there is a shortage of affordable housing (Schier, Voigtlander 2016).

Since social policy is aimed at various spheres of activity, the main aspects of the welfare state should be characterized by equal relations between citizens and the state: the state provides a high standard of living, and citizens create material wealth for them and for the whole society, and thereby ensure their material well-being. Thus, the emerging parity of interests of the state and its citizens creates legal conditions for the development of a social market economy.

Of interest are the factors influencing the development of social policy, where an important indicator is changes in population growth in economically developed and developing countries, a decrease in the rate of population growth in the world, further aging of the population and an increase in the demographic burden on the working-age population (Glushchenko 2019).

World development experience shows that the success of advanced states is based on investments in human capital, which have a multiplier effect on increasing competitiveness. For example, the development of education and health care systems, the improvement of the well-being of the people ensured a favorable dynamics of the growth of the socio-economic development of Singapore. By using the competitive advantages of human potential, South Korea has become a leader in the development of the latest technologies, microelectronics, biotechnology and optics, aimed at protecting the environment.

According to Wang C., Cardon P.W., Liu J., Madni G.R. (2020), environmental performance is influenced by several factors simultaneously, but ethnic fragmentation, political freedom, financial development and institutional quality have a significant impact on environmental performance in various countries.

In recent months, Covid-19 has caused significant social and economic disruption around the world. Governments and health officials around the world have introduced mandatory preventive measures to combat the pandemic, which have contributed to the creation of large amounts of medical waste. Social distancing and forced lockdown measures have also been introduced to protect people from Covid-19. This epidemic caused severe demographic changes and unemployment, and economic activity was stopped to save lives. However, limited economic activity has contributed to a cleaner environment, but environmental changes are not permanent and pollution levels may rise again in the future. As a result, current research by Bashir M., Shahzad L. (2020) indicates that policymakers must pursue strong environmental policies to encourage the use of clean energy.

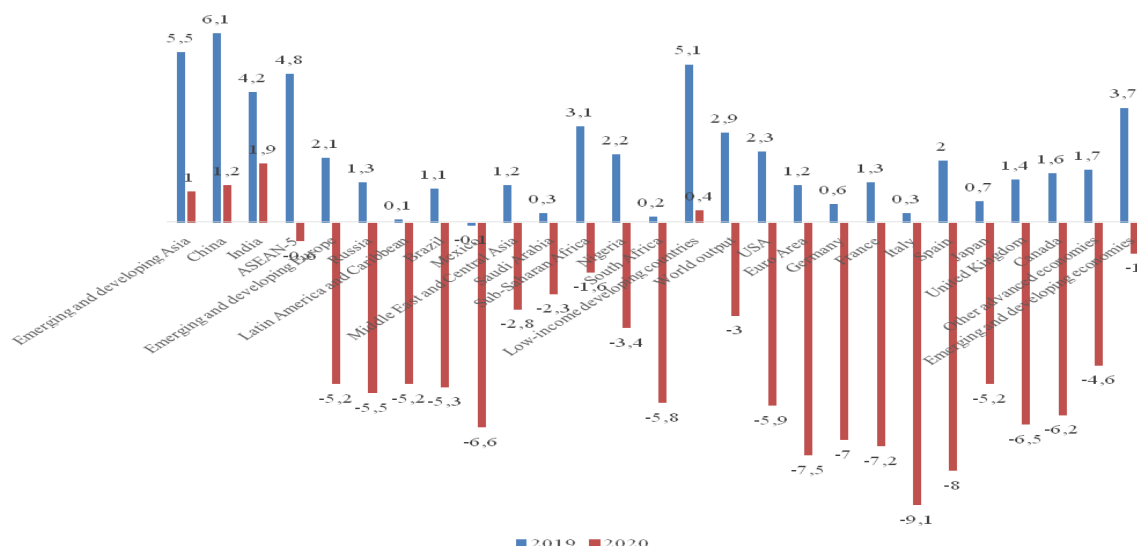
Socio-economic and demographic factors indicate that the pandemic does not affect everyone equally, as Collivignarelli M.C., Abbà A., Bertanza G., Pedrazzani R., Ricciardi P., Miino M.C. (2020) argue in their studies. It is quite difficult to fully understand why infectious pandemics affect different socio-economic groups in different ways, and in this regard, the reliability of the data is of key importance, where important socio-economic indicators are education, rural or urban area, population density and the number of tenants in household.

As foreign scientists believe, the relationship between climatic indicators and the coverage of the pandemic of socially vulnerable segments of the population indicates that:

- based on the analysis carried out by Bashir M.F., Komal B., Tan D., (2020) argue that higher population density means that it is difficult to ensure social distancing in urban areas,
- according to the authors of Singh R.P., Chauhan A. (2020), residents of areas with a lower socio-economic status are at a higher risk due to the lack of medical services, for example, in India, Pakistan, Bangladesh, which generally has an impact on the environment.

Thus, we can confidently conclude that socio-economic demography is in the spotlight, especially in the context of the global financial crisis caused by the COVID-19 pandemic, which has had a significant impact on industrial, economic and social activities (Figure 1).

Figure 1. Analysis of the global socio-economic and environmental impacts due to the Covid-19 pandemic



Source: compiled by authors according to World Economic Outlook Database, <https://www.imf.org>

As a result of such global changes in socio-economic indicators, of course, changes have been made in the implementation of strategies for full and partial localization, which guarantees that economic and social goals will be adapted in accordance with the socio-economic policies of states.

Knowledge of the impact of regional economic well-being on global resource use and environmental emissions has increased significantly in recent years. The key point, according to Yang L., Wang Y., Wang R. *et al.* (2020) is consumption-based environmental impact accounting, which is associated with regional consumption, the exploitation of natural resources and environmental impacts, both within the region and beyond.

Other scientists are of the same opinion. The growth of global value chains has fundamentally changed the way raw materials are sourced, produced, marketed and consumed, and hence the geographic distribution of income and pressures on the environment.

According to Wiedmann T., Lenzen M. (2018), globalization has led to an increase in the geospatial separation of production and consumption and, as a result, to an unprecedented movement of environmental and social consequences in international trade.

According to research by Adolf Acquaye, Kuishuang Feng, Eunice Oppon, Said Salhi (2017), much of the overall global impact can be trade-related, and this trend is increasing. Advances in global multi-regional I/O models have allowed researchers to detail the international links between harmful production in social and environmental hotspots and high consumption in global welfare centers.

Similarly, researchers from Adolf Acquaye, Taofeeqlbn-Mohammed, Andrea Genovese, Godfred A.Afrifa, Fred A.Yamoah, Eunice Oppon (2018) believe that the development of robust value chain performance assessment tools has been identified as an essential step for the transition to a global "green economy".

Foreign authors such as John Kenny (2020) provide evidence of how the Great Recession influenced environmental priority-setting. Data from the World Values Survey, both before and after the recession, show that rising unemployment has had a significant negative impact on environmental priorities, while changes in growth or gross domestic product (GDP) have not any impact. These results apply not only to countries with developed industrial democracies, but also to countries in Latin America. Moreover, the findings do not indicate that the recession has changed the attitude of individual wealth towards environmental priorities. Since strong environmental public opinion is an important factor in successful environmental policy implementation, the findings show that if policymakers want to maintain public support for environmental protection measures, they should prioritize low unemployment over economic growth.

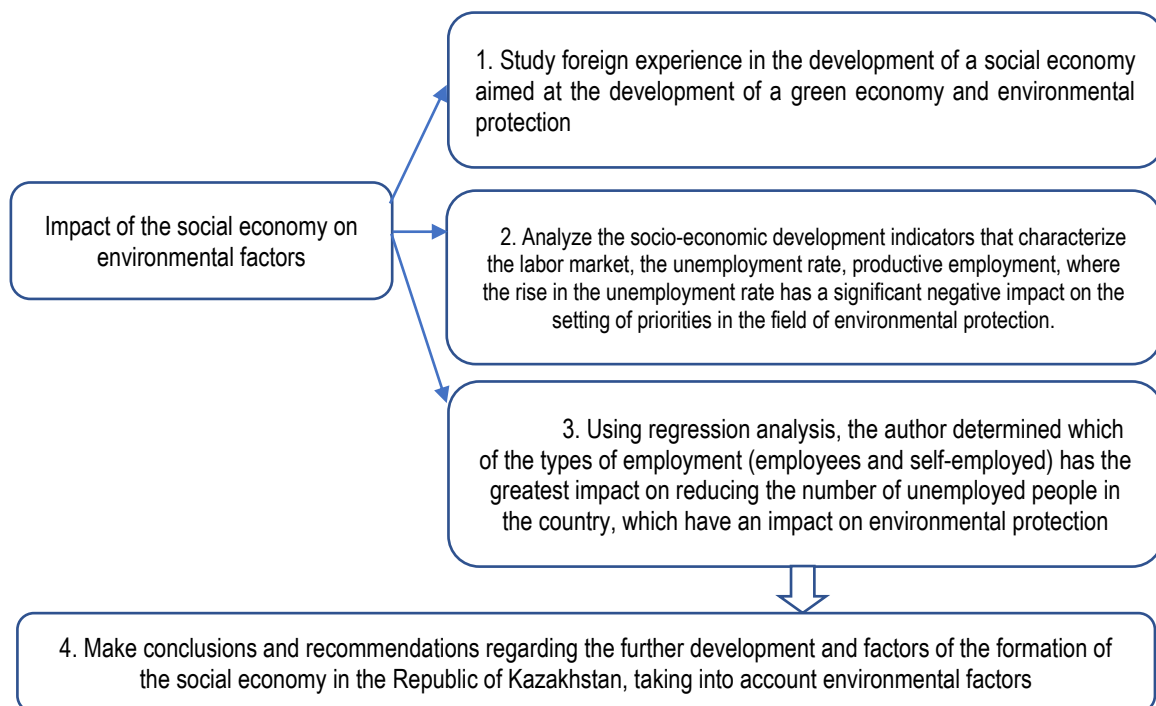
In research by Marc A.C. Hafstead & Robertson C. Williams (2018) analyzes the impact of environmental policies on employment (and unemployment) using a new two-sector general equilibrium search model. The authors found that the introduction of a tax on environmental pollution leads to a significant reduction in employment in the regulated (polluting) industry, but this is offset by an increase in employment in the unregulated (non-polluting) sector.

Many scientists, such as Andrew Meyerls (2016), Andrea Bonanomi, Francesca Luppi (2020), Ann-Kathrin Blankenberg, Harm Alhusen (2019) and many others are engaged in the problems of unemployment, employment and their influence on environmental factors. In the context of the coronavirus pandemic, this problem has become widespread, both in domestic and foreign literature.

2. Research Questions

In the study, the author assesses the socio-economic system (SES) taking into account the factors affecting the self-employed population, which can also include environmental factors. This approach, naturally, has its own research limitations, since many other factors that make up a complex socio-economic system are not taken into account. Alas, the author is sure that such an approach has not been used before, and therefore an attempt was made to assess the factors affecting such an indicator as self-employment of the population in the Republic of Kazakhstan and its significance for the formation and implementation of modern social policy, which has a great influence on the formation of budgets at all levels. socio-economic indicators of well-being and the level of growth of life of the population, since it is this group of the population that has a negative impact not only on the country's economy, without paying taxes, respectively, without deducting pension contributions, and in the future this may constitute a social problem for the state at a time when the question will arise about their social and pension security, but also the environmental factors associated with environmental protection (Figure 2).

Figure 2. Research questions



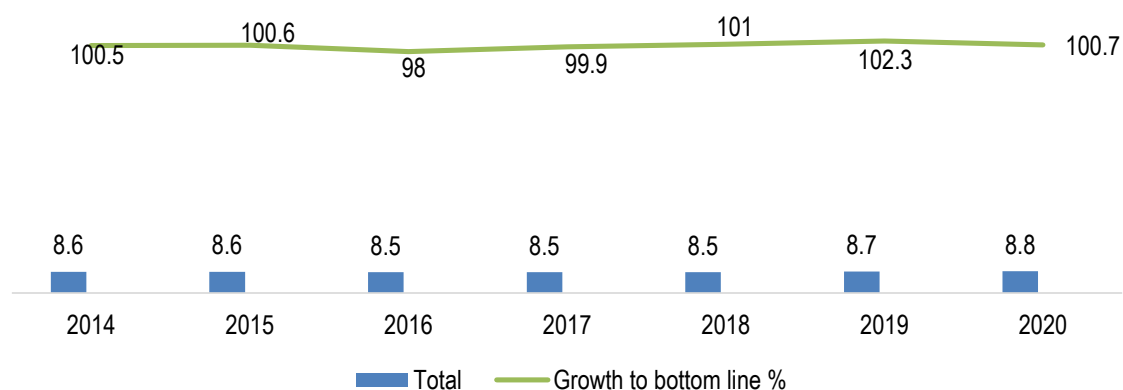
Source: compiled by authors

The progress that Kazakhstan demonstrates in its development became possible thanks to the consistently pursued economic and social reforms, an effectively built system of state planning, as well as internal policies aimed at strengthening tolerance in society, ensuring intercultural and interfaith harmony and respect for the person's personality.

3. Methodology and Analysis

In the first quarter of 2020, there were 8.8 million employed people in the Republic of Kazakhstan, which is 0.7% more compared to the same period last year. The number of unemployed in the Republic of Kazakhstan amounted to 442.4 thousand people (Figure 3).

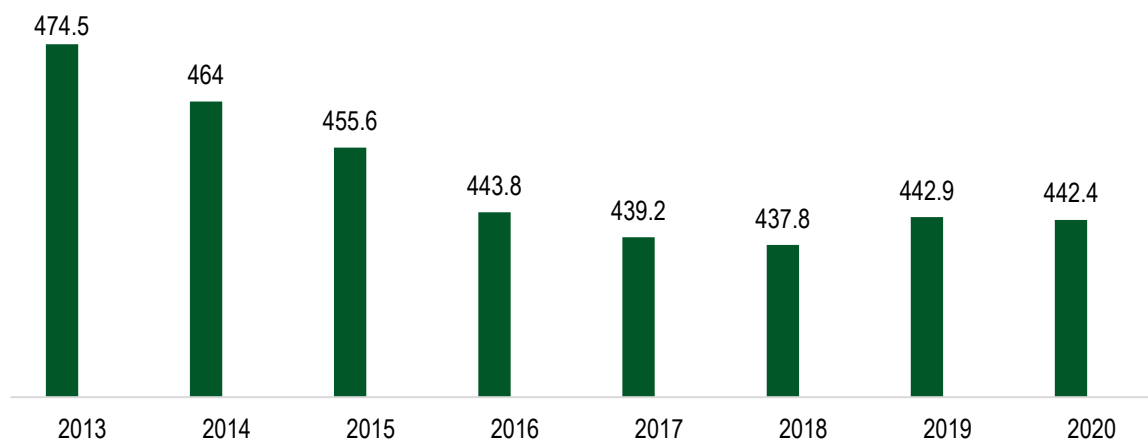
Figure 3. Dynamics of employment of the population of Kazakhstan



Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

It should be noted that the unemployment rate in Kazakhstan (4.8%) is lower than the average for OECD countries (5.2%), as well as in countries such as Canada (5.7%), France (8.5%), Denmark (5.1%), Italy (10%), Sweden (6.8%), etc. (Figure 4).

Figure 4. Dynamics of the unemployed population of Kazakhstan



Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

To maintain a low level of unemployment, which in recent years has not gone beyond 5%, the country is implementing many state programs. Ensuring effective employment is one of the main directions of the state policy of the Republic of Kazakhstan. So, today the country is implementing state programs that are aimed directly at the development of the labor market: "Employment Roadmap 2020" and "State Program for the Development of Productive Employment and Mass Entrepreneurship for 2017-2021" Enbek. In total, in 2019, within the framework of the State Program for the Development of Productive Employment and Mass Entrepreneurship, 449 thousand people were employed, of which 85%, or 383 thousand people - for permanent work.

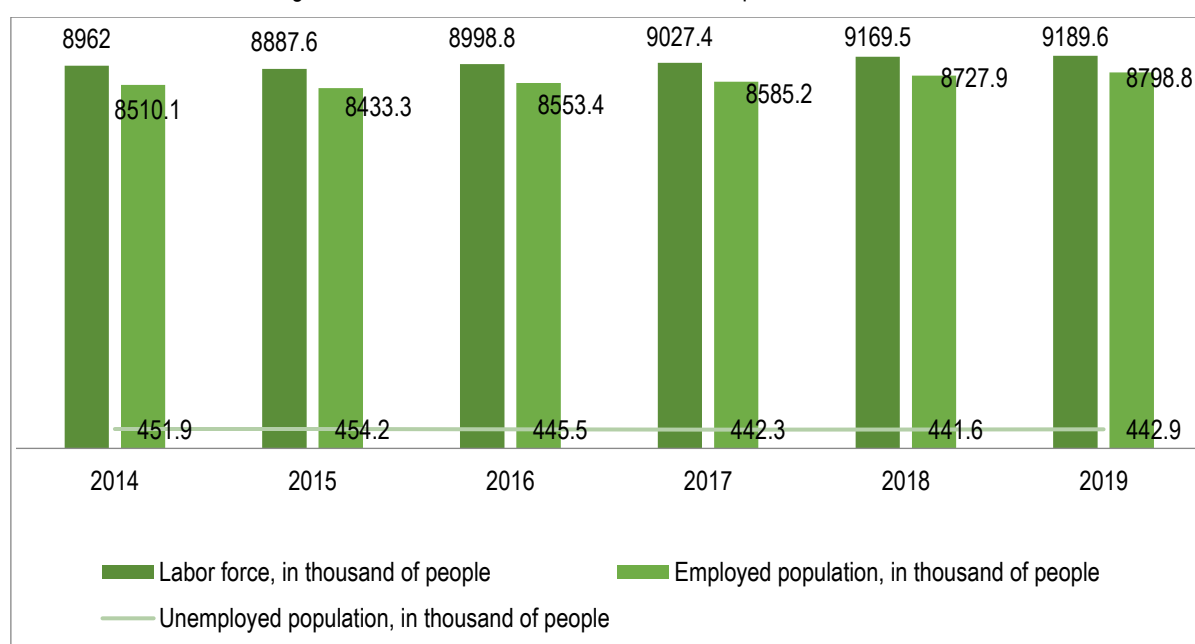
In general, government support measures allowed Kazakhstan to improve its position in the 2019 Global Competitiveness Index in the Labor Market category from 30th to 25th place. Positions were strengthened on indicators such as wages and productivity, internal labor mobility, employment promotion policies, workers' rights, etc.

So, in accordance with this program, 8.7 million people or 66.6% of the population aged 15 and over were employed in various sectors of the economy of Kazakhstan in 2018. More than half of the employed 51.5% (4.5 million people) are men, 48.5% (4.2 million people) are women.

The number of employees in 2018 amounted to 6.6 million people, or 76% of the total number of people employed in the economy. Among the employed population, the number of self-employed workers, that is, self-employed, amounted to 2.1 million people, or 24%. Of the total number of the self-employed population, the share of productively employed was 90.7% (in 2017 - 89.6%), unproductively employed - 9.3% (in 2017 - 10.4%).

The unemployment rate was 4.9%. The share of men among the unemployed was 45.5%, women - 54.5%. The level of youth unemployment at the age of 15-28 was 3.8%. In 2019, the situation remained practically unchanged (Figure 5).

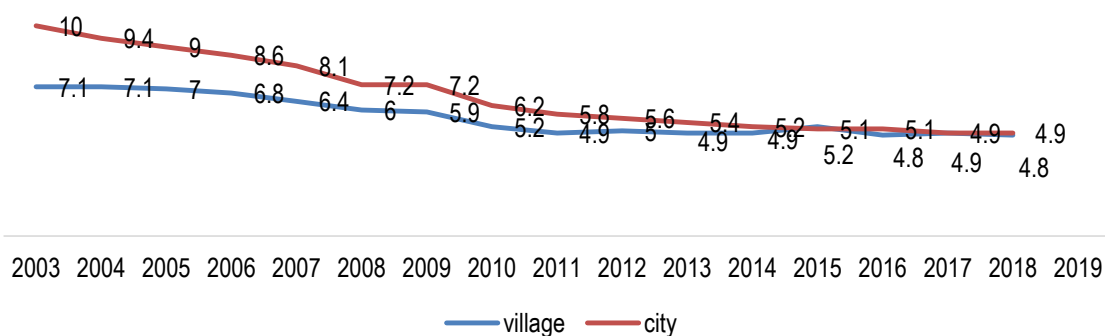
Figure 5. Indicators of the labor market in the Republic of Kazakhstan



Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

If we consider the unemployment rate in the Republic of Kazakhstan depending on the place of residence, the trend is as follows (Figure 6).

Figure 6. Dynamics of the unemployment rate in the Republic of Kazakhstan depending on the place of residence



Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

Statistics show that the urban unemployment rate is on average 1.05% higher than in rural areas. In the context of a significant outflow of the economically active population from the countryside to the city, not only the pressure on the urban labor market is increasing, but also significant changes are taking place in the social structure of the countryside, the deepening of social differentiation and transformation of rural society.

This year, due to the outbreak of the COVID-19 pandemic, the global labor market has been hit hard, as has the economy as a whole. At the beginning of April 2020, around 3.3 billion people worldwide, or 81% of the total workforce, suffered from full or partial job loss. In Kazakhstan, in turn, in March-April 2020, due to the introduction of quarantine measures, 4.2 million Kazakhstan's were temporarily out of work.

In general, due to the negative consequences of the crisis caused by the coronavirus pandemic, the expected unemployment rate in the country at the end of the year could be 6.1%. To solve problems in the labor market, Kazakhstan, like many other countries, is taking unprecedented measures. One such measure is the Employment Roadmap.

More than 6.5 thousand projects were presented within the framework of the map, in which 255 thousand jobs will be created. A special condition for the implementation of infrastructure projects of "DKZ" is to ensure the use of at least 90% of goods and services of domestic producers; in addition, at least 50% of workers will be hired through employment centers. As of July 15 of this year, work on 6295 projects began in the regions, more than 148 thousand jobs were created, including 77 thousand jobs through employment centers.

One of the most active employment centers in the country is the Central Office of the Akimat of Almaty. So, according to the results of the first quarter of this year, 3.3 thousand people were employed for permanent work through the central office of the megalopolis - noticeably more than through the Nur-Sultan employment center (651 people). It should be noted that this difference in the number of employed is also due to the difference in the population in the regions.

Table 1. Indicators of youth employment in the Republic of Kazakhstan (aged 15-28) by type of economic activity for 2019-2020

Indicator	2019	2020
Employed in the economy, total	2 007,9	2 045,9
Agriculture, forestry and fisheries	270,5	250,2
Industry	216,2	232,5
Mining and quarrying	49,9	51,0
Manufacturing industry	121,7	135,3
Electricity, gas, steam and air conditioning	29,1	28,8
Water supply, sewerage system, control over the collection and distribution of waste	15,6	17,3
Construction	150,8	144,8
Wholesale and retail trade; repair of cars and motorcycles	336,3	368,1
Transport and storage	127,2	125,3
Accommodation and catering services	44,9	57,3
Information and communication	50,0	43,6
Financial and insurance activities	56,2	62,2
Real estate operations	42,6	33,1
Professional, scientific and technical activities	64,4	63,8
Administrative and support activities	66,1	67,4
Public administration and defense; compulsory social security	144,2	123,2
Education	222,6	235,0
Health care and social services	105,6	110,5
Arts, entertainment and recreation	39,1	39,8
Provision of other types of services	71,2	89,0

Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

From the beginning of this year to 14th of August 2020, 23 017 people were employed through the employment center in Almaty. 12 158 people were sent to temporary jobs, of which 1 088 people - for social jobs, and 10 385 people - for public works. In addition, within the framework of the Employment Roadmap, the largest number of newly created jobs is expected in Almaty - 26 000.

8300 people were employed directly through the employment center. The proposed salary is 85–120 thousand tenge. After the implementation of the Employment Roadmap, 2 045 new permanent jobs will be created in the region due to the construction of new facilities.

In addition, a number of other state programs are being implemented to stimulate employment in Almaty. Additionally, within the framework of such state programs as "Enbek", "DKB", "Damu", "APK", Almaty Business, "EPV", as well as through private investments, it is planned to create more than 67.5 thousand new jobs, including 27.3 thousand permanent. Another significant tool for supporting employment in the region is government grants to support mass entrepreneurship. To date, 1.3 thousand people have received grants for 725.6 million tenge. In general, the above measures will have a positive impact and neutralize the negative consequences for the labor market in the city.

Consider the indicators of youth employment in Kazakhstan (aged 15-28) by type of economic activity for 2018-2019 (Table 1).

In the structure of the employed population, significant differences remain between urban and rural areas. Thus, 84% of the urban population are hired workers, the remaining 16% are self-employed. In rural areas, the share of hired workers is only 61%, and the share of self-employed workers is 39% (Table 2).

Table 2. Analysis of labor resources by employment status

Indicator	2013	2014	2015	2016	2017	2018	2019
Labor force, in thousands of people	9 041,3	8 962,0	8 887,6	8 998,8	9 027,4	9 138,6	9221,5
Employed population, in thousands of people	8 570,6	8 510,1	8 433,3	8 553,4	8 585,2	8 695,0	8 780,8
Employees, in thousands of people	5 949,7	6 109,7	6 294,9	6 342,8	6 485,9	6 612,5	6 681,6
Self-employed, in thousands of people	2 621,0	2 400,4	2 138,4	2 210,5	2 099,2	2 082,5	2 099,2
Unemployed population, in thousands of people	470,7	451,9	454,2	445,5	442,3	443,6	440,7
Unemployment rate, in %	5,2	5,0	5,1	5,0	4,9	4,9	4,8
Youth unemployment rate, in % (aged 15-24)	3,9	3,8	4,2	3,8	3,8	3,7	3,6
Youth unemployment rate, in % (aged 15-28)	5,5	4,2	4,4	4,1	3,9	3,8	3,7
Long-term unemployment rate, in %	2,5	2,4	2,5	2,2	2,2	2,2	2,2
Average duration of unemployment, in months	7,4	7,3	6,8	6,9	6,7	6,2	6,2
Persons outside the labor force, in thousands of people	3 569,4	3 715,9	3 867,4	3 855,0	3 927,3	3 907,3	3 934,0

Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

It should be especially noted that the preservation of the category of unproductively self-employed is a factor in increasing the economic burden on the country's budget system.

Regionally, 46% of the self-employed population is located in the Southern region, namely:

- Almaty (12.67%),
- Zhambyl (10.22%),
- South Kazakhstan (22.74%)
- Kyzylorda (5.5%).

The rest of the self-employed population is located:

- in the North (21.58%),
- Western (10.27%),
- Vostochny (9.09%),
- Central (3.31%).

In 2020, according to the Program of Productive Employment, both women and men became participants, while the share of young people under the age of 29 is 45.2%, the share of women is 32.5% (Table 3).

Table 3. Analysis of labor resources by employment status

Region	women		men	
	quantity	in % of the total	quantity	in % of the total
Republic of Kazakhstan	4245442	45,2	4535387	32,5
Akmola	200697	40,0	207305	18,3
Aktuibinsk	196009	48,3	220449	45,8
Almaty	477265	32,7	513700	18,5
Atyrau	152804	46,3	163460	36,2
East Kazakhstan	330413	44,1	350576	29,3
Zhambyl	236845	50,5	270193	39,0
West Kazakhstan	157178	51,2	164484	29,8
Karaganda	299592	53,2	349342	36,1
Kostanay	243380	45,0	241406	30,3
Kyzylorda	151230	42,1	181102	23,6
Mangistau	141877	49,1	163639	38,9
Pavlodar	198474	47,4	192065	26,8
North Kazakhstan	140571	36,3	152780	24,1
South Kazakhstan	198852	46,1	210927	38,6
Almaty city	485408	51,6	451136	44,6
Nur-Sultan city	281811	37,4	210927	33,0

Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

4. Application Functionality

To determine the development strategy for the self-employed population market, it is necessary to identify the factors influencing to it and conduct their statistical analysis.

One of the methods that allow one to study the dependence of one variable on several explanatory factorial variables that influence it is multiple correlation-regression analysis. For this, significant factors are selected and a multiple linear regression equation is constructed. Parameters for a quantitative explanatory variable are interpreted as the average change in the resulting variable for a single change in the explanatory variable itself and unchanged values of the remaining independent variables. The intercept determines the value of the dependent variable at zero values of all factorial variables.

Table 4. Statistical data required to build an econometric model for the period from 2006 to 2020

Year	Self-employed population, thousand people	Employed population, thousand people	Number of people employed in the service sector, thousand people	Number of people employed in individual entrepreneurship, thousand people
2006	2620,4	7261,0	3600,6	571,62
2007	2626,9	7403,5	3703,5	622,67
2008	2657,6	7631,1	3804,5	733,46
2009	2657,8	7857,2	4000,5	828,96
2010	2664,6	7903,4	4085,8	874,36
2011	2704,8	8114,2	4300,6	710,56
2012	2720,2	8301,6	4531,3	771,94
2013	2693,4	8507,1	4685,5	831,43
2014	2621,0	8570,6	4798,0	990,68
2015	2400,4	8510,1	5136,3	1136,05
2016	2138,4	8433,3	5297,2	1360,34
2017	2210,5	8553,4	5401,6	1288,17
2018	2099,2	8585,2	5561,7	1240,88
2019	2082,5	8695,0	5739,9	1315,16
2020	2099,20	8781,00	5865,61	1315,16

Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

To carry out the correlation-regression analysis, an indicator was determined as a dependent variable - the number of self-employed population (thousand people).

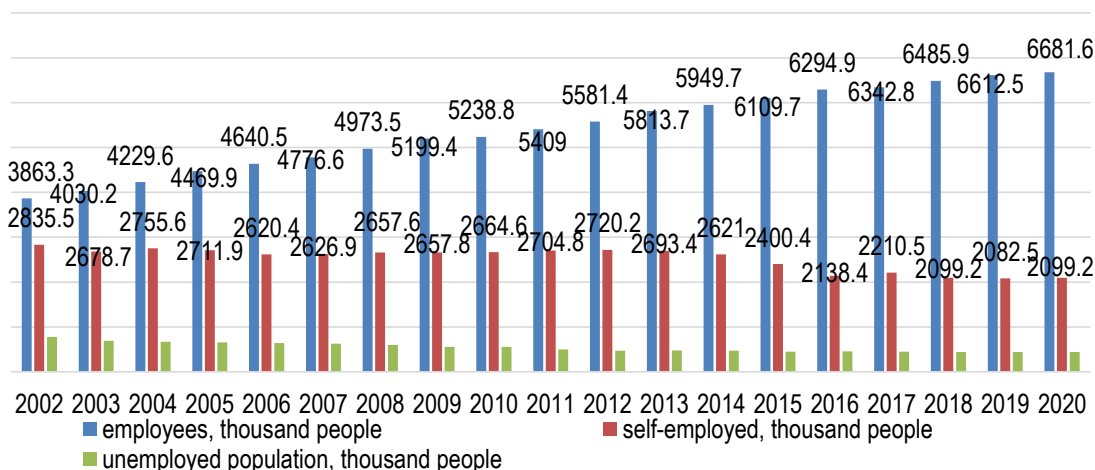
The following socio-economic indicators were selected as independent factors:

- employed population (thousand people),
- the number of people employed in the service sector (thousand people),
- the number of people employed in individual entrepreneurship (thousand people).

To build an econometric model, the statistical data of these indicators were used for the period from 2006 to 2020, presented in Table 4.

Figure 7 shows the dynamics required to build a model of indicators.

Figure 7. Dynamics of the unemployed population, hired and self-employed workers in the Republic of Kazakhstan, in thousands of people



Source: compiled by authors according to the source Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

To carry out the correlation and regression analysis, the computer program Statistica was used. The analysis of the dependencies between the considered indicators is presented in the form of a correlation matrix in Table 5.

Table 5. Correlation matrix

Item	Self-employed population	Employed population	Number of people employed in the service sector	Number of people employed in individual entrepreneurship
Self-employed population	1			
Employed population	-0,623338485	1		
Number of people employed in the service sector	-0,864543679	0,92778803	1	
Number of people employed in individual entrepreneurship	-0,913102951	0,82491443	0,940340833	1

Source: compiled by authors

The results of the data fit using the least squares method is presented in Table 6.

The multiple correlation coefficient indicates a close relationship of the resulting trait with three factorial traits at the same time, and the adjusted determination coefficient indicates that 99% of the variation in the dependent variable is explained by the resulting regression.

The regression equation as a whole and the regression coefficients with a 95% probability are statistically significant and reliable, which cannot be said about the intercept.

Analysis of the obtained parameters of the multiple linear regression equation allows us to draw the following conclusions:

1) with an increase in the employed population by 1000 people, the number of self-employed population increases by an average of 618 people;

2) with an increase in the number of people employed in the service sector by 1000 people, the number of self-employed population decreases by an average of 530 people;

3) with an increase in the number of people employed in individual entrepreneurship by 1000 people, the number of self-employed populations decreases by an average of 369 people.

Table 6. The results of evaluating the equation of the number of self-employed population

R	0,996
R^2	0,992
Adjusted R^2	0,990
Observed value of Fisher's criterion	477,951
Fisher's criterion critical	3,587($\alpha = 0,05$, $k_1 = 3$, $k_2 = 11$)
Variables	
Self-employed population (thousand people) - dependent variable	
Constant	242,431
Regression coefficients	
Employed population, thousand people	0,618***
Number of people employed in the service sector, thousand people	-0,530***
Number of people employed in individual entrepreneurship, thousand people	-0,369***
* $p < 0,1$; ** $p < 0,05$; *** $p < 0,01$	

Source: compiled by authors

The choice of the method of correlation-regression analysis is due to its capabilities for determining the relationships of indicators of social development of society, when the dependence between them is not strictly functional and may be distorted by the influence of outside, random factors. At the same time, the correlation analysis allows you to determine the degree of connection between the varying variables and to estimate the factors that have the greatest influence on the effective feature.

The results of research work show that self-employment is a special type of entrepreneurial activity, but it is difficult to regulate by the state due to its predominantly "shadow" nature, which indicates a significant negative impact on the setting of priorities in the field of environmental protection.

First of all, it should be noted that in international sources the terms "self-employed" and "private entrepreneur" are often mixed, and a clear line between them is not drawn. However, in a greater number of cases, it is proposed to understand as an entrepreneur someone who is going to receive income from a business, even if at the initial stage a lot of independent work is expected, and under self-employed it is proposed to understand someone who does not plan to hire other workers, works by himself, without signing a contract with one permanent employer. These are two different strategies for organizing their economic activities and, accordingly, different strategies of the state in relation to this category of persons.

The scale of self-employment is significant both abroad and in Kazakhstan. According to the Statistics Committee of the Republic of Kazakhstan, the share of self-employed in the total number of employed Kazakhstani population is 22%, while more than 50% of self-employed work without registering their activities, without paying taxes or insurance premiums.

Conclusion

The complexity of state regulation of self-employment is associated with the need to maintain a balance of interests of all subjects of economic, legal and environmental relations in order to prevent possible negative consequences for the state economy and the environmental component.

The formation of a model of social economy and social policy is wholly and completely determined by the characteristics of the socio-economic system characteristic of a particular state. Therefore, the author considered the foreign experience in the development and interaction of the social economy, social security and the development of a green economy aimed at maintaining and setting priorities in the field of environmental protection.

Of course, the success of advanced states is based on investment in human capital, which has a multiplier effect on increasing competitiveness. Therefore, in the course of the study, an analysis of the social economy was carried out through the prism of social policy in Kazakhstan and the main indicators characterizing the labor market, unemployment rate, productive employment, which have an impact on environmental protection.

Using regression analysis, the author determined which of the types of employment (employees and self-employed) has the greatest impact on reducing the number of unemployed people in the country, which have a significant impact on the social development of the economy and, accordingly, on the environmental component.

The performed analysis shows that self-employment is a special type of entrepreneurial activity, but it is difficult to regulate by the state due to its predominantly "shadow" nature. The scale of self-employment is significant. Among the self-employed, various groups of citizens are distinguished, in particular, according to the criterion of official registration of labor activity. Some of the self-employed citizens work on an informal basis, i.e. does not pay taxes or insurance premiums. Moreover, such citizens use public goods free of charge. As a result, on the one hand, the state budget does not receive a part of possible income (due to tax revenues), on the other hand, self-employed citizens, being "in the shadow", deprive themselves of the right to receive an insurance pension in the future, since they do not make contributions to the pension the fund and their seniority are not registered.

In recent years, the state has taken various measures to legalize the activities of the self-employed, but these measures at the moment are mostly of an experimental nature. As a rule, they are related to taxation, simplification of registration of self-employed in tax authorities and further communication with them. State regulation of the activities of this group of citizens is hindered by the absence in the legislation of a single definition of "self-employment" for the entire legislative system, as well as the generally accepted criteria for classifying citizens as self-employed.

The results of the analysis show that the initiatives of the state at the moment do not find tangible support from the self-employed citizens themselves, which is largely due to their distrust of government authorities, as well as the lack of real incentives to move to the legal field, in particular, the provision of social guarantees.

In this regard, it is very important to determine the legal status of the self-employed (the same for the entire legislative system), the legislative definition of the criteria for self-employment, the rights and obligations of the self-employed. Lack of certainty in the legal status of self-employed entails the threat of bringing them to administrative, tax or criminal liability for illegal entrepreneurship.

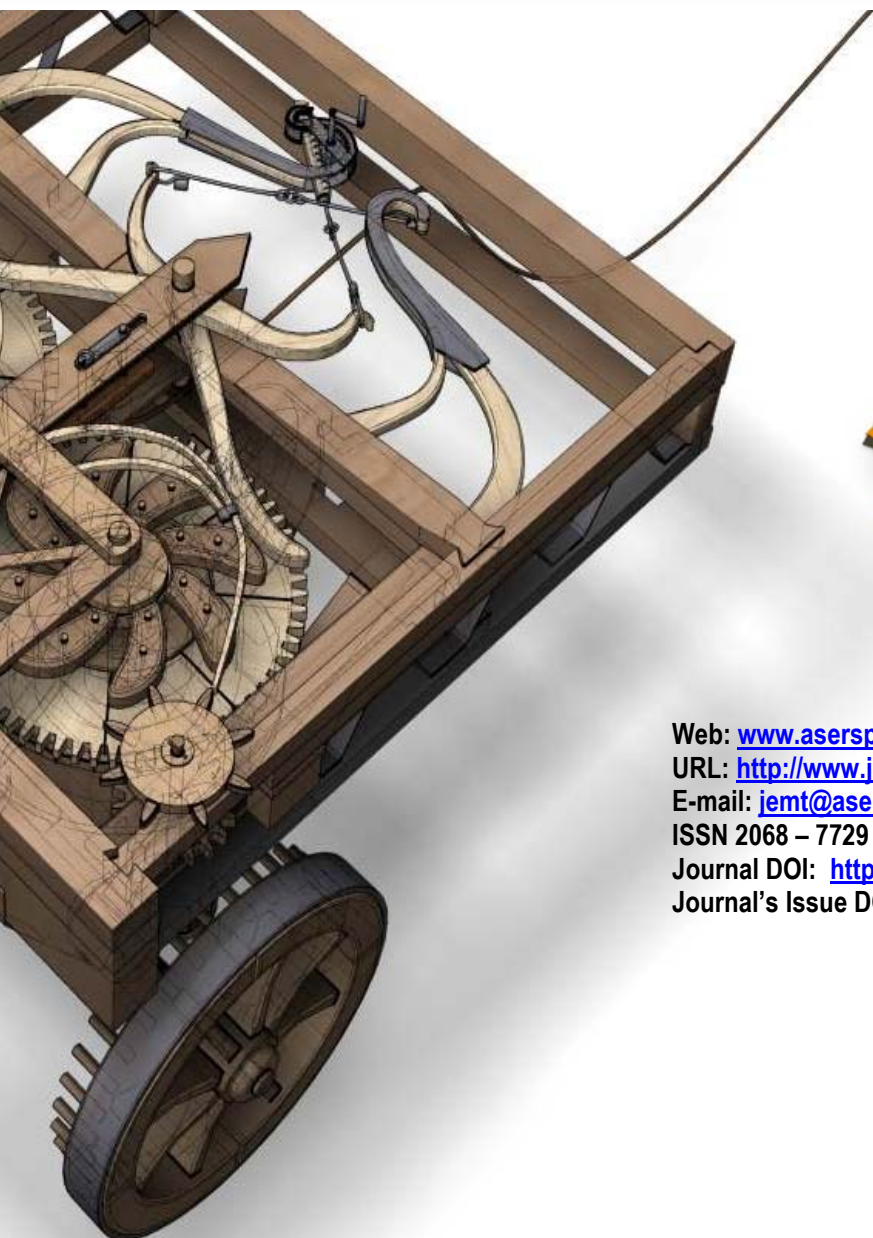
Consequently, we can name the main reasons for the need for the state to legalize self-employment. This is the need for additional tax revenues to the state budget and a decrease in the burden on social extra-budgetary funds. In addition, the transfer of the self-employed to the official economy can contribute to the development of their entrepreneurial initiative, as well as have a positive impact on the social development of the economy and, accordingly, on the environmental component.

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