# ECONOMIC ACTIVITY OF THE RURAL POPULATION: A CASE STUDY OF UKRAINE

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#### Abstract

In the article determined and substantiated that the public opinion that the residents of rural areas, due to less strict observance of the regime of quarantine COVID restrictions on economic activity, lower population density in the settlement network, and technological features of agriculture, suffered smaller losses in terms of employment and income than other strata, turned out to be too optimistic. According to the results of the study, social alienation is increasing as a result of the deterioration of the entire spectrum of social and labour relations. Further research on the chosen subject may be related to strengthening the institutional capacity and financial self-sufficiency of communities due to the decentralization of powers and resources, the transition to a two-level model of interbudgetary relations, the development of local self-government and changes in the administrative-territorial system, overcoming the social alienation of self-employed persons, provision of force majeure in circumstances similar to the COVID pandemic, economic access to food, health care services, education, culture, transport, and digital infrastructure.

**Key words:** agricultural sector, rural population, economic activity, COVID restrictions, employment, labour relations

#### INTRODUCTION

Research on the peculiarities of the economic activity of the rural population focuses on the influence of a number of various factors on this process. At the same time, some of them have a direct and quick effect, while others have a long-term effect. The specificity of the formation of the economic activity of the population of Ukraine consists of a series of successive systemic economic crises that occurred since 2001, which had a negative impact on the socio-economic sphere and the quality of life of the country's rural population. In addition, the unfolding of such economic crises significantly worsened due to the overlap of world global crises. As a result, all these negative phenomena negatively affected the processes of the formation of economic activity of the rural population. And even recent events related to Russia's armed aggression against Ukraine impose significant

negative consequences on the processes of economic activity of the rural population. However, the study of this impact requires indepth analysis after receiving relevant statistical data in the future.

The main problem that affected the level of economic activity in the countryside was the long-term processes of reducing production volumes in agriculture and the transformation of agrarian business in general, which continued in the early 2000s. The consequence of these trends was the growth of negative social changes in the countryside, the migration of a large part of rural residents to cities, etc. All this led to the aggravation of the problem of economic activity of the population in the countryside, and an increase in the level of unemployment, which led to a decrease in the incomes of rural residents. At the same time, the active formation of large agricultural holdings in the 2010s was associated with the technical re-equipment of agriculture, which was accompanied by the release of surplus labour.

Thus, solving the problems associated with a significant increase in the number of jobs is directly related to the implementation of important economic tasks in the agricultural sector.

At the same time, the difficult situation with the use of the labour force is connected not only with the growth of agricultural efficiency but also with the formation of a labour market with a high level of professional mobility of the population.

All this requires a detailed analysis of the current situation and the development of recommendations for increasing the efficiency of the use of the economically active population of rural areas.

The study of the problems of economic activity or inactivity of the rural population, their distribution by appropriate groups, and the analysis of factors that affect the level of unemployment and working capacity of peasants are not new to the field of specialized economic scientific research and are sufficiently widely disclosed in the works of such scientists as O. Agres [1], O. Apostolyuk [2], I. Balaniuk [3], O. Binert [4], A. Boiar [5], Y. Chaliuk [6], M. Dziamulych [8, 9, 10, 11, 12, 13, 14, 15], V. Nahornyi [16], N. Onyshchenko [18], A. Popescu [19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30], G. Shamborovskyi [31], T. Shmatkovska [32, 33, 34, 35], R. Sodoma [36, 37, 38, 39], O. Stashchuk [40, 41, 42], A. Tiurina [44], I. Voronenko [45, 46], I. Yakoviyuk [47], Y. Yanyshyn [48], O. Yatsukh [49] and others. However, the constant changes taking place in the socio-economic sphere, as well as the development of agricultural production in Ukraine, require an in-depth study and analysis of the grouping of the rural population by activity levels; determination of employment indicators, and the level of unemployment of rural residents; study of the influence of the quality of the received education on the economic activity of the peasants.

#### MATERIALS AND METHODS

The economically active population is a part of the population of both sexes, which during a certain period ensures the supply of its labour force for the production of goods and the provision of services.

Those engaged in economic activity are persons aged 15-70 who perform work for remuneration under the conditions of full-time or part-time employment, work individually (self-employed) or for individual citizenemployers, in their own (family) enterprise, members working without pay households, employed in personal auxiliary agriculture, and also temporarily absent from work. According to this methodology, persons who worked for at least 4 hours per week (at least 30 hours on a personal farm) regardless of was permanent, temporary, whether it seasonal, casual, or other work, are considered employed.

The unemployed (as defined by the International Labour Organization) are persons aged 15-70 (both registered and unregistered in the state employment service) who simultaneously meet three conditions: they do not have a job (gainful occupation), are looking for work or are trying to organize own business, ready to start work within the next 2 weeks. This category also includes persons who are studying under the referrals of the employment service, have found a job and are waiting for an answer, or are preparing to start it, but at this time are not yet working.

Economically inactive population (population outside the labour force) - persons who do not have a job and are not looking for it, that is, they cannot be classified as "employed" or "unemployed" [7].

Unemployed population – persons aged 15-70 who were unemployed or economically inactive during the surveyed week.

When summarizing scientific-methodical approaches, formulating intermediate and final conclusions and proposals, techniques of abstract-logical tools, analysis, synthesis, analogy, comparison, etc. were used in the research.

## **RESULTS AND DISCUSSIONS**

A decrease in the level of employment of the population and its economic activity negatively affects the dynamics macroeconomic indicators. The share of the GDP of agriculture, forestry, and fisheries (according to the production method in actual prices) in the 1st quarter of 2021 was 2.8% compared to 2.9% in 2020 and almost 3% in the same period of 2019 to the total [17]. This is despite the fact that the chain index (month to previous month) of consumer prices for the specified period for food products and nonalcoholic beverages grew every year. As a matter of fact, we have a relative decrease in the production of agricultural enterprises compared to other sectors of the economy, in particular, due to unemployment and a the economic activity decrease in employees. According to the State Statistics Service of Ukraine, the number of the workforce, i.e. all employed and unemployed persons aged 15 and older, in rural areas, which provided supply on the labour market during the surveyed week, in the first quarters of 2019-2021 remained almost unchanged and ranged from 52.1% (2021) to 53.8% (2020). At the same time, there was a decrease in of persons of working age (women aged 15-58 years and men 15-59 years old) in the 1st quarter of 2021 by 145 thousand compared to the corresponding period of 2019, of which the age category 20-64 years – by 106.3 thousand, which was 73.3%.

The explanation for this phenomenon can be the resumption of migration processes both in the middle of the country and outside it as a result of the relaxation of quarantine restrictions in 2021 and the start of mass vaccination.

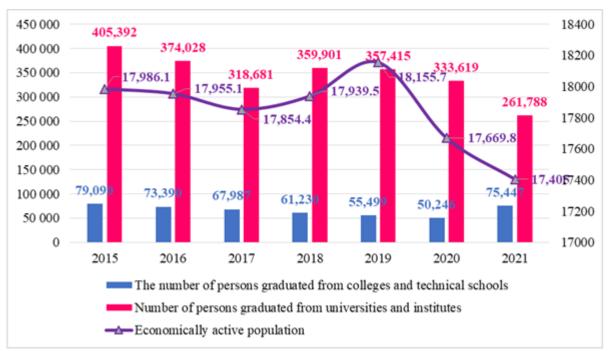


Fig.1. Dynamics of the number of the economically active population, persons who graduated from colleges and technical schools and persons who graduated from universities and institutes in Ukraine for 2015-2021, thousands of persons

Source: calculated and constructed according to data [43].

Using the data of the State Statistics Service of Ukraine, models were built that reflect the dependence of the number of economically active population aged 15-70 on graduation from educational institutions and the demographic situation in the country.

$$Y = 12,288.4794 + 48.0279X_1 + 8.5791X_2$$
 .....(1) where:

Y – the number of the workforce, thousands of people;

 $X_1$  – number of persons who graduated from colleges and technical schools, thousands of persons;

X2 – number of persons who graduated from universities and institutes, thousands of persons.

The model shows that the number of persons who graduated from institutions of higher education has a positive effect on the number of the economically active population, therefore, a balanced interaction of the education system and the labour market will lead to an improvement in the situation in the latter and contribute to an increase in the quality of the workforce. This is confirmed by the calculated elasticity coefficients, which are equal to:

$$E_{y/x1} = \frac{\partial y}{\partial x_1} \times \frac{\overline{x_1}}{\overline{y}} = a_1 \times \frac{\overline{x_1}}{\overline{y}} = 0.2672....(2)$$

$$E_{y/x1} = \frac{\partial y}{\partial x_2} \times \frac{\overline{x_2}}{\overline{y}} = a_2 \times \frac{\overline{x_2}}{\overline{y}} = 0.1434$$

Thus, the following conclusions can be drawn:

- a 1% increase in the number of persons who graduated from colleges and technical schools, all other things being equal, will cause an increase in the number of the economically active population by an average of 0.27%;
- an increase in the number of university and institute graduates by 1%, other things being equal, will cause an increase in the number of the economically active population by an average of 0.14%.

The presented results generally correspond to the current state of the labour market, which presents an increased demand specifically for graduates of colleges and technical schools. (Fig. 2). As we can see, in 2021, compared to the same period of the previous year, there was a reduction in the number of employed rural population by 361.7 thousand people, or by 7%, including wage earners by 153 thousand, and employers by 4.5 thousand.

Collapse business has become the most alarming signal about the effectiveness of state measures aimed at supporting micro and small enterprises in rural areas during the lockdown period associated with COVID-19. The release of workers from agricultural enterprises, including due to COVID-19, led to a significant increase in unemployment among the rural population in 2020–2021 (Fig. 3).

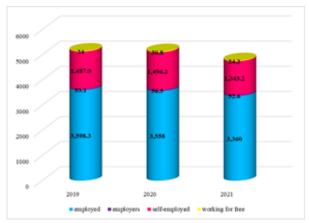


Fig. 2. The number of the employed rural population in Ukraine by employment status in 2019–2021, thousands of people Source: [43].

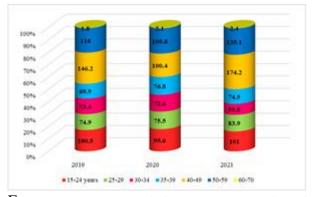


Fig. 3. Unemployment within the rural population of working age in Ukraine (according to the ILO methodology) for 2019-2021, thousands of people. Source: calculated and constructed according to data [43].

As you can see, out of the seven analyzed age groups, the unemployment rate has increased in six, with the exception of 30-34-year-olds. For unknown reasons, the population aged 25–29 (+2.8%), 15–24 (+2.4%), and 40–49 (+2.1%) turned out to be the most vulnerable in terms of keeping their workplace. In our opinion, internal pendulum labour migrants could hardly compete with them. According to expert assessments, there was no mass influx of workers from abroad into rural areas

either, and those who returned, as a rule, were in no hurry to find a job and were looking for various opportunities to return back as soon as possible. This is confirmed by the data of the National Bank of Ukraine, according to which in 2020, compared to the same period in 2019, remittances to Ukraine increased by more than 2.6% (from 8.701 to 8.928 billion USD). From this amount, private transfers from persons working abroad for more than one year increased by 7.5% (from 677 to 728 million USD). The constant leader among countries remains Poland, whose share in total revenues is almost a third - 30.3%, although a decrease of 8.3% is observed over the same period [20]. Analytical data from the State Statistics Service of Ukraine (Fig. 4) show that in agriculture, the number of persons who had the status of unemployed in 2021 was equal to 119.8 thousand, or more than every fifth of all workers who worked in the economy of the country.

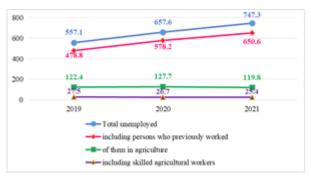


Fig. 4. The number of persons who had the status of unemployed in Ukraine in 2019-2021, thousand persons.

Source: calculated and constructed according to data [43].

As we can see, in contrast to the general dynamics of the labour market, the number of registered unemployed, including qualified workers, in the specified industries decreased by 2.6 and 2.1 thousand people, respectively, during the analyzed period. So, we can conclude that, despite the quarantine measures, the demand for agricultural workers has decreased compared to other industries, but not critically. However, this may not be true, since, for various reasons, not all unemployed people in rural areas turn to employment centres for help, and those who turn to them may not receive the appropriate

status even in the conditions of a pandemic, both objectively and subjectively. objective reasons. The increase in unemployment among officially employed residents of rural areas has expectedly increased the burden on the expenditure part of the mandatory state social insurance fund in case unemployment. In total, during the period when quarantine restrictions were in effect, the number of service recipients increased by 20% from 509.2 thousand in 2019 to 611 thousand in 2021 (Table 1).

Table 1. Provision of services by the State Employment Service of Ukraine to residents of rural areas in 2019–2021 the service of the services by the State Employment Services by the State Employmen

2021, thousands of people

2021, tilousalius of people						
Indicators	2019	2020	2021	Deviation 2021 to		
				2019		
				thousands	%	
				of people		
Received services	509.2	539.5	611.0	101.8	120.0	
Had the status of	246.5	269.1	326.3	79.8	132.4	
unemployed						
In total, got a job, incl.	126.9	103.4	99.2	-27.7	78.2	
before acquiring the status						
of unemployed						
Underwent professional	46.3	32.6	30.0	-16.3	64.8	
training						
Participated in public and	51.2	34.5	23.0	-28.2	44.9	
other works of a						
temporary nature						
Number of unemployed	232.9	221.2	275.8	42.9	118.4	
persons covered by						
vocational guidance						
services						
Received unemployment	107.7	146.2	150.5	42.8	139.7	
benefits (at the end of the						
period)						

Source: calculated and constructed according to data [43].

As we can see, the unfavourable situation during the COVID-19 pandemic had a negative impact on the volume employment, including before the client became unemployed. Other active types of services of the State Employment Service decreased, namely: vocational training – up to 64.8% and participation in public works – up to 44.9%. Therefore, despite the systematic and operational measures of the state, in extreme conditions, the rural unemployed found themselves in a kind of institutional trap. On the one hand, they were released, depriving them of the basic means of subsistence, the other hand. while on opportunities for employment and finding a new place of work were significantly narrowed.

#### CONCLUSIONS

It has been established that the public opinion that the residents of rural areas, due to less strict observance of the regime of quarantine COVID restrictions on economic activity, lower population density in the settlement network, and technological features of agriculture, suffered smaller losses in terms of employment and income than other strata, turned out to be too optimistic As a result of all-Ukrainian introduction of two lockdowns in 2020-2021, the number of the employed rural population decreased by 361,000 people, or by 7%, of which 198,000 were employed and 153,000 were selfemployed. The unemployment rate during the specified period also increased by 1.7 percentage point, or up to 11.5%. In April-May 2021, almost 120,000 workers, or one in five of the total in the economy, received the status of unemployed, dismissed agricultural, forestry, and fishing enterprises. At the same time, the number of applicants for one vacancy in rural areas has doubled due to a simultaneous reduction in the financial capabilities of the State Employment Service, especially regarding the implementation of active forms of returning them to employment status. In the conditions of the pandemic, the state and local authorities have become even more distant from the vital problems of the self-employed in rural areas. Social alienation is increasing as a result of the deterioration of the entire spectrum of social and labour relations. In the first half of 2020, compared to the same period of the previous year, the share of the population with average per capita equivalent monthly income lower than the legally established and the actual living wage increased from 2.7 to 3.3% and from 33.6 to 34, 7% respectively. As a result, the well-being of rural households worsened, the scale of poverty increased, and the problem of economic access to food products became even more acute for certain categories. Further research on the chosen subject may be related to strengthening the institutional capacity and financial self-sufficiency of communities due to the decentralization of powers and resources, the transition to a twolevel model of inter-budgetary relations, the development of local self-government and changes in the administrative-territorial system, overcoming the social alienation of self-employed persons, provision of force majeure in circumstances similar to the COVID pandemic, economic access to food, health care services, education, culture, transport, and digital infrastructure.

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