

THE IMPACT OF THE PEASANT FARMS FUNCTIONING ON THE DIFFERENTIATION OF THE LIVING LEVEL OF THE RURAL POPULATION. A CASE STUDY OF VOLYN REGION, UKRAINE

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Abstract

The article analyses the modern features and the differentiation level of the rural population life quality. The influence of income from personal peasant farms the functioning on the rural population life quality is considered. The peculiarities of functioning of personal peasant farms are determined. The study proved, that the ratio of the consumed products grown value in personal peasant farms between the extreme decile groups, which are formed by average per capita expenditures, exceeded 5.3 times for the entire Volyn region household population in 2018. In order to visualize the presentation of information on the degree of uneven distribution of the average per capita money and total expenditures of rural personal peasant farms in the Volyn region of Ukraine, we constructed the Lorentz curve, which represents the cumulative distribution of population and the corresponding expenditures. The study proved, that the functioning of the private economy is a significant factor for the smoothing of income unevenness and social polarization of the rural population. It has been found that some levelling of living standards in the countryside is achieved largely by the self-sufficiency of food produced in the personal peasant farms than by the income from their sale.

Key words: rural population, peasant farms, decile coefficient of funds, decile coefficient of cost differentiation, the Lorentz factor, the Gini coefficient

INTRODUCTION

The standard of living is one of the most important socio-economic categories that characterizes the position of a person in society, the possibility of meeting his needs and human development [7]. It should be noted that in most scientific studies, living standards are measured through welfare assessments. However, personal peasant farms can be defined as a form of agricultural production in which the worker and the entrepreneur are combined in one person [8]. Today, as a result of significant structural shifts in agricultural production, the share of products produced in the private sector, namely, in private peasant

farms (PPF), has increased significantly. Therefore, there is a need to evaluate these transformations in terms of determining the importance of functioning and development of peasant farms in shaping the standard of living of the rural population. The scientific and practical importance of this issue has determined the relevance, purposefulness and necessity of researching the impact of the private peasant farms functioning on the differentiation of the living standards of the rural population.

In the scientific works of A. Boiar and O. Stashchuk [3], D. Bohynia [2], E. Libanova [9], O. Borodina and I. Prokopa [4], P. Sabluk [13], R. Sodoma and H. Skhidnytska [14], I.

Tofan [15], V. Yakubiv [16; 17] the mechanism of formation of the living standard of the population is investigated. However, in modern scientific work the problems of estimation of incomes influence from functioning of personal peasant farms on graduation indicators of rural population and formation of middle class, as social foundation of the state, bases of its dynamic and progressive economic development are insufficiently covered.

MATERIALS AND METHODS

The tasks set are: to evaluate the dynamics of the polarization development of living standards of the rural population and to determine the role and value of revenues from the activities of personal peasant farms in the differentiation of income and expenditure indicators and the formation of the middle class in rural areas of Volyn region, Ukraine.

Conducting of the research is based on the use of such methods and methodological approaches: analysis and synthesis, structural analysis, grouping methods, graphical and tabular methods – to display visually the results of the research. Figures were drawn using Microsoft Excel, 2013 version.

The work is based on the analysis and evaluation of the results of the analysis of statistics State Statistics Service of Ukraine and Volyn contained in statistical databases.

RESULTS AND DISCUSSIONS

The result of the functioning of the socio-economic mechanism of income generation and expenditure of the population is their differentiation. Depending on many factors, households receive unequal public benefits. Some are richer, others poorer [6].

In particular, the estimation of the uneven distribution of expenditures of rural population of the Volyn region with the help of a decile coefficient of differentiation indicates its decrease during the period from 2013 to 2018 for monetary expenditures – by 30%, for aggregate expenditures – by 10%. Moreover, the ratio of the minimum level of expenditures among the 10% of the most affluent urban

population to the maximum level of expenditures among the 10% of the least affluent urban population in the studied period decreased for total expenses – by 1.1 times, and for monetary – remained constant. The declining ratio of the rural population's cash spending in 2013-2018 decreased from 6.9 to 6.0, and the urban ratio from 7.0 to 5.4. The results obtained show that the degree of differentiation of monetary incomes in rural areas of Volyn region is somewhat higher now than in urban settlements.

The decile ratio of funds of money income from the products sale of personal peasant farms, as a ratio of their average values within the extreme decile groups, determined by the average per capita expenditures, for the entire household total, in 2018 in Volyn was 11.3 times. Moreover, the share of monetary income from the sale of agricultural products in the first decile group held 3.9%, and in the last – 11.8%.

Because of an international comparison, the income ratio of rich and poorest households, in particular, in China and the EU-5 countries is 7:1, in Japan – 4.3:1, and in Ukraine – 30:1 [10]. At the same time, the estimation of the indicators of socio-economic stratification of the population at the cumulative expenditures in some countries [12] (Table 1) and in Ukraine indicates some of its smoothing.

Table 1. Indicators of socio-economic stratification of the population in 2017

Country	Gini coefficient	Total expenditure ratio of 10% of the most deprived (decile coefficient of funds)
Bulgaria	0.27	3.90
Hungary	0.28	3.49
Armenia	0.32	4.08
Poland	0.34	4.29
Latvia	0.34	4.54
Georgia	0.37	5.69
Moldova	0.41	6.14
Russia	0.47	8.06

Source: Author's results based on [12].

However, the rather high growth rates of real monetary incomes of the rural population in the study period still did not ensure the exit of a large mass of peasants from the poverty zone [6]. For the rural population, which, according

to the nature of its activities, should not be distinguished by a high level of variability in income and expenditure [1], the estimation of the differentiation of these coefficients indicates the continued dominance of significant social stratification.

In our opinion, some other conclusions can be drawn regarding the degree of the rural population polarization at aggregate costs. Thus, the decile coefficient of differentiation of the total expenditures of rural population of Volyn region for 2013-2018 decreased by 1.1 times and amounted to 3.1, and for urban population – 3.5. The decile ratio of the funds of total expenditures of the rural population of Volyn region, as the ratio between the average values of expenditures within the extreme comparable decile groups, decreased from 4.4 to 3.7 during the study period, and from 5.9 to 5.0 for the urban population. It should be noted that the ratio of the consumed products grown value in personal peasant farms between the extreme decile groups, which are formed by average per capita expenditures, exceeded 5.3 times for the entire Volyn region household population in 2018. Moreover, the results of the analysis of the share of designated income in the context of decile groups indicate that there is no sharp differentiation: in the first decile it was 12.7%, in the tenth – 18.1%, i.e. it remained relatively stable.

The estimation of tendencies of stratification change of rural population of Volyn region during 2013-2018 on aggregate expenses shows a slightly lower in comparison with monetary expenses, degree of their differentiation. Our study provide grounds to argue that to some extent the differentiation degree of the population by aggregate expenditures smooths out and equalizes the income derived from the functioning of the personal economy. After all, under current conditions, the value of products consumed by personal peasant farms and the assistance of relatives with food products produced in private households occupy the lion's share (more than 36.4%) in the total resources of the rural population of Volyn region.

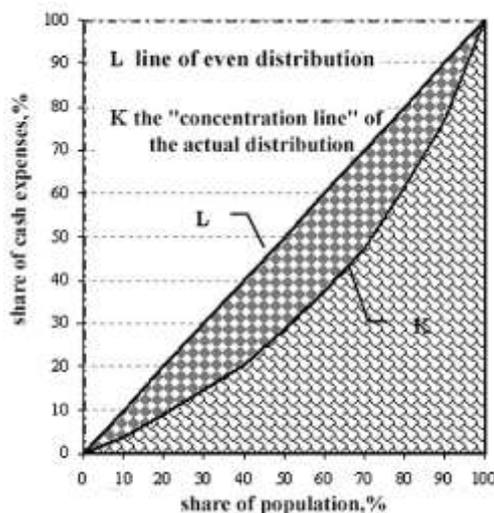


Fig. 1. The Lorenz curve on monetary expenditures of rural population of Volyn region, Ukraine, 2018
 Source: Built by the Authors.

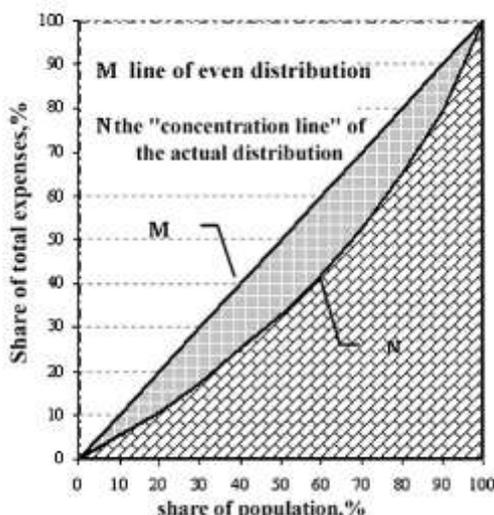


Fig. 2. The Lorenz Curve on Aggregate Expenditure of Rural Population of Volyn Region, Ukraine, 2018
 Source: Built by the Authors.

It should be noted that in the rural personal peasant farms of Volyn region during 2013-2018 there is a clear tendency to increase the total expenditures of the share of the first decile group – from 5.2% to 5.6%, i.e. by 0.4 percentage points. Simultaneously with the increase in the share of the first decile, during the study period, the share of the tenth decile group decreases from 22.6% to 20.8%, i.e. by 1.8 percentage points. As a result of these transformations, in 2018, the first quintile group of the rural population of Volyn region accounted for 10.7% of total expenditures, and the fifth – 34.6%, i.e. 3.2 times more (in 2013, the outlined difference was 3.0 times). Thus,

the characterized trends serve to confirm the partial equalization of rural population differentiation in aggregate costs.

In order to visualize the presentation of information on the degree of uneven distribution of the average per capita money and total expenditures of rural personal peasant farms in the Volyn region, we constructed the Lorenz curve, which represents the cumulative distribution of population and the corresponding expenditures.

The graphs (Figs. 1, 2, 3, 4) clearly show that in 2013 the level of differentiation of total and especially monetary expenditures of the rural population was slightly higher than their corresponding level in 2018. Particularly significant is the polarization of the distribution of rural population monetary expenditure in 2013, because the «concentration line» (F) during this period differs most (is the most concave) from the line of uniform distribution (H), i.e. the concentration of the identified costs is the highest. Although in 2018, the distribution of average per capita cash expenditures of rural peasant farms is not balanced with the distribution of per capita total expenditures, but compared to 2013, their differentiation is somewhat smoothed (Figs. 1 and 2).

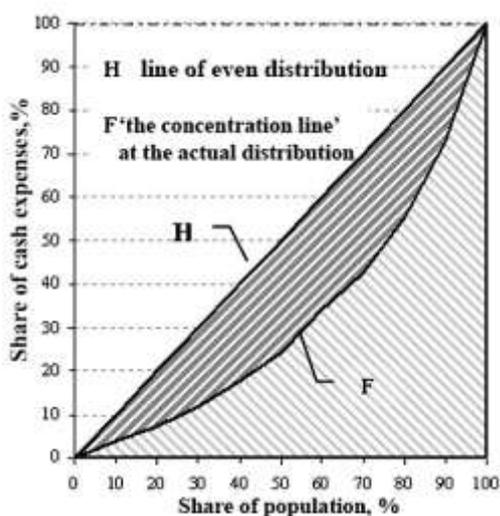


Fig. 3. The Lorenz curve on monetary expenditures of rural population of Volyn region, Ukraine, in 2013
 Source: Built by the Authors.

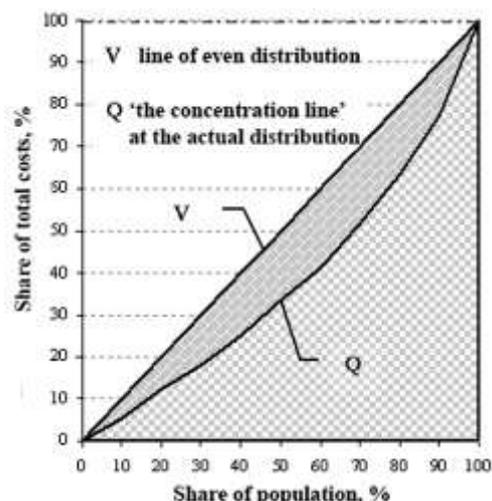


Fig. 4. The Lorenz curve on total expenditures of rural population of Volyn region, Ukraine, 2013
 Source: Built by the Authors.

The Gini coefficient was used to estimate the deviation degree of the actual expenditures distribution by numerically equal groups of rural population from the line of their real distribution. It should be noted that for 2013 – 2018, the average difference in the average per capita money income of rural personal peasant farms in Volyn region decreased by 6 percentage points and amounted to 30% (in the whole country – 31%) relative to the average income in their entirety. During the study period in Volyn region, it was the lowest in 2015 – 27% (Table 2). For the aggregate average per capita incomes of rural personal peasant farms in the Volyn region, this average difference for 2013 – 2018 remained constant – 24% (in the whole country – 28%), and the smallest in 2015 was only 9% (Table 2).

Table 2. Indicators of socio-economic of Volyn region rural population differentiation in 2013-2018, Ukraine

Year	Gini coefficient		Decile coefficient of population spending differentiation (times)		Percentage of households with an average per capita expenditure per month below the subsistence level (%)	
	pecuniary	cumulative	pecuniary	cumulative	pecuniary	cumulative
2013	0.36	0.24	5.5	2.8	95.9	81.1
2014	0.32	0.24	4.6	3.1	98.7	89.0
2015	0.27	0.09	3.5	2.8	99.1	89.4
2016	0.28	0.20	3.2	2.4	96.6	82.8
2017	0.28	0.21	4.1	2.8	89.6	72.3
2018	0.30	0.24	4.3	3.1	75.9	56.4

Source: Author's results based on [5].

In the urban households of Volyn region, the average difference in average per capita income for the study period increased by 3 percentage points and amounted to 27% relative to the average income for their entire population.

According to the results of a sample survey of households in the Volyn region, in 2013, only 4.1% of the rural population (urban – 5.8%) by average per capita money expenditures and 18.9% (urban – 11.8 %) by average per capita total expenditures, were above the official poverty line and all others were outside (Table 2). In 2018, the situation has improved somewhat: average per capita spending over and above the officially established subsistence level was made by 24.1% of rural (31.4% of urban) households. 43.6% of rural households and 27.9% of urban households were above the subsistence minimum on average per capita expenditures. It should be noted that in households of Volyn region with average per capita total expenses below the subsistence minimum in 2018 the total income from the operation of private households accounted for 27.9% of all resources.

However, the real cost of living differs significantly from the officially established one. Because the state is not able to provide social guarantees at the minimum subsistence level due to the limited financial resources, the corresponding level of its provision has been legislated [11]. In reality, the subsistence minimum is a much larger value, and so the poverty threshold at the subsistence level is actually higher [1], and the extent of its spread in society, particularly in rural areas, is much higher. Thus, according to UN standards, the poverty line in Central and Eastern European countries is set at the average daily income of 4 USD [9], which at the current exchange rate is about 100 UAH, or an average of 3 000 UAH per month.

CONCLUSIONS

The above gives grounds to argue that the functioning of the private economy is a significant factor for the smoothing of income unevenness and social polarization of the rural population. It has been found that some

levelling of living standards in the countryside is achieved largely by the self-sufficiency of food produced in the personal peasant farms than by the income from their sale. However, it should be noted that the peasant economy is characterized by consumer efficiency, which is expressed by the degree of satisfaction of the needs of the rural population in food products of their own production. Thus, the personal economy is the response of the rural population majority to the low financial income and unemployment that prevails in rural settlements.

We believe that increasing the number of medium- and high-performing households, while further increasing their efficiency, is one of the important economic prerequisites for the formation of a middle class in the countryside. In addition, the performance of personal peasant farms is an integral and important feature of the performance of the agricultural industry. However, under the realities of the socio-economic conditions of the present, through work in the personal economy is mainly self-protection of the rural population, the internal economic content of the economy is reduced to food self-sufficiency, which leads to the formation in the vast majority of personal peasant farms rather low level of their marketability. Therefore, we consider it appropriate to emphasize the priority of supporting both commodity personal peasant forms of business and entrepreneurship in general, which concentrates on the middle class (existing and potential) – the objective basis of economic growth.

Summing up, we emphasize the need to create the permanent monitoring mechanism of the rural population living standards polarization, which would contribute to the development of a measures system aimed at reducing the outlined deformations.

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