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ON THE EDGE OF SURVIVAL: RURAL POPULATION'S INCOMES AND EXPENSES IN UKRAINE

ABSTRACT

Over one third of the Ukrainian population is living in the rural area, yet the rural people's living conditions are significantly different from those of urban inhabitants, primarily due to the inequality in income distribution. Even larger gap exists between them and residents of EU member countries, including the less developed ones, while the cost of living in Ukraine is at the same level as in EU and in the case of certain products and services it is even more expensive. Therefore, the present article is devoted to the analysis of the rural population's incomes and expenses, to their structures and peculiarities. The data on rural population in five economic regions of Ukraine were analyzed in order to define the regional differences.

Key words: income, expenses, rural territories, economic region, Ukraine.

JEL Classification: O18, R21.

1. INTRODUCTION

The development of Ukraine is characterized by significant contradictions that apply to all sectors of the economy and social life. The need for sustainable development is declared, but it is not financially supported; therefore the areas that mostly need changes do not receive any help and are left on their own. The rural territories and their population are among these areas, which have remained without organizational, financial and innovational support for decades.

While in the economically developed countries the rural population's living standard is slowly increasing due to proper government policies and measures for economic (business) development in rural areas, Ukraine can be characterized as mono-functional, with agriculture being the main economic activity and the source of income for most rural inhabitants.

The rural territories of various regions in Ukraine have common features, such as large share of agricultural employment, lack of alternative economic activities, low income level, insufficient infrastructural coverage, worn out and obsolete agricultural machinery and equipment, active labor migration towards urban areas and abroad, steady diminution in number of the rural population, lack

of development perspectives for young people. However, there are also significant rural development differences across regions in the context of these and other characteristics. They include development factors such as natural (land, presence or availability of resources, weather conditions), historical (causes of rural settlements formation, peculiarities of their existence and development in different time periods), economic (prerequisites for various economic activities, including agriculture, availability of income generation possibilities, proximity to markets, etc.), territorial (distance to district or regional centers, state borderlines), transport (presence and development of transport network, quality of vehicles), demographic (fertility, death rate, morbidity), etc.

The research on various aspects of rural development in Ukraine, including the rural population's living standard, is conducted by many Ukrainian scientists, which include Baranovskiy M., Borodina O., Borschevskiy V., Hubeni Y., Muzyka P., Pavlov O., Prytula K., Prokopa I., Sadova U. Some foreign researchers also approached these issues in Ukraine, one of them being Rejman K. However, due to the wide range of issues related to the problem, many of them still need further exploration, as well as definition of solutions, their substantiation and possible implementation.

Therefore, the goal of the research is to identify and investigate the regional characteristics and differences in rural population's incomes and expenses in Ukraine.

2. ANALYSIS OF RURAL POPULATION'S INCOMES AND EXPENSES IN UKRAINE

One of the main obstacles on the way to consumption enhancement, increase of demand, development of industrial production and services is the low income of the population in Ukraine, especially in rural areas. While the average monthly salary in the country was € 210 (converted to EUR from UAH according to the average annual exchange rate of the National Bank of Ukraine) in 2010, in agriculture this amounted to only € 134 (according to the State Statistics Service of Ukraine). In addition to this, the level of salaries in agriculture also had significant regional differences, ranging from a minimum value of € 77.6 in Volynska to maximum € 170.7 in the Kyivska oblast (*oblast* is an administrative region in Ukraine). It is also important to note such an indicator as a minimal monthly cost of living per person, reviewed periodically and confirmed by the Cabinet of Ministers of Ukraine. By December 1, 2010, this indicator reached € 82.9 (according to the Law of Ukraine "On definition of the minimal cost of living and minimal wages").

The data based on the Ukrainian Household Survey, organized by the State Statistics Service of Ukraine, were used for the following analysis of rural

population's incomes and expenses. Five economic regions of Ukraine, which significantly differ in the quantity and density of the rural population, the ownership structure in agriculture, its production volumes and efficiency, were chosen for comparison. These economic (not administrative) regions include (see Figure 1): Karpatskyy (consisting of Ivano-Frankivska, Zakarpatska, Lvivska, Chernivetska oblasts), Prydniprovskyy (Dnipropetrovska, Zaporizka, Kirovohradska oblasts), Skhidnyy (Poltavska, Sumska oblasts), Tsentralnyy (Kyivska, Cherkaska oblasts), Prychornomorskyy (Odeska, Mykolayivska, Khersonska oblasts and the Autonomous Republic of Crimea).



Figure 1. Economic regions of Ukraine.

Among the investigated economic regions, there are significant differences with regard to the density and number of households. Thus, in the year 2010, in the Karpatskyy economic region, the share of households in the rural areas accounted for 48.2% of total households in the region, in Prychornomorskyy 32.1%, Skhidnyy – 29.2%, Tsentralnyy – 23.4%, while in Prydniprovskyy economic region – 22.2%. The most numerous households are found in the rural territories of Karpatskyy economic region, with an average size of 3.3 people, in Prychornomorskyy –

2.8 people, while in the Tsentralnyy, Skhidnyy and Prydniprovskyy the average size of rural households ranges from 2.40 to 2.46 people. Compared to other economic regions, Karpatskyy has the largest number of households with children under 18 years of age, their share accounting for 50.9%. The investigated regions also differ from the point of view of the coefficient of economic burden on the working household member, which is the highest in Prydniprovskyy economic region (3.0), slightly lower in Tsentralnyy (2.84), Skhidnyy (2.67), Karpatskyy (2.53), and the lowest in Prychornomorskyy region – 2.45.

Table 1 presents basic data that reveal the average monthly resources and expenses of rural population in five economic regions of Ukraine, which reveals the differences in the possibilities of income generation on various rural territories.

Table 1
Average monthly resources and expenses of rural households
in selected economic regions of Ukraine in 2010

| Economic regions | Average monthly indicator per household, euro | |
|------------------|---|----------------|
| | Total resources | Total expenses |
| Karpatskyy | 331.1 | 295.7 |
| Prydniprovskyy | 274.9 | 228.1 |
| Skhidnyy | 299.0 | 248.4 |
| Tsentralnyy | 284.1 | 255.6 |
| Prychornomorskyy | 289.4 | 253.4 |

Source: State Statistics Service of Ukraine.

The total household resources consist of income, such as salary (wages), as well as savings, loans, credits, debts, taken by and returned to the household. *Aggregate resources* are an indicator that shows the potential resources of a household, regardless of their source. The display of this indicator in a relative manner (Table 2) allows a better understanding of the regional differences with regard to the particular income types and sources.

The share of official remuneration and pensions in aggregate resources ranges from 54.3% to 63.4%, depending on the economic region. It is largest in the Tsentralnyy region, due to the largest share of salaries and pensions in its structure. In the Prydniprovskyy region, the share of remuneration is the lowest, while the smallest share of pensions in total household incomes in rural areas is in the economic region Karpatskyy.

It is interesting to point out is that the share of income from entrepreneurial activity and self-employment of the rural population in Prychornomorskyy and Karpatskyy regions is 4 times higher than that of the rural residents from Skhidnyy and Tsentralnyy regions, and twice as high as in Prydniprovskyy region.

Table 2
Structure of total household resources of rural population in selected economic regions in 2010, %

| Sources of income | Economic regions | | | | | Ukraine |
|--|------------------|---------------|---------|------------|-----------------|---------|
| | Karpatsky | Prydniprovsky | Skhidny | Tsentrally | Prychornomorsky | |
| Remuneration | 32.9 | 30.6 | 33.4 | 36.3 | 37.9 | 32.0 |
| Pension | 21.4 | 24.6 | 24.4 | 27.1 | 21.8 | 24.7 |
| Income from entrepreneurial activity and self-employment | 8.8 | 4.6 | 2.2 | 2.2 | 9.5 | 4.8 |
| Income from sales of agricultural products, personal and household property, real estate | 5.0 | 12.8 | 11.6 | 9.9 | 11.3 | 10.9 |
| Income from ownership | 0.1 | 3.6 | 2.1 | 1.6 | 2.1 | 1.6 |
| Scholarships | 0.5 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 |
| Benefits, subsidies and compensation payments | 5.3 | 3.4 | 3.7 | 3.9 | 3.0 | 4.0 |
| Financial support (from family of other individuals/organizations) | 8.2 | 3.8 | 5.0 | 4.6 | 4.2 | 5.3 |
| Alimony | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other income | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 |
| Value of self-grown or self-made consumed products | 13.6 | 12.0 | 14.5 | 11.6 | 7.5 | 12.9 |
| Usage of savings, loans, returned debts | 3.4 | 3.5 | 1.9 | 1.6 | 1.4 | 2.5 |

Source: State Statistics Service of Ukraine.

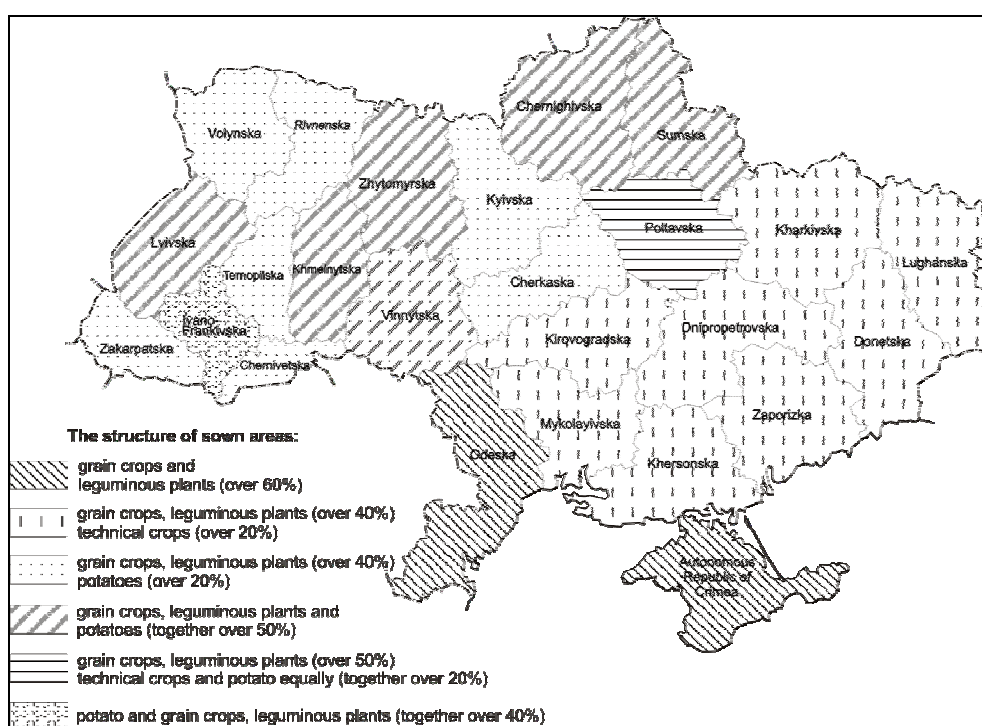
A significant part of total resources on rural households come from remuneration, pensions and sales or self-consumption. The share of sales of agricultural products in total resources is the highest for the rural households of Skhidny, Prydniprovsky and Prychornomorsky regions. The income received from the sales of agricultural goods calculated per household per month for the above-mentioned regions is € 34.7, € 35.2 and € 31 respectively, while for the Karpatsky region only € 16.4. The households in Karpatsky and Skhidny economic regions, compared to other regions, focused on the production for self-consumption. The shares of consumed products, generated by individual households, in the Karpatsky and Skhidny economic regions accounted for 13.6% and 14.5%, exceeding the average index for Ukraine. In general, this index in the structure of total resources of rural households is on the third and fourth position from the top, depending on the economic region, revealing that this is an important source of income/consumption for the rural population in Ukraine. Therefore, it would be important to investigate how the farmland is used by individual households, what particular crops are grown and the land cultivation modality.

In the agricultural land structure, according to its actual use on all surveyed households in 2010, the share of arable land amounts to 60%. The highest shares of arable land, reaching even 90% of oblasts' agricultural land, were typical for Dnipropetrovska, Kirovohradska, Zaporizka oblasts (Prydniprovskyy economic region), Odeska, Mykolayivska, Khersonska oblasts and the Autonomous Republic of Crimea (Prychornomorskyy economic region), Kyivska, Cherkaska oblasts (Tsentralnyy economic region) Vinnytska, Donetsk, Kharkivska and Ternopil'ska oblasts.

The perennial plants occupy small areas in the agricultural land structure. Their relative share ranges from 0.1% to 5.0%.

Grasslands and pastures are concentrated mostly in Volynska (24.6%), Zhytomyrska (25.4%), Zakarpatska (32.3%), Ivano-Frankivska (22.4%), Rivnenska (22.7%), Chernivetska (32.0%) and Chernighivska (22.5%) oblasts.

The structure of planted areas is dominated by cereals and legumes (Figure 2). The industrial crops and potatoes are cultivated on smaller areas, but their size largely varies across regions. The share of field vegetables and melons is small and averages 4.3% in Ukraine.



Source: State Statistics Service of Ukraine.

Figure 2. The structure of planted areas of rural households in Ukraine in 2010.

In Ukraine, land is cultivated by rural households mostly on the basis of human labor and to a much lesser extent by tractors. 70.8% of households from the Autonomous Republic of Crimea cultivate their land with their own hands. The large majority of rural households in Zhytomyrska (53.5%), Lvivska (64.5%) and Rivnenska (71.5%) oblasts cultivate the land manually, as well as with draft animals (horses and oxen). Meanwhile, in oblasts such as Ternopil'ska and Volyn'ska, almost half of rural households use all available means: manual labor, horses, oxen and tractors. In total, 53.7% of rural households in Ukraine cultivate land manually and using tractors, 16.0% – manually and with horses and oxen, 15.1% – manually, using horses, oxen and tractors, 9.0% – manually only, 4.8% – using only tractors, 1.1% – using only horses and oxen, 0.3% – using only horses, oxen and tractors.

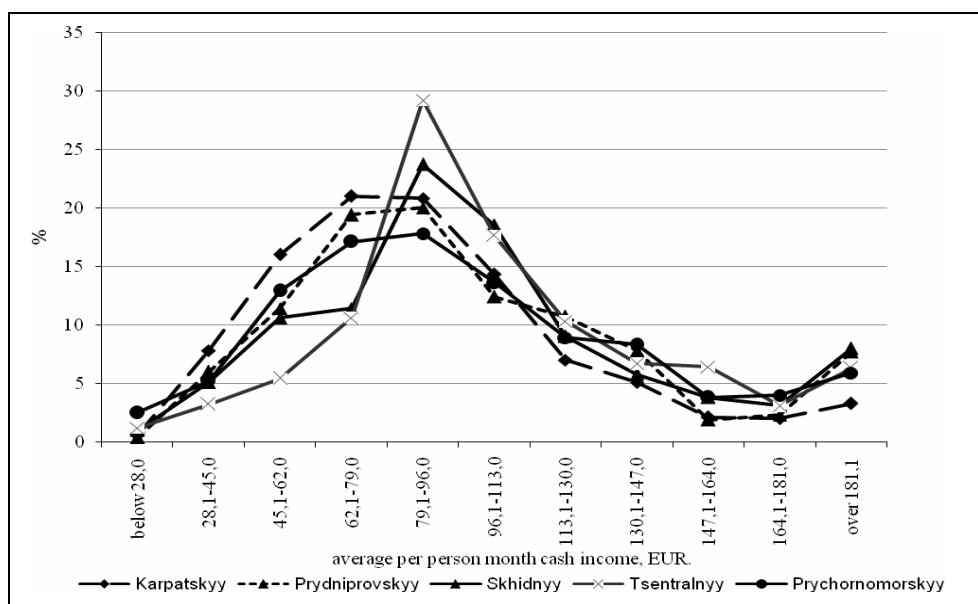
Only in the Donetsk oblast, over 50% of rural households had agricultural machinery. Fewer rural households in Volyn'ska (47.5%), Mykolayiv'ska (31.5%), Rivnenska (29.6%) and Ternopil'ska oblasts (23.6%) had agricultural machinery. The average for Ukraine, as far as the share of rural households owning agricultural machinery goes, amounts to only 13.0%.

It should be noted that the use of manual labor in agriculture is very common in the Ukrainian rural area. Of course, in some regions, machinery use is limited due to landscape peculiarities (such as in the Autonomous Republic of Crimea), but in most areas the lack of advanced equipment results from the rural population's financial problems and poverty. This predetermines the area of land that can be cultivated by one household, lowering the efficiency and the potential income.

Returning to the issue of income assessment on rural households, Figure 3 presents the distribution of rural households according to the level of received income by the investigated economic regions. It is obvious that a large share of rural households receive incomes that are lower than the minimal monthly cost of living per capita by Ukrainian government (€ 82.9 as of December 1, 2010). Thus, 45.5% of rural households in Karpatskyy economic region have a lower average income than the aforementioned indicator. The share of such households in the Prychornomorskyy economic region is smaller, *i.e.* 37.7%, in the Prydniprovskyy region – 37.2%, in the Skhidnyy – 28.1%, while the lowest percentage of rural households with income below the minimal cost of living is found in the Tsentralnyy economic region (20.4%) due to its proximity to the capital of the country.

In Tsentralnyy economic region, nearly one third of rural households (29.2%) have an average income per capita ranging from € 79.1 to € 96.0. Almost one fifth of the rural households in Skhidnyy and Tsentralnyy economic regions have an average income per capita ranging from € 96.1 to € 113.0 (18.5% and 17.6% respectively). Most rural households with average income per capita over € 181.1 can be noticed in Skhidnyy (8.0% of the total rural households) and Prydniprovskyy

(7.7%) economic regions. The smallest share of such households is located in Karpatskyy economic region – 3.3%. Thus, the income sources feature significant differences across regions, determined by the different conditions of life, job availability, rural population's activity and initiative in entrepreneurship and agriculture, as well as efficiency and productivity.



Source: State Statistics Service of Ukraine.

Figure 3. Distribution of rural households according to the income per capita.

The household expenditures are closely related to incomes. The analysis revealed that the income of rural households in all districts covers most living expenses. However, this does not indicate that the income level is optimal, as due to the lack of opportunities to increase the income, rural households are forced to control their consumption and limit their development opportunities. The most common ways to reduce the cost of living for the rural population are: agricultural production for self-consumption, purchasing cheap products and omitting the use of any third-party services, which can be handled by their family members (the quality of such services is often not taken into account, since the cost is the main factor).

In the structure of total household expenses, the largest share belongs to consumer spending; yet aggregate expenditure in relative indicators shows a slight variation of their structure by different economic regions (Table 3).

Table 3

Structure of aggregate expenses of rural households in selected economic regions of Ukraine in 2010, %

| Types of expenses | Economic regions | | | | | Ukraine |
|---|------------------|----------------|----------|-------------|------------------|---------|
| | Karpatskyy | Prydniprovskyy | Skhidnyy | Tsentrалnyy | Prychornomorskyy | |
| Consumer expenses, including: | 90.7 | 85.5 | 86.6 | 86.4 | 88.9 | 87.4 |
| Food and non-alcoholic beverages | 55.7 | 52.7 | 56.5 | 56.2 | 55.2 | 56.1 |
| Alcoholic beverages and tobacco products | 3.4 | 3.6 | 2.7 | 2.2 | 3.3 | 2.9 |
| Clothing and footwear | 8.0 | 5.0 | 5.5 | 6.0 | 6.2 | 6.2 |
| Housing and utilities (water, electricity, natural gas, etc.) | 6.3 | 9.2 | 7.4 | 7.6 | 8.8 | 7.4 |
| Household appliances, housewares | 2.4 | 1.9 | 2.5 | 1.7 | 3.0 | 2.4 |
| Health | 2.9 | 3.9 | 2.8 | 3.5 | 2.6 | 3.0 |
| Transportation | 3.7 | 3.8 | 2.6 | 3.4 | 2.6 | 2.9 |
| Communications | 2.0 | 1.8 | 1.9 | 1.7 | 2.1 | 1.8 |
| Recreation and culture | 0.9 | 0.6 | 1.0 | 0.8 | 0.9 | 0.8 |
| Education | 1.2 | 0.5 | 0.8 | 1.0 | 0.9 | 0.9 |
| Restaurants and hotels | 2.0 | 0.8 | 1.3 | 0.6 | 1.2 | 1.2 |
| Other goods and services | 2.2 | 1.7 | 1.6 | 1.7 | 2.1 | 1.8 |
| Non-consumer expenses | 9.3 | 14.5 | 13.4 | 13.6 | 11.1 | 12.6 |

Source: State Statistics Service of Ukraine.

In the structure of expenses on rural households, the largest share is devoted to satisfy basic human needs. Overall, the share of consumption expenditures of rural households is largest in Karpatskyy economic region, *i.e.* 90.7%. However, non-consumer spending is low and ranges from 9.3% in the Karpatskyy region to 14.5% in the Prydniprovskyy economic region. The non-consumer expenses include financial help (donations) to relatives and other entities or individuals, bank deposits, purchase of shares, real estate, construction and reconstruction, etc.

An average rural household in Karpatskyy economic region spends around € 23.5 per month on clothing and footwear, which is the highest among the investigated regions. A significantly lower amount is spent on such goods in Prychornomorskyy economic region (€ 15.7), and Tsentrалnyy (€15.2), Skhidnyy – € 13.6, and the lowest in Prydniprovskyy economic region – only € 11.4. Therefore, the expenses of rural residents on clothing and footwear in Prydniprovskyy economic region are twice smaller compared to the Karpatskyy region.

On the average, the rural households in the Karpatskyy economic region spend more on transportation and communications compared to other regions. The rural households of the Prychornomorskyy economic region spend more on household appliances and house repairs compared to other regions.

Significant differences in the levels of spending on education exist between Karpatskyy (€ 3.6) and Prydniprovskyy (€ 1.2) economic regions. Spending on transportation, as mentioned before, is high in Karpatskyy region, € 10.9, while the lowest was noticed in Skhidnyy economic regions (€ 6.4). Expenses on restaurants and hotels are characterized by significant differentiation with maximum in the Karpatskyy and the minimum in Tsentralnyy economic region.

Aggregate housing expenses, including utilities (water, electricity, natural gas, etc.) in Prychornomorskyy region totaled € 22.5 and were the highest among the investigated regions, in which these ranged from € 18.5 to € 21.

A minor part of rural households' income in all economic regions was spent on recreation and culture.

3. CONCLUSIONS

The conducted analysis of income and expenses on the rural households in Ukraine enable us to draw conclusions on the existing problems, which are a significant barrier to development. While the income level in the investigated economic regions turned to be similar, its structure was largely different, and this was also the case with the expenses.

The following are typical aspects of the rural households in the investigated economic regions:

- the share of remuneration (salaries and wages) and pensions totals over 50% of their aggregate resources;
- the income from the sales of agricultural products, personal and household property, real estate holds the third position (next after remuneration and pensions) in Prydniprovskyy and Prychornomorskyy economic regions, while the same rank in Karpatskyy, Skhidnyy and Tsentralnyy economic regions are held by the self-consumption of products, grown or produced by the households themselves;
- predominance of arable farmland in the structure of agricultural land, owned by rural households, with the cereals and legumes being the most popular crops;
- over a third of rural households in Karpatskyy, Prydniprovskyy and Prychornomorskyy economic regions receive income below the minimal cost of living; in Skhidnyy region it is even lower, *i.e.* 28.1%, and the lowest was noticed in Tsentralnyy economic region – 20.4%;
- prevalence of consumer spending, with over 50% being spent on food and non-alcoholic beverages;
- the share of non-consumer spending is very low and ranges from 9.3% to 14.5%, depending on the selected economic region;
- education is among the least financed services, this having a negative influence upon the further development of rural territories, mainly in the case of young people.

REFERENCES

1. Law of Ukraine "On definition of the minimal cost of living and minimal wage" (№ 1646–VI enacted on 20/10/2009).
2. Consumption in post-industrial society, Rejman Krzysztof. Social and economic dimension, Philosophy of financial civilization: human in the world of money, Lviv, 2009, p. 317–329.
3. Expenditures and resources of households in Ukraine in 2010 (data of sample survey of living conditions of households in Ukraine), State Statistics Service of Ukraine, 2011. Part III. Economic regions. Karpatsky economic region, Kyiv, 179 p.
4. Expenditures and resources of households in Ukraine in 2010 (data of sample survey of living conditions of households in Ukraine), State Statistics Service of Ukraine, 2011. Part III. Economic regions. Prydniprovsky economic region, Kyiv, 179 p.
5. Expenditures and resources of households in Ukraine in 2010 (data of sample survey of living conditions of households in Ukraine), State Statistics Service of Ukraine, 2011. Part III. Economic regions. Prychornomorsky economic region, Kyiv, 179 p.
6. Expenditures and resources of households in Ukraine in 2010 (data of sample survey of living conditions of households in Ukraine), State Statistics Service of Ukraine, 2011. Part III. Economic regions. Skhidny economic region, Kyiv, 180 p.
7. Expenditures and resources of households in Ukraine in 2010 (data of sample survey of living conditions of households in Ukraine), State Statistics Service of Ukraine, 2011. Part III. Economic regions. Tsentralny economic region, Kyiv, 179 p.
8. Main agricultural characteristics of households in rural areas in 2010, State Statistics Service of Ukraine, 2010, Kyiv, 80 p.
9. Regions of Ukraine 2010, State Statistics Service of Ukraine, Part I, Kyiv, 368 p.