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The Analysis of the Regional Dimension of Human Development in Ukraine

Abstract: The article is devoted to important issue of modern regional analysis of Ukraine, i.e. peculiarities of regional development formation. All provincial regions of Ukraine were chosen for this analysis. The aim of the study was to determine trends of regional indicators during the period 2012–2015. The social component of sustainability reflects the quality of life and it is focused on preserving the stability of the social and cultural systems, in particular on reducing the number of destructive conflicts between people. The basis of our study was the method of the Human Development Index rating in 2015, conducted by the State Statistics Service of Ukraine and the Institute of Demography and Social Studies named after M.V. Pukhta, but with a reduction of performance indicators to four groups (comfortable life, prosperity, decent work, education). The results of our grouping allow for developing a number of measures to respond to current trends and adjust them depending on the situation. Areas with consistently high rates of human development dimension should extend its positive experience to other regional areas of Ukraine. A significant list of areas with average dimension of human development confirms the generally known trend that these areas do not conduct systematic improvement policy and optimal use of all components that can affect the standard of living. The list of regions, which are lagging behind includes regions that theoretically exhibit a powerful economic development which is however not reflected on the general welfare of the people in these regions.

Keywords: comfortable life; decent work; education; Human Development Index; provincial regions of Ukraine; socio-economic development; welfare

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INTRODUCTION

Globalization has a significant impact on social development of areas, countries and regions, leading them to a new level of quality, characterized by the dominant social priorities. Human development can be defined as enabling people to fully develop their potential, to live productively and creatively in tune with their needs and interests (*Regional...*, 2016: 3). The potential is formed over a lifetime and it must be cultivated

and maintained; otherwise, it may stagnate. Thus, man creates his life environment, which aims to balance the formation of human capabilities to improve their life conditions and their use as well. The concept of sustainable human development puts man in the center of any development. According to it, the development should be focused on growth and prosperity, as well as full satisfaction of various, constantly growing needs of the population.

ANALYSIS OF THE RESEARCH

Since 2012 Ukraine has been using its own method of calculating the index of human development. This calculation included 33 indicators, grouped into six blocks in accordance with the basic aspects of human development – reproduction, social position, comfortable life, welfare, decent work, and education. These indicators were selected on the basis of suitability for the annual calculation, providing available information from the State Statistics Service of Ukraine, reliable valuation of regional level, accordance of human development problem specifics in Ukraine, unambiguous interpretation of the human development impact, lack of high correlation between individual performance and adequacy of static and dynamic variation. Thus, every aspect of human development indicators corresponds to a separate unit that form a system of human development indicators of the region, which generally form a regional index of human development.

Research in the field of welfare at the regional level in Ukraine was conducted by scientists in many areas, and therefore has a pronounced interdisciplinary character. Nevertheless, we will mention only the Ukrainian geographers that were interested in the subject matter concerned. Among them M. Bagrov (2005), O. Topchiev (2005), A. Shabliy (2012; 2001) should be mentioned. Their research unites theses of geospatial analysis of this issue at national or regional level.

O. Topchiev assessed the quality of life in the system indicators and developed technique (2005). O. Shabliy, in his studies (2012; 2001), analysed the importance of social direction indicators for well-being and social situation of the population. M. Bagrov (2005) defined the modern social orientation of Ukrainian society through the prism of his information.

We also carried out the assessment of the human development index of Ukraine population in the light of regional indicators (2014; 2015). This publication includes indicators of human development and recreational facilities role in sustainable development.

RESULTS AND ANALYSIS. METHODOLOGICAL AND THEORETICAL FOUNDATIONS OF RESEARCH

To assess the dimension of human development we undertook the following steps:

- select criteria that have a crucial role at assessing the level of welfare and human development;
- identify constituent indicators of human development dimension;
- on the basis of research, implement regions grouping on indicators of comfortable life, welfare, decent work, education;
- identify trends that would be typical for regional human development in the near future.

A common problem for post-Soviet states is weakened attention to the social sector reformation, where there is an ambiguous trend of the annual Human Development Index, which slows down the integration of these countries with Europe. But not all countries in this list occupy the same positions. That fact reflects very clearly the nature of sustainable development in the social sphere.

In 2015 Ukraine ranked 81st by the Human Development Index, a position that has been more or less fixed throughout the years (*Human ...*, 2015). Among the post-Soviet countries some representatives show better results. These are Russian Federation (50), Belarus (50), Kazakhstan (56), Georgia (76), Azerbaijan (78). Also better positions are occupied by the current members of the EU – Estonia (30), Lithuania (37), Latvia (46). They all have high level of human development. Thus, Ukraine found itself in the second part of the list among 15 former Soviet Union states. This is an alarming fact, considering that the initial conditions in the early 1990s forecasted her leadership. Such trends allow to conclude that, while Ukraine is fighting for retention in the top 90, other post-Soviet countries have experienced a number of positive reforms that are a precondition for growth and increasing welfare layer in the middle class. Progress in other countries of the former Soviet Union is associated with increased focus on social components (available healthcare, accessible education and its quality, environmental sustainability, employment in services and other areas, the development and availability of financial services and banking). It should be recognized that economic development itself would not solve all social problems in Ukraine. Global experience, including Ukrainian experience as well, suggests that economic growth is accompanied by increasing disparities in regional development and increasing income inequality, and both of these problems must be solved through effective policy measures.

There are differences in human development index among large regions of Ukraine as well.

According to the results of the human development index rating, regions of Ukraine (2014) can be divided into three groups: 1) the leading regions, which occupy a leading place in the ranking; 2) regions of the intermediate group, which occupy a middle position according to the calculations results of the Human Development Index; 3) regions-outsiders, which take last places in these calculations.

Methodology of Grade Human Development Index in 2015, conducted by the State Statistics Service of Ukraine and the Institute of Demography and Social Studies of M.V. Pukhta was used as the basis, but the number of indicators was reduced to four groups:

1. Portable life,
2. Welfare,
3. Decent work,
4. Education.

It seems right to focus the attention on these criteria, which fully disclose basic indicators of human development and create strong welfare characteristics (their importance and characteristics of components is in Table 1).

Normalization was used to determine the impact of index-indicator (separate figures for stimulants and non-stimulants), calibration conducted to ensure equal representation of the normalized performance index in the block before the weighing procedure, detailed calibration presented (*Regional...*, 2016: 19–20). The use of indicator weights of units and general integrated index seems logical.

Tab. 1. The list of indicators in units and influence of the human development dimension of components on different regions of Ukraine

	Units and indicators	Impact on human development
Comfortable life		
1.1	Housing supply in urban areas (Total area for 1 person), m ²	Stimulator
1.2	The share of apartments (single-family houses) equipped with centralized sewerage and drainage system in rural areas, %	Stimulator
1.3	The share of apartments (single-family houses) equipped with centralized gas supply or electric stove in rural areas, %	Stimulator
1.4	Integral state indicator of environment	Stimulator
1.5	A planned capacity of outpatient policlinic establishments (for 10 000 of population)	Stimulator
1.6	The amount of realized public services (per capita)	Stimulator
Welfare		
2.1	The poverty rate according to the relative criterion (proportion of population, the total expenditures of which do not exceed 75% of the median level), %	De-stimulator
2.2	The share of households that made savings or bought real estate, %	Stimulator
2.3	Number of minimum consumption basket that can be purchased with average income	Stimulator
2.4	Gross regional product (per capita)	Stimulator
2.5	The share of households with a full set of durable use products (TV, refrigerator, washing machine), %	Stimulator
Decent work		
3.1	Employment rate (percentage of employed population between the ages 18–65), %	Stimulator
3.2	Unemployment rate (percentage of unemployed population between the ages 18–65 years), %	De-stimulator
3.3	The proportion of workers who are paid less than 1.5 subsistence minimum, %	De-stimulator
3.4	The share of employees who work in conditions that do not meet sanitary standards, %	De-stimulator
3.5	Ratio of an average wage to a minimum	Stimulator
3.6	Social insurance coverage (the proportion of insured and employed people), %	Stimulator
Education		
4.1	Pure enrollment rate of preschool educational establishments for children aged 3–5, %	Stimulator
4.2	Coverage of secondary education by school age children (6–18 year-olds), %	Stimulator
4.3	The proportion of people with education, not less than “basic higher education” among people aged 25 and older, %	Stimulator
4.4	The average duration of education for people aged 25 and more, years	Stimulator
4.5	Average grade based on the results of external independent evaluation (all subjects)	Stimulator

Source: *Regional...* (2016: 31–33)

To determine the state of the social environment it seems appropriate to analyse these categories of indicators that allow to group formation region in terms of the social environment. We should emphasize that relatively short period was selected for

analysis because of the introduction of this technique in 2012, and preliminary figures were allocated and formed according to other criteria.

Assessing group of indicators «comfortable life» over the period of 2012–2015, we selected a group of regions with the highest rates, which they maintained or multiplied. This group includes Western (Lviv, Transcarpathian, Chernivtsi), Black Sea (Odessa, Kherson) and Kyiv region. Over the same period its position in terms of life comfort became worse in Volyn region (primarily due to the low share of apartments (single-family homes), equipped with centralized gas supply or electric stove in rural areas and low capacity of outpatient clinics (10 000 of people). On the other hand, Rivne region improved these figures and raised to the leading group.

The second group consists of the regions with an average life comfort. This group is quite numerous and is represented by Podniprovia (Dnipropetrovsk, Kirovohrad, Poltava, Cherkasy) and Podilsk (Vinnytsia, Ternopil) region, Mykolayiv and Zhytomyr and Kharkiv regions. Zaporizhzhia region became significantly worse in its position over the reported period. This can be explained by environmental integral indicator deterioration and the deterioration of the planned capacity of outpatient clinics (for 10 000 people).

The outsiders group in terms of life comfort includes Ivano-Frankivsk, Sumy, Khmelnytsky and Chernihiv regions. Apart from low indicator of housing in urban areas, there are other indicatives, which confirm this problematic sector of Ukraine. These are an index of the apartments proportion (single-family homes), equipped with centralized sewerage and sanitation in rural areas; an index of the apartments proportion (single-family homes), equipped with centralized gas supply or electric stove in rural areas, integrated indicator the environment, planned capacity of outpatient clinics (for 10 000 people); volume of public services (per capita). All there rates occupy low ranking positions.

Leading group in terms of «Welfare» over the period of 2012–2015 consists of Podniprovia region (Dnipropetrovsk, Zaporizhzhia, Poltava) and Mykolaiv, Kharkiv, Chernivtsi and Chernihiv regions. Traditionally these areas also have high rates of gross regional product (per capita) and the proportion of households with a full set of durable use products (TV, refrigerator, washing machine). In fact, the same areas have quite a high rate of destructive indicators – the relative poverty criterion (the proportion of the population, equivalent to the total, whose expenditures do not exceed 75% of the median), which is offset by other indicators of the same group.

The second group includes Vinnytsia, Volyn, Transcarpathian, Kyiv, Kirovohrad, Odessa, Lviv, Sumy, Khmelnytsky, Cherkasy region. Zhytomyr region for the same period weakened greatly in its position (almost all indicators of this group showed a tendency to deterioration).

The last position in terms of welfare belong to mainly western Ukrainian regions (Ivano-Frankivsk, Rivne, Ternopil) and Kherson region.

Indicators of «decent work» are the most diverse and demonstrate the areas migration from one group to another. Consistently high rates demonstrate Dnipropetrovsk region, Odessa and Kharkiv. Some regions worsened their rates, such as Transcarpathian, Kyiv, Mykolaiv and Chernivtsi region. In contrast, Volyn and Zaporizhzhia region improved their positions.

The second group includes Vinnytsia, Ivano-Frankivsk, Kirovohrad, Lviv, Poltava, Sumy and Khmelnytsky regions. These areas have the stable average ratio of the

average wage to the minimum, and units of social insurance coverage (the proportion of insured people employed). In addition, these areas demonstrate the average for Ukraine share of employees who work in conditions that do not meet sanitary standards.

The third group covers Zhytomyr, Rivne, Ternopil regions that combine low rates of employment, high rates of unemployment and significant number of workers who are paid less than 1,5 living wages, the negative ratio of the average wage to the minimum, low coverage of social insurance.

Education indicators also show features of instability, which is a wake-up call for most regions of Ukraine. In fact, this subsystem requires significant and long-term investment for full development of the Ukrainian society.

A very small number of areas show consistently high rates. These are Dnipropetrovsk, Zaporizhzhia and Kharkiv. Some regions have a tendency to deterioration, such as Vinnitsa, Kirovohrad, Khmelnytsky and Chernihiv regions. Situation has improved during 2015 in Kyiv, Poltava, Sumy and Cherkasy regions. This happened due to the growing share of people with education not less than the “basic higher” among people aged 25 and older, increasing the average years of schooling for people aged 25 and older, and increasing the average score on the results of external independent evaluation.

The second group of regions includes Volyn, Lviv, Mykolaiv, Odessa, Kherson and Chernivtsi regions.

The third category in terms of educational activities consists of Zhytomyr, Ivano-Frankivsk, Rivne, Ternopil regions. These areas have not sufficiently high rate of coverage of pre-schools children aged 3–5, low average years of schooling for people aged 25 and older, and the average grade point of the external independent evaluation results.

Therefore, based on the four blocks of indicators it is possible to analyse the formation of the social environment in Ukraine in the context of regional areas.

Regions with a high degree of social environment development include Podnirovyia (Zaporizhzhia, Dnipropetrovsk), several regions of Western Ukraine (Chernivtsi, Transcarpathian) and Kharkiv, Mykolayiv, and Kyiv regions. These good results were achieved due to the successful combination of a number of performance indicators such as sufficient proportion of apartments (single-family homes), equipped with centralized sewerage and sanitation in rural areas, a significant number of minimum food basket, which can be purchased at the average income, a significant gross regional product per capita, moderate unemployment rate and a large proportion of people with no education below the “basic higher” among people aged 25 and older.

Regions-leaders have a relatively stable, but also rather mixed composition. Permanent leader since 2010 is the Kharkiv region, included in the top three ranking for the formation of the labour market and the level of education. It also occupies a leading position in health care, material prosperity, living conditions of the population, and social environment. At the same time, there are some problems with the environmental situation in the region and financing of the social sphere.

The second group consists of Vinnytsia, Volyn, Kirovohrad, Lviv, Odessa, Poltava, Sumy, Kherson, Cherkasy and Chernihiv regions. Regions of the basic group make up the largest group, which includes areas that demonstrate middle rates. Regions of the group placed 8th (Poltava region) to 17th (Volyn region) in terms of the overall regional index of human development. These regions have middle rates of comfortable life, welfare rate, decent work and education level.

Tab. 2. Index and rating of human development parameters formation in the regions of Ukraine in 2015

Regions	Indicators								Index of social environment formation	
	«Comfortable life»		«Welfare»		«Decent job»		«Education»		sum	rank
	Index indicator	rank	Index indicator	rank	Index indicator	rank	Index indicator	rank		
Kharkiv	0,6017	10	0,7960	2	0,6125	4	0,8510	2	2,8612	1
Zaporizhzhia	0,5217	22	0,8741	1	0,6040	5	0,8413	3	2,8411	2
Mykolayiv	0,5955	12	0,7491	4	0,5958	6	0,8202	15	2,7606	3
Chernivtsi	0,6331	6	0,7544	3	0,5550	16	0,8112	16	2,7537	4
Transcarpathian	0,8145	1	0,6216	11	0,5852	9	0,7261	22	2,7474	5
Dnipropetrovsk	0,5651	17	0,6979	5	0,6207	1	0,8531	1	2,7368	6
Kyiv	0,6579	3	0,6491	9	0,5832	10	0,8343	9	2,7245	7
Poltava	0,5908	13	0,6977	6	0,5640	13	0,8350	8	2,6875	8
Odessa	0,6815	2	0,5521	16	0,6197	2	0,8297	10	2,6830	9
Chernihiv	0,5567	18	0,6864	7	0,5554	15	0,8359	6	2,6344	10
Lviv	0,6504	4	0,5544	15	0,5858	8	0,8266	11	2,6172	11
Cherkasy	0,5847	15	0,6698	8	0,5253	20	0,8251	12	2,6049	12
Kherson	0,6341	5	0,4984	21	0,6129	3	0,8228	13	2,5682	13
Kirovohrad	0,5883	14	0,5815	13	0,5608	14	0,8352	7	2,5658	14
Sumy	0,5283	21	0,6207	12	0,5540	17	0,8226	14	2,5256	15
Vinnitsia	0,5445	19	0,6297	10	0,5121	22	0,8338	5	2,5201	16
Volyn	0,6235	8	0,5153	18	0,5880	7	0,7931	17	2,5199	17
Khmelnitskyy	0,5311	20	0,5582	14	0,5785	11	0,8391	4	2,5069	18
Ivano-Frankivsk	0,6006	11	0,5115	19	0,5744	12	0,7604	21	2,4469	19
Zhytomyr	0,6042	9	0,5054	20	0,5429	18	0,7895	18	2,4420	20
Rivne	0,6276	7	0,4980	22	0,5403	19	0,7651	20	2,4310	21
Ternopil	0,5794	16	0,5199	17	0,5211	21	0,7781	19	2,3985	22
Autonomous Republic of Crimea	***	***	***	***	***	***	***	***	***	***
Donetsk	***	***	***	***	***	***	***	***	***	***
Luhansk	***	***	***	***	***	***	***	***	***	***

Source: *Regional...* (2016: 52, 53, 55)

The final group covers Zhytomyr, Ivano-Frankivsk, Rivne, Ternopil, Khmelnytsky regions. A common problem for these areas is a high rate of unemployment and workers with wages less than 1.5 minimum, a small amount of the minimum food basket, which can be purchased at the average income, low coverage of employed staff social insurance.

Table 2 was grouped according to the areas rating on indicators of level and formation of human development dimension in regions of Ukraine in 2015.

CONCLUSIONS

The social component of sustainability reflects the life quality and is focused on preserving the stability of the social and cultural systems, in particular on reducing the number of destructive conflicts between people. On such conditions, a person must be actively involved in the formation of their lives, making decisions and monitoring their implementation. This concept is based on the idea of noble humane improvement of life quality for present and future generations, as well as sustainable development approaches that could provide such changes.

The results of our research allow for the development of a number of measures to respond to current trends and adjust them depending on the situation. Areas with consistently high rates of human development (Dnipropetrovsk, Zaporizhzhia, Kharkiv, Chernivtsi, Transcarpathian, Mykolaiv and Kyiv) have spread their positive experience to other regions of Ukraine. The region that occasionally falls into the group of leaders requires some changes in its socio-economic development. Such fluctuations show that they have a significant potential that needs rational and planned usage, which will provide improvements in these areas. A considerable list of areas with an average rate of human development index (Vinnytsia, Volyn, Kirovograd, Lviv, Odessa, Poltava, Sumy, Kherson, Cherkasy and Chernihiv) confirms a well-known trend in these areas. There is no systematic improvement policy and optimal use of all components, which can affect the standard of living. The list of lagging regions (Zhytomyr, Ivano-Frankivsk, Rivne, Ternopil, Khmelnytskyi) includes regions, which have generally different powerful economic development, but it does not effect the general welfare of people in these regions.

References

- Bagrov, N. (2005) *Geography in the information world*. Kyiv: Lybid.
- Human Development Report 2015 (2015). New York: Work for Human Development.
- Kuzyshyn, A. (2014). Geospatial Study of Human Development Index of Ukraine in the Light of Regional Indicators. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 26, 197–206.
- Libanova, E.M., Hvesyk, M.A. (eds.) (2014). *Socio-economical potential of the sustainable development of Ukraine and its regions: national report*. Kyiv: DU IEPSR NAS of Ukraine.
- Regional Human Development* (2015). Statistical Bulletin. Kyiv: State Statistics Service of Ukraine.
- Regional Human Development* (2016). Statistical Bulletin. Kyiv: State Statistics Service of Ukraine.
- Shablii, O. (2001). *Human Geography: theory, history, Ukrainian Studies*. Lviv: Ivan Franko National University of Lviv.
- Shablii, O. (2012). *Fundamentals of Human Geography*. Lviv: Ivan Franko National University of Lviv.
- Topchiev, O. (2005). *Socio-geographic research: methodology, methods and techniques: Tutorial*. Odessa: Astroprint.
- Tsaryk, L., Kuzyshyn, A., Tsaryk, P., Stetsko, N., Maryniak, Y., Poplavska, I., Hinzula, M. (2015). The regional formation of recreation and environmental protection systems of Ukraine. *Annales Universitatis Paedagogicae Cracoviensis. Studia Geographica IX*, 193, 184–194.

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