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MONITORING OF HUMAN DEVELOPMENT IN REGIONS IN UKRAINE (integrated approach)

The draft State strategy for regional development of Ukraine for the period up to 2027 identified the problems of monitoring and evaluating State regional policy, noting that in the field of regional development policy in Ukraine, several indicator systems are implemented by separate regulatory acts of the Cabinet of Ministers of Ukraine (Government Resolutions No. 476 of 2009, No. 856 of 2015, No. 932 of 2015, No. 787 of 2016 and No. 1029 of 2017).

The problems of monitoring and evaluation of State regional policies are contained in an excessive number of sets of indicators, the mixing of indicators of the socio-economic development of regions and the implementation of regional policies, together with the need to develop a significant number of periodic reports, which creates an additional burden on State authorities (in particular the Ministry of Regional Development of Ukraine), without creating comprehensive and synthetic information that would be useful [1].

But for some reason, unfortunately, the listed list of Government decisions does not include national methods for measuring human development for regions and measuring regional human development, which was approved:

– joint resolution of the Board of the State Statistics Committee of Ukraine and the Presidium of the National

Academy of Sciences of Ukraine in 2001 No. 182/76 of 05. 04. 2001 and 14. 03. 2001.

– by the decision of the Presidium of the National Sciences Academy of Ukraine and the board of the State Statistics Service of Ukraine of 13. 06. 2013 No. 123, which was developed by the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine together with the Ministry of Economic Development and Trade of Ukraine.

Using these Methods 2001 and 2012, the State Statistical Committee and the State Statistics Service issued the annual statistical bulletin "Regional Human Development." It contained the calculation results of the components and integral value of the Regional Human Development Index (RHDI) on nine aspects of human development and 92 indicators on the 2001 Methodology and on six aspects of human development, and 33 indicators on the 2012 Methodology.

Statistical bulletins "Regional Human Development" almost always included the RHDI Measurement Methodology 2012 and the results of the rating assessment of places of administrative regions on a single scale, as well as its significance in Ukraine as a whole. RHDI recalculations of all areas according to the 2012 Methodology have been carried out on a statistical basis since 2004.

That is, there were reasons for the transition from statistical RHDI observations of the administrative regions of Ukraine to its planning and forecasting calculations with possible elements of designing and optimizing components.

The action plan for 2015-2017 for the implementation of the State Strategy for Regional Development until 2020, which Cabinet approved of Ministers Resolution No. 821 of October 7, 2015, provided for the development and submission to the Government of a draft act of the Cabinet of Ministers of Ukraine on the procedure and methodology for calculating the Regional Competitiveness Index by October 1, 2016 (RCI) and the Regional Human Development Index (RHDI) and the calculation of their forecast values for the period up to 2020 [2, p. 13].

But this measure was not carried out either in terms of content or timing. But, *more than a year after the deadline for its implementation*, on December 20, 2017, the Cabinet of Ministers of Ukraine adopted Resolution No. 1029, "Some Issues of Improving the Monitoring and Evaluation System for the Implementation of State Regional Policy," which approved the simplified Procedure and Methods for Calculating RCI and RHDI [3].

At the same time, for example, if the Action Plan for 2015-2017 was supposed to develop the Procedure and Methodology for carrying out RHDI forecast calculations, then by a Government resolution of December 20, 2017 – only for generalized analytical calculations of the actual RHDI values by administrative areas (*according to a simplified evaluation scheme with posting, as an information certificate, on the website of the Ministry of Regional Development of Ukraine without use in short-, medium- and long-term strategic planning or in operational management*).

The provisions coordination of the draft Government Decree on these issues took place on April 13, 2017, in the Ministry of Region of Ukraine. The authors presented the RHDI prediction technique for 6 blocks with 33 indicators, which was tested at the Khmelnytsky Region State Administration during the development of the "Regional Program for Human Development of the Khmelnytsky Region in 2016-2020" [4-5]. But it was not taken into account by the Ministry of Regional Development of Ukraine because it was prepared without grant financing by foreign funds and control by domestic curators.

That is, the Ministry of Regional Development of Ukraine intended, but not implemented, to call time for the development of methodological support for the measurement and forecast of RHDI for the design regulation of its components.

In addition, by Government Decree No. 821 of October 7, 2015, when approving the Action Plan for 2015-2017 for the implementation of the State Regional Development Strategy for the period up to 2020, strategic indicators for assessing the effectiveness of their implementation were given taking into account

forecast values only as of January 1, 2017, that is, in fact for one the year 2016.

Unfortunately, indicators for assessing the performance of tasks in 2015-2017 were not defined for such events as: restoration of life safety and economic rehabilitation of Donetsk and Luhansk regions; protecting national interests and preventing violations of the constitutional rights of Ukrainian citizens in temporarily occupied parts of these areas; creating conditions to address the urgent problems of the displaced; the creation of conditions for strengthening ties between regions and communities, as well as the development of border territories.

But, the strategic indicators of the development of administrative regions were brought by the Government for the Region State Administration **two months later** (October 07, 2015) and, as we have already noted, with forecast calculations - only for the 2016 year. That is, in compliance with previous government decisions, the Region State Administration and the Regional Council did not have real-time and could not take these indicators into account when bringing Regional Development Strategies into line with both the State Regional Development Strategy for the period up to 2020, and when developing Action Plans for their implementation for 2015-2017 years.

The main reasons for the lack of coherence of management decisions and the government's strategic instructions in 2014 can be considered the following.

Firstly, the Ministry of Regional Development of Ukraine, which was given the authority from the Ministry of Economic Development of Ukraine to guide the improvement of regional development strategies and action plans for their implementation, as well as to monitor and evaluate their final performance (including using the corresponding state order).

Secondly, the absence of a subordinate departmental-sectoral (in the regional sector of the national economy) scientific institutions or agencies and their branches would bias the development of appropriate information and methodological support and carry out forecast calculations. The central apparatus of the ministry could not cope with this, and our proposals were ignored.

By its orders from 24.06.2016 No. 474, the Government of Ukraine adopted, and from 18.12.2018 No. 1102, approved the new edition of the Reform Strategy of Public Administration for the period up to the 2021 year and the Plan of Measures for its implementation for 2019-2021 years. The Strategy allegedly complies with the European standards of good governance and public administration SIGMA's European principles.

The 10 ministries of Ukraine are experimenting with this strategy's scenario by establishing separate structural units for the reform of the public service to improve the quality of State policy-making and coordination of its implementation. The corresponding Directorates are created, in which specialists for the

posts of state experts with salaries of 30.0-50.0-70.0 thousand UAH are involved on a competitive basis. This is ten times more than the official salaries of associate professors and professors in the field of education and science of Ukraine, but, unfortunately, not invited to state experts' posts because they are more competent in territorial planning and management problems.

The draft State strategy for regional development of Ukraine for the period up to 2027 does not define or consider such a requirement for institutional support for regional development as *"timely preparation discipline observance, making, bringing to performers and monitoring the implementation of relevant state decisions"* that was inherent in the State Plan of Ukraine of past times, as well as in the first years of gained independence, when the Ministry of Economy worked the retained personnel potential of professionals of a high level of spirituality and competence.

Resolution of the Government of August 6, 2014, No. 385, which approved the State Strategy for Regional Development of Ukraine for the period up to 2020, simultaneously violated the principle of *"historical continuity"* of state regional policy proclaimed in it, recognized the "Procedure for the development, monitoring, and evaluation of the results of the implementation of the State Strategy for Regional Development" of November 16, 2011, as invalid. (para. 2).

The relevant authorities were instructed to ensure the Action Plan's development for the implementation of the Strategy within six months (para. 3). That is, by February 2015. But these government decisions were implemented eight months later: The Action Plan for 2015-2017 for the implementation of the State Strategy for Regional Development until 2020 (first stage) was approved on October 7, 2015, by Resolution No. 821. It was quite informative, but with forecast values of indicators as of January 1, 2017, that is, only for one the year 2016 and after nine months of 2015, and not earlier – in September 2014 (*quarter before the start of the planning period according to the regulations of the former State Planning Commission of Ukraine*).

The new procedure for the improvement of State and Regional Development Strategies and Action Plans for their implementation, as well as the monitoring and evaluation of their realization, was approved on November 11, 2015, by Government Resolutions No. 931 and No. 932. Until that time, the Procedure would have to be in force, which was approved by Government Resolution No. 1189 of November 16, 2011, according to which the relevant government decisions should be monitored.

The Action Plan for 2018-2020 for the implementation of the State Strategy for Regional Development of Ukraine for the period up to 2020 (second stage) was approved on September 12, 2018, by Government Resolution No. 733, and according to the regulatory requirements of 2011 this should be executed

in July 2017, and in accordance with the requirements of 2015 - in September 2017. That is, this happened 12 months later according to the requirements of 2011 and after 8 months of delay according to the requirements of 2015 regarding the beginning of the first stage of its implementation.

The leaders of the Government of Ukraine during these years were A. Jacenjuk and V. Grojsman. Strategic indicators of regional development were identified and proved to regional authorities with delays of one and two years, and regulatory requirements should be approved in September of the year, which precedes the planned period of three and four years.

Unlike the State Strategy for Regional Development of Ukraine for the period up to 2015, the new Strategy for the period up to 2020 excluded the following sections:

- "Scientific and methodological support for the implementation of the Strategy";
- "Priority areas of regional development for the period of the Strategy";
- "Indicators for assessing the implementation of the Strategy (*including indicators of activities coordination of central and local executive bodies and compulsory medical insurance for the development of the regions*)."

Government Decree approved the list of annual indicators aimed at achieving the predicted values of the State Strategy for Regional Development for the period up to 2020 (by year, starting in 2014) in the context of three goals for Ukraine and the regions No. 1089 of December 20, 2017. That is, after three years (2015, 2016, 2017) of implementation of the Strategy until 2020.

Government Decree No. 1189 of November 16, 2011, approved the procedure for monitoring and evaluating the results of the Development Strategy for the period up to 2015 by conducting annual monitoring of the state of realization of the Plans of measures for the implementation of the Strategy with relevant proposals for the next calendar year (item 7.8).

Despite the recommendations of domestic economic science regarding the consistency of the Strategy's indicators until 2015 with the Millennium Development Goals until 2015 and with the RHDI indicator system, they were not taken into account [6, 7].

The list of annual indicators, the State Strategy for Regional Development for the period up to 2020, was aimed at achieving the predicted values (*approved by Government Decree No. 1089 of December 20, 2017*), included the following rates as RHDI indicators for the goal "Territorial socio-economic integration and spatial development":

- 1) demographic burden of the population aged 16-59 years;
- 2) the overall attrition rate of the rural population;
- 3) total mortality rate;

4) the unemployment rate of the population aged 15-70 years.

But, the alignment of these indicators with the RHDI indicators was not achieved by the Medium Term Plan until 2020.

The initial reference to the need to prepare the Strategy for the period up to 2020 was the completion of the previous strategy's implementation period for the period up to 2015. But in the future, there was a clarification and addition of the Strategy sections by the years of its implementation compared to the text of 2014.

Thus, the hasty, with a reduction of one year, preparation of the State Strategy for Regional Development for the period until 2020 was justified not only by the extraordinary elections of the fifth President of Ukraine and the new composition of the Verkhovna Rada of Ukraine but also by the start of the ATO in the Ukrainian Donbas and the transfer of powers of its formation from the Ministry of Economic Development to the Ministry of Regional Development of Ukraine. That is, in order to ensure the timely implementation of the recommendations of domestic economic science (*in time and volume*), it is necessary to introduce criminal liability of the governing bodies of national and regional authorities, compulsory medical insurance, and united territorial communities (*by analogy as in the final section V "Control over compliance with budget legislation and liability for violation of budget legislation" of the Budget Code of Ukraine*).

Recommendations for the implementation of pilot projects "Luganshchyna-MDG," "Donechchyna-MDG," "Lviv-MDG" since 2005, "AR Crimea-MDG" since 2010, the development of "National and Regional Human Development Programs" from 2005-2006, as well as the use of financial standards for budgetary security for human development since 2011 have not been institutionalized by current legislation and therefore, apparently, cannot be grounds for opening criminal cases against officials. But Ukrainian legal science should overcome this shortcoming in the near future.

The draft laws of Ukraine on long-term planning provided for the development of a State strategy for regional development for ten years. The regional development strategies of Ukraine, which were adopted in 2014 and 2015, provided for a six-year period for their implementation and the draft State regional development strategy for the period until 2027 – seven years. The introduction of such a strategic planning timeline is justified by the need to move to its organization based on EU member countries' experience, despite more urgent own experience with developed domestic scientific and methodological support for 20, 15, 10, 5 years.

Thus, monitoring of human-centric development in the regions should begin with an assessment of compliance with the deadlines for the development of

new state decisions, their delivery to the executors, and the frequency of control.

Khmelnytsky University of Management and Law (*founder of the Khmelnytsky Regional Council*) in May 2016 addressed the Prime Minister of Ukraine V. B. Grojsman with a proposal on the use of methodological recommendations to improve the assessment of the effectiveness of the implementation of state regional policy based on the use of methodological allotments "Statistical modeling of socio-economic development."

The Ministry of Regional Development of Ukraine reported that in the near future, together with other central and local executive authorities, work will be carried out to improve the assessment and monitoring of the socio-economic development of the regions, taking into account the best practices and methodologies of the European Union. Within this work framework, the submitted methodological recommendations will be processed (from 14.06.2016 No. 9/31.1-288-16).

In addition, the proposed recommendations were also sent to the Ministry of Regional Development for consideration in the work of the Ministry of Economic Development and the State Statistics.

That is, in this issue of methodological support for monitoring socio-economic development, the Government of Ukraine turned out to be not independent but under "external influence."

The invitation to Dr. Econ.Sci., professor O. I. Kulynych in the structure of the Working group Khmelnytsky Region State Administration on problems of introduction of a system of fire safety regulations inactivity of the Regional State Administration provided use of his methodical practices for forecasting of RHDI for 2016-2020 by the Technique of his measurement of 2012 on statistical base since 2004. The results of the forecast calculations were used in the development of the first Regional Human Development Program in Ukraine of the Khmelnytsky region as an administrative region [4, 5].

The dissemination of this experience could be carried out back in 2017 when the regional state administrations developed Action Plans for 2018-2020 to implement the State and Regional Development Strategies simultaneously with their clarification for the period until 2020.

On December 20, 2017, the Government of Ukraine adopted Resolution No. 1029, "Some Issues of Improving the Monitoring and Evaluation System for the Implementation of State Regional Policy," in which it approved the simplified Methodology and Procedure for Calculating the Regional Human Development Index. This 2017 Methodology includes three blocks with 8 indicators that supposedly characterize regional human development components.

In the simplified RHDI assessment system, only one indicator is used as a destimulator – the mortality rate from intentional self-harm per 100 thousand people of the existing population, *prostantimile*.

In the previous 2012 Methodology, out of 33 indicators, 22 were considered as indicators-stimulants of human development, and 11 – as indicators – dissimulators, the results of their forecast calculations became the basis for substantiating specific proposals in the Action Plans for 2018-2020 for the implementation of Regional Strategies for the period up to 2020.

The simplified scheme of monitoring and rating of RHDI is quite laborious both in the hierarchy and in time and therefore has a purely informational nature. Its use does not provide for feedback from the central executive authorities to the authorities of administrative regions and administrative regions to implement state regulation of regional human development.

In September 2018, the Directorate of Regional Ministry Development of Ukraine published RHDI calculations for 2017 on 8 indicators of three aspects of human development in 22 administrative regions of Ukraine (except Luhansk, Donetsk, and Crimea).

RHDI estimates for 2017 for areas are presented not as aspects of regional human development but as areas of research: "Long and healthy life," "Well-being and decent working conditions," "Education." At the same time, the dynamics of the change in the integral values of the RHDI have been presented since 2013 in all areas and in Ukraine as a whole.

In the Luhansk and Donetsk regions and the Autonomous Republic of Crimea since 2014, the implementation of RHDI calculations has been recognized as incorrect due to the lack of information on the part of the temporarily occupied territories of Ukraine.

In 2017, in Ukraine as a whole, according to this methodology (three aspects, eight indicator indicators that were not tested for the validity of the measurement of human development), the RHDI was 0.65. The numerical value of RHDI in the whole of Ukraine is the same order as the value of HDI when comparing countries in the world dimension.

That is, it seems that the Ministry of Regional Development, invented on the initiative of the Government, has a new method of measuring RHDI in order to demonstrate the following: after the 2014 Dignity Revolution, Ukraine will indeed enter the 50 best countries in the world in 2020 according to the "Medium-Term Plan of Priority Actions of the Government for the Period until 2020" (by order of the Cabinet of Ministers of Ukraine of 03.04.2017 No. 275-r signed by V. Groysman). *Perhaps the leadership of the Government did not distinguish the indicators of the HDI (Human Development Index) from the RHDI (Regional Human Development Index)!*

The first ten places of the RHDI ranking in line with the results of 2017, according to the briefly considered Methodology, were occupied by Kyiv (0.80) and the following regions: Lviv (0.71), Kyiv (0.70), Chernivtsi (0.69), Kharkiv (0.68), Ternopil (0.67), Zakarpattja (0.66), Volyn (0.65), Ivano-Frankivsk (0.65), Rivne (0.65).

The results of the RHDI calculations according to the 2017 Methodology indicate the presence of a negative value of the total population growth (reduction) rate per 1000 people of the existing population other than Kyiv.

But how or to what extent this affected the growth in the volume of expenditures of local budgets, taking into account inter-budget transfers per person, is not estimated.

But the results of the analysis of the dynamics of such RHDI components assessment as the level of employment of registered unemployed people, the ratio of the average wage to minimum wage, the mortality rate from deliberate self-harm per 100 thousand people of the existing population are possible and will serve to justify the corresponding additional measures a year after their measurement, that is, for 2019.

The numerical estimates of RHDI for administrative regions according to the 2017 Method are determined to be the same for the following groups of regions: 0.65 – Volyn, Ivano-Frankivsk, Rivne, Ukraine as a whole; 0.64 – Dnipropetrovsk, Sumy, Cherkasy, Khmelnytsk; 0.63 – Poltava, Mykolaiv, Odesa, Vinnytsia, Zakarpattja; 0.62 – Zhytomyr, Kherson; 0.61 – Kirovograd and Chernihiv.

That is, the simplified Methodology of 2017 does not allow to carry out rating assessments of the locations of regions on a single scale of measurement of their RHDI, as well as to compare RHDI in regions with the average value of the RHDI of Ukraine as a whole, as a criterion for financial equalization of regional human development, as well as a possible criterion for the distribution of funds from the State Fund for Regional Development.

In addition, there is no differentiation of the rating of the components and integral value of the RHDI of the administrative regions of Ukraine to assess the effectiveness of state regional policy and to justify measures to increase it only in these three "areas" of human development and using only 8 indicators, of which only one is destructive, as a dissimulator of human development.

But in August-September 2018, according to the State Statistics Service of Ukraine, RHDI 2017 ratings remain more productive to substantiate the relevant measures based on the results of assessing the dynamics of 33 indicators – indicators of all 6 aspects of human development in the regions according to the 2012 Methodology. Rating estimates of administrative regions of Ukraine according to the RHDI should be supplemented with the following recommendations and proposals completed by the authors of the search scientific and methodological support mechanism of state regulation of regional human development.

The general algorithm for the integrated rating of components and the integral value of RHDI is implemented in four stages.

The first three stages of the integrated rating assessment include analysis of the development and

ranking of administrative areas according to the relevant characteristics:

- the first stage: on the main components of socio-economic development of the regions;
- the second stage: factorial analysis of the socio-economic development of areas that are grouped into appropriate clusters;
- the third stage: on the state of socio-economic security of the development of regions.

In the fourth stage of integrated human development rating of administrative areas, calculations of RHDI components and integral value are carried out by regions grouped in the first three stages. These procedures ensure the achievement of a comprehensive rating of the human development of the administrative regions of Ukraine, as more objective than the existing schemes and systems – indicators of their implementation.

At the first stage, the rankings of Ukraine regions according to RHDI are grouped by the 4th main components proposed by O. A. Rjadno and O. V. Berkut [8, p. 63].

Three indicators form the first main component with the most positive factor load: retail turnover; employment rate; the average monthly nominal wage of workers, as well as one indicator with a significant negative factor load – the share of the population with an average per capita equivalent total income per month below the subsistence minimum.

The second component includes the following indicators with a positive load – capital investments; foreign direct investment in the regions of Ukraine; the volume of sold products (goods, services), financial results of enterprises to taxation.

The third main component consists of one indicator with a positive load – the coefficient of export coverage by import and one indicator with a negative load – the population's coefficient of migration growth (reduction).

The fourth main component is formed by only one indicator with a positive load – the total expenditure in innovation areas.

In the future, at the second stage of the integrated rating assessment of the regional human development of administrative regions for certain indicators-factors, a cluster analysis is carried out on all data sets that they performed for each time slice separately for 2009-2013 and simultaneously for all five years of observation.

The results of clustering regions are described as follows.

Cluster 5 formed the Donetsk and Luhansk regions as the most stable.

The first major component is determined by the high value of industrial development and wage levels.

The second major component is below the Ukrainian average. The third main component (the level of foreign trade development in monetary terms) is the largest in Ukraine, which compensates for the negative impact of migration in these regions.

The fourth main component demonstrates the importance of the "innovativeness" of both regions as a whole of the lower average level in Ukraine.

Cluster 4 contains Kyiv, Odessa, and Kharkiv regions. For the first main component, these three areas occupy the first positions in Ukraine: the components' indicators have maximum values.

The second main component is the average in Ukraine (the transition between clusters – from the 1st to the 2nd, and then to the 4th in 2009-2010 was due to increased foreign direct investment).

The decrease in the third main component was due to a decrease in imports' export coverage ratio while increasing the migration growth (decline) ratio of the population. This component tends to decrease, and the fourth main component – "innovation" – is below the Ukrainian average.

Cluster 3 formed the Dnipropetrovsk, Zaporizhzhya, and Poltava regions. The value of the first main component is close to the average in Ukraine, and the value of the second main component is the largest in Ukraine – in terms of the efficiency of enterprises, all three regions are leaders in Ukraine.

The third main component's high values are inferior only to cluster 5, and the value of the fourth main component is the maximum among all clusters. The quality of life of the population of the regions is higher than the average in Ukraine.

Cluster 2 is characterized by an unstable composition, which includes the regions contained in cluster 1: Crimea, Vinnytsa, Volyn, Ivano-Frankivsk, Kirovograd, Lviv, Sumy, Cherkasy, Chernihiv, Chernivtsi (only Mykolaiv region stably includes in cluster 2).

Cluster 1 is conversely characterized by stable region composition throughout the study period (2009-2013). These are Zhytomyr, Zakarpattja, Rivne, Ternopil, Kherson, Khmelnytsky.

In general, both latter clusters are characterized by the lowest economic development indicators and quality of life of the population compared to other clusters. That is, in the second stage of integrated rating assessment of administrative regions of Ukraine according to RHDI, it is advisable to carry them out within each of the five clusters of factor analysis according to the considered components.

At the third stage of the integrated rating assessment of RHDI administrative areas, it is recommended to carry out statistical clustering of areas according to the level of socio-economic security according to the criteria proposed by V. K. Antoshkin [9-11].

The first statistical cluster forms a group of regions with a high level of socio-economic security, which is characterized by high indicators of macroeconomic, social, and foreign economic security. Thanks to the territorial placement and accumulation of large amounts of labor reserves, industrial and investment-innovation potential, such regions can create and mobilize a

significant share of the total financial resources (through taxation) and value-added to meet their own needs for an adequate amount of resources.

The second statistical cluster consists of areas with low indicators of macroeconomic, social, and foreign economic security since the importance of their components is below the average level in Ukraine as a whole. These are areas with low levels of socio-economic security.

V. K. Antoshkin believes that the low level of socio-economic security of the regions is caused by lower incomes, a decline in fertility, an increased number of pensioners who cannot work, and create value-added and lead to a decrease in local budget revenues through taxation.

In this regard, there is a need for additional funds to support industrial enterprises, provide new jobs and attract investment resources.

The results of studies by V. K. Antoshkin indicate the presence of:

– first, the direct relationship between existing strong industrial capacities and large human resources levels to ensure socio-economic security and resilience to economic crises;

– secondly, the feedback between the low level of social security and the economic development of the regions is due to the identification of disincentives such as high values of the economically inactive population and an increase in unemployment. Together, this reduces the region's labor potential and indicates its inability to meet development needs independently.

Based on the study, V. K. Antoshkin proposed determining the state of stability of the regions of Ukraine depending on the level of socio-economic security [11, c. 70].

1. **Sustainable development** (regions belonging to a specific cluster throughout the period from 2004 to 2013; migration of regions on clusters doesn't happen) – the Dnipropetrovsk, Donetsk, Odessa, Kharkiv regions, Kyiv, Sevastopol, Vinnytsia, Volyn, Zhytomyr, Zakarpattia, Ivano-Frankivsk, Rivne, Ternopil, Khmelnytsky, Cherkasy, Chernivtsi, Chernihiv regions (% in the total number of regions of Ukraine).

2. **The average level** of stability (migration of regions is recorded at a time for the entire period) is Zaporizhzhya, Sumy, Kherson, Kirovograd regions (14% in the total number of regions of Ukraine).

3. **Unstable state** (double change of regional positions in clusters) – Luhansk, Kyiv, Mykolaiv, Poltava regions (14% in the total number of regions of Ukraine);

4. **Turbulent state** (three-fold and more changes in regional positions in clusters) – AR Crimea and Lviv region (7% in the total number of Ukraine regions).

The migration of regions in clusters with a high level of socio-economic security (SES) to clusters with a low level of SES inclusive after 2007 was due to a sharp decline in the quantitative values of security components and the reverse movement of regions took

place only after 2012. That is, Ukraine has not yet reached the SES level of the regions of the pre-crisis period of 2007-2008.

At the same time, according to the results of the study of V. K. Antoshkin found that 62% of the regions of Ukraine have a stable state relative to the level of SES and were not subject to crisis phenomena in the periods 2007-2008. It is advisable to take this into account when conducting a rating assessment of administrative regions of Ukraine according to individual components and integral RHDI values.

At the third stage of the integrated rating assessment of regions according to the RHDI, it is also advisable to use a set of indicators for assessing the state of environmental, social, and economic security of regions in the corporate governance system (business, government, public), which V. F. Stoljarov substantiated and S. V. Kukarceva [12, p. 21].

They consider it necessary and advisable to move to corporate security management in the region, which involves achieving social coherence and balancing the interests of local authorities, businesses, and the organized public.

Under such conditions, it becomes possible to determine the ecological, socially, and economically effective scale of economic activity in the territory within the limits of environmental (11 indicators), social (9 indicators without indicators of social diseases), and economic (13 indicators) security of the region.

At the same time, integrated indicators of environmental, social, and economic security of the region, on the one hand, are calculated in percent, UAH, years and estimates per 100 thousand people, and, on the other hand, they are normalized, as a rule, as a percentage of the gross added value of the territory.

That is, in the processes of monitoring regional human development at the level of administrative areas, problematic issues of monitoring and analysis of indicators of environmental safety, social security, and economic security require priority attention.

In this regard, the powers of the regional State administrations should include determining the threshold values of these indicators and ensuring, on their basis, social standards of life of the population of a subordinate territory, regardless of their location in relation to the regional and district centers. The fundamental revision of the criterion for determining economic security indicators at the regional level (as a kind of framework of national security that ensures the stability of the state) in the context of improving the accounting, analysis, and management of foreign economic activity (FEA) proposes to implement by M. M. Oleksijenko [13].

He, as an expert analyst of the regional development of the Lviv CPO "Institute of International Economic Research" and an applicant of the National Institute of Strategic Research, substantiated, taking into account national interests, procedures for early identification and minimization of possible external and

internal risks and threats of an effective FEA of the region.

Considering the integral nature of the foreign economic security of the state as a number of interconnected structural components, he, as a researcher, simultaneously reveals them as a set of conditions for ensuring the sustainable self-development of the national economy and generating innovative shifts in it, as the fullest realization of national advantages in the international division of labor, the preservation of national wealth and the ecological state of the environment for the next generations.

At the fourth stage of the regional rating for RHDI at the regional level, it is advisable to use methodological approaches to the construction of subindexes of regional human development with the determination of imbalances in the development of urban settlements and rural areas, which M. V. Otkydach substantiated [14, p. 154].

It should also be emphasized that one of the main features of the disaggregation of national targets of the 17 global Sustainable Development Goals for 2030 is also the classification "by type of locality – urban or rural" in 23 indicators of eight targets out of 172 indicators of eighty-six targets [15, p. 128-147].

Thus, the differentiation of the system of indicators and procedures for monitoring regional human development at the subnational (regional) level makes it possible to more objectively assess the socio-economic policies of local executive authorities to improve the quality of life of the population of villages, towns, cities (including united territorial communities), districts and regions as a whole.

In addition to the current methodology for measuring regional human development, the introduction of sub-indices of human development in urban and rural areas will contribute to more systematic State regulation of inter-settlement processes while addressing regional imbalances in the current context of the establishment of united territorial communities.

Monitoring of regional human development is the third leading element of the mechanism of state regulation at the level of administrative regions of Ukraine, which was developed in the doctoral dissertation of PhD, assistant professor of finance at the Berdyansk University of Management and Business Shynkarjuk Oksana Vjacheslavivna during the years of internship at the Research Financial Institute of the Ministry of Finance of Ukraine and in doctoral studies at the Research Economic Institute of the Ministry of Economy of Ukraine [16-20].

In the framework of state regulation of regional human development, the first leading element is the definition of development goals, modeling, forecasting, and planning of human development in the region, and the second leading element is the financing of relevant tasks and events.

Each of these main elements has three main procedural components, common among which are the

procedures for the development, analysis, and monitoring of the implementation of National and Regional Programmes and National and Regional Action Plans for Balanced Sustainable Development, which organically accumulate social (human), environmental and economic aspects.

The algorithm for the functioning of the mechanism of state regulation of regional human development includes a block of calculations of the components' level and dynamics and, in general, the RHDI to evaluate its success and effectiveness.

In the conditions of reforming local self-government bodies and the territorial organization of power, when substantiating a new regional map of the state, the procedures and results of a comprehensive rating assessment of the components and, in general, the RHDI can become arguments for reformatting the socio-economic space and administrative-territorial structure of the state.

The average value of RHDI in options for grouping regions when reformatting the socio-economic and territorial space of Ukraine may become an additional criterion for the formation of a new regional map of the state in accordance with the requirements of EU economic and statistical principles.

In the current conditions for the development and adoption of the Region State Administration and Regional Councils of Regional Strategies of Administrative Regions for the period up to 2027 and Action Plans for 2021-2023 for their implementation, it is advisable to recognize the following priority components of monitoring regional human development:

- assessing and analyzing the status of implementation of localized national targets of the Millennium Development Goals up to the year 2015 and, if necessary, developing events to complete their achievement in 2021-2023;

- selection and disaggregation of strategic indicators of national Sustainable Development Goals 2027 targets;

- predictive calculations of 33 human development indicators according to 6 blocks with the definition of dynamics of indicators-dissimulators to develop appropriate measures to neutralize their negative impact or change in positive dynamics in each region for the period up to 2027;

- ensuring statistical and methodological consistency of strategic indicators 7 of the Millennium Development Goals (2000-2015) with strategic indicators 17 of the Sustainable Development Goals (2016-2030) and a system of indicators-stimulants and indicators-dissimulators of human development in the regions of Ukraine with optimization of components and in general RHDI.

Using the experience of the Khmelnytsky Region State Administration Working Group on the problems of implementing the fire safety rules system in the regional state administration, it becomes appropriate to recommend that all institutions of higher education in

the regions approve the topics of coursework and graduation qualification of the educational degree "Bachelor" and "Master" in practical issues of the life of the population of the basic, district and regional levels in the context of the human-centric development of the regions and the state as a whole.

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Столярова В. В., Шинкарюк О. В., Столяров В. Ф., Антошкін В. К., Горяча О. Л., Фролова Г. І. Моніторинг людського розвитку в регіонах України (інтегрований підхід)

У статті узагальнено основи інформаційно-методичної метрології регіонального людського розвитку, становлення та розвиток яких затверджувались Урядом України у 2001, 2012 і 2017 роках. Особливу увагу зосереджено на проблемах узгодженості оцінки динаміки складових Індексу регіонального людського розвитку (ІРЛР) з показниками Державних стратегій регіонального розвитку на періоди до 2015, 2020 і 2027 років.

У контексті оцінки результативності і ефективності механізму державного регулювання регіонального людського розвитку на основі його прогнозування розкриті сутність і зміст чотирьох етапів алгоритму комплексної рейтингової оцінки ІРЛР. Використано методи кластеризації регіонів за відповідними компонентами, прийомми і процедури композиції та декомпозиції складових ІРЛР з метою забезпечення соціально-економічної безпеки регіонів.

Диференціація системи показників і процедур моніторингу регіонального людського розвитку на субнаціональному (обласному) рівні дозволяє більш об'єктивно визначити соціально-економічну політику регіональних і місцевих органів

виконавчої влади щодо підвищення якості життя населення сіл, селищ, міст, районів та адміністративних областей України загалом.

Ключові слова: метрологія, регіональний людський розвиток, складові, індикатори, показники моніторингу, алгоритм комплексної рейтингової оцінки, методи кластеризації.

Stolyarova V., Shynkaryuk O., Stolyarov V., Antoshkin V., Goryacha O., Frolova G. Monitoring of Human Development in Regions of Ukraine (Integrated Approach)

The article summarizes the basics of information and methodological metrology of regional human development, the formation and development of which were approved by the Government of Ukraine in 2001, 2012 and 2017. Particular attention is paid to the problems of coordination of the assessment of the dynamics of the components of the Regional Human Development Index (RHDI) with the indicators of the National Regional Development Strategies for the periods up to 2015, 2020 and 2027.

In the context of assessing the effectiveness and efficiency of the mechanism of state regulation of regional human development on the basis of its forecasting revealed the essence and content of the 4 stages of the algorithm of comprehensive rating assessment of RHDI. Methods of clustering of regions by appropriate components, methods and procedures of composition and decomposition of components of RHDI were used in order to ensure socio-economic security of regions.

Differentiation of the system of indicators and procedures for monitoring regional human development at the subnational (regional) level allows to more objectively determine the socio-economic policy of regional and local executive bodies to improve the quality of life of villages, towns, cities, districts and administrative regions of Ukraine.

Keywords: metrology, regional human development, components, indicators, monitoring indicators, algorithm of complex rating assessment, clustering methods.

Столярова В. В., Шинкарюк О. В., Столяров В. Ф., Антошкин В. К., Горячая О. Л., Фролова Г. И. Мониторинг человеческого развития в регионах Украины (интегрированный подход)

В статье обобщены основы информационно-методической метрологии регионального человеческого развития, становление и развитие которых утверждались Правительством Украины в 2001, 2012 и 2017 годах.

Особое внимание было уделено проблемам согласованности оценки динамики составляющих Индекса регионального человеческого развития (ИРЧР) с показателями Государственных стратегий регионального развития на периоды до 2015, 2020 и 2027 годов.

В контексте оценки результативности и эффективности механизма государственного регулирования регионального человеческого развития на основе его прогнозирования раскрыты сущность и содержание четырех этапов алгоритма комплексной рейтинговой оценки ИРЧР. Были использованы методы кластеризации регионов по соответствующим компонентам, приемы и процедуры композиции и декомпозиции составляющих ИРЧР с целью обеспечения социально-экономической безопасности регионов.

Дифференциация системы показателей и процедур мониторинга регионального человеческого развития на субнациональном (областном) уровне позволяет более объективно определить социально-экономическую политику региональных и местных органов исполнительной власти по повышению качества жизни населения сел, поселков, городов, районов и административных областей Украины в целом.

Ключевые слова: метрология, региональное развитие человека, составляющие, индикаторы, показатели мониторинга, алгоритм комплексной рейтинговой оценки, методы кластеризации.

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