TRACKING PROGRESS ON SUSTAINABLE DEVELOPMENT GOALS FOR THE REGIONS OF UKRAINE: CHOOSING INDICATORS AND SETTING BASELINES

ANALYTICAL STUDY

(Discussion paper)

Tracking progress on Sustainable Development Goals for the regions of Ukraine: choosing indicators and setting baselines. - Kyiv, 2019. – 270 P.

The discussion paper tends to assess the situation in the regions of Ukraine from the positions of Sustainable Development Goals (SDGs), adopted by United Nations in 2015. Based on the officially localized national SDGs and appropriate indicators for Ukraine, the authors designed their own vision of the system of indicators, available in regional disaggregation, that estimate SDGs at the level of each region of Ukraine in 2015 as baseline year for SDG progress at global and, in particular, Ukrainian levels. In order to obtain the representative and reliable regional-level data, the set of indicators was partly modified compared to the adopted nation-level SDGs indicators for Ukraine.

The study was performed in two dimensions:

- the levels of regional indicators for each of 17 SDGs were analyzed and possible measures to improve sustainable development progress were suggested to be taken by local authorities;
- the situation in each region of Ukraine from the viewpoint of SDGs indicators levels was analyzed and the priorities of regions' development were suggested based on these criteria.

The study gave an opportunity to compare the situation in the regions of Ukraine from the viewpoint of their balanced development based on SDGs criteria, as well as to line out the leading regions and troubled regions, forming the integral indicators for SDGs for Ukraine.

The displayed set of regional SDGs indicators represents the authors' vision of the possible regional dimension of sustainable development assessment, based on the existing opportunities of national statistics, and should undergo further expert discussion and adjustment.

The obtained data can be used to coordinate the activity of local governments concerning the implementation of SDGs in Ukraine, to settle or amend the priorities of nation-level policy of SDGs implementation and complementary regional development policy, to provide expert or (in case of officially approved indicators) managerial monitoring of sustainable development of the regions of Ukraine. In particular, the authors offered their vision of SDGs implementation in regional strategic policy papers.

The discussion paper was prepared by a team led by Anatoly Maksiuta. The team members included expert-coordinator Svitlana Kovalivska, country experts Yaroslav Zhalilo and Vadym Pishcheiko. The regional data collection was provided by the group of regional coordinators, working in each region of Ukraine: Anastasia Lanina (Vinnytsia region), Iryna Paschuk (Volyn region), Elena Kharchenko (Dnipropetrovsk region), Natalya Yaremenko (Donetsk region), Oksana Krapich (Zhytomyr region), Lyubov Pavlovich (Zakarpattya region), Gennadiy Ustimov (Zaporizhya region), Larisa Pylyukh (Ivano-Frankivsk region), Sivilia Akmerova (Kyiv region), Konstantin Kamma (Kirovograd region), Natalya Yaremenko (Luhansk region), Irina Galayko (Lviv Oblast), Tatyana Gvozd (Mykolayiv region), Tetyana Mayak (Odesa region), Victoria Kurilko (Poltava region), Olga Kashevskaya (Rivne region), Tamara Kharchenko (Sumy region), Ihor Stefanyshyn (Ternopil region), Svetlana Karpinska (Kharkiv region), Esma Umerova (Kherson region), Vyacheslav Tretyak (Khmelnytskiy region), Anna Babkova (Cherkasy region), Tetyana Bovt (Chernivtsi region), Nina Pidkolizna (Chernihiv region). The translation has been done by Topperevod team under general editorship of Anna Isichko. Editorial proofreading has been performed by Yaryna Tsymbal. Graph design and text design has been elaborated by Svitlana Kovalivska and Yurii Klymenko.

The study was performed with the support of UNDP Office in Ukraine.

TABLE OF CONTENT

ACRONYMS AND ABBREVIATIONS

ATO	Antiterrorist Operation
EU	European Union
FDI	Foreign direct investments
GDP	Gross domestic product
GRP	Gross regional product
HIV	Human Immunodeficiency Virus
IAA	Investment attraction agency
ICT	Information and Communications Technology
IDPs	Internally Displaced Persons
IDS	Acquired Immunodeficiency Syndrome
IDSS NAS	Institute for Demography and Social Studies, National Academy of Sciences of Ukraine
KWh	kilowatt-hour
MAPF	Ministry of Agrarian Policy and Food of Ukraine
MDG	Millennium Development Goal
MEDT	Ministry of Economic Development and Trade of Ukraine
MENR	Ministry of Ecology and Natural Resources of Ukraine
MES	Ministry of Education and Science of Ukraine
MIA	Ministry of Internal Affairs of Ukraine
MinTOT	Ministry of Temporarily Occupied Territories and Internally Displaced Persons in Ukraine
MoH	Ministry of Health of Ukraine
MoI	Ministry of Infrastructure of Ukraine
MRD	Ministry of Regional Development, Building and Housing of Ukraine
MSR	Main Department of Statistics in region
MSW	municipal solid waste
NBU	National Bank of Ukraine
NCCIR	National Commission for State Regulation of Communications and Informatization of Ukraine
ODA	Official development assistance
PPP	Public-private partnership
RSA	Regional State Administration
SCORE	Social Cohesion and Reconciliation Index
SD	Statistical digest
SDG	Sustainable Development Goal
SES	State Emergency Service of Ukraine
SFS	State Fiscal Service of Ukraine
SME	Small and medium-sized enterprise
SSS	State Statistics Service of Ukraine
StateGeoCadastre	State Service of Ukraine for Geodesy, Cartography and Cadastre
TPP	thermal power plant
TPS	thermal power station
UCGFEA	Ukrainian Classification of Goods of Foreign Economic Activity
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UTC	United territorial community
VRU	Verkhovna Rada of Ukraine

CHAPTER 1

INTRODUCTION


SUSTAINABLE DEVELOPMENT GOALS

1.1. Goals, targets and structure of the study

The Goal of this study is to determine the relevant instrument for measuring the baseline level of the regional-level SDGs and to ensure its quantification in each of the regions of Ukraine, subject to the national targets of the SDGs and their achievement indicators. This allows to identify the strengths and weaknesses of Ukraine in reaching the regional-level SDGs in the baseline period and recommend the implementation of regional indicators for sustainable development into a system of regional strategic documents.

To achieve the goal of the study and deliver its results, the following **targets were identified and met**:

1. formulate a set of relevant indicators for the region level SDGs as of the end of the baseline period subject to actually obtainable readings of their measurement for all regions of Ukraine;
2. determine the set of data necessary to create indicators and to monitor them subsequently;
3. obtain the actual values of the indicators of the SDGs;
4. determine the lists of strategic and planning documents recommended for the consideration and monitoring of each SDGs indicator for each of 24 regions;
5. assess each SDG baseline in the regions of Ukraine by comparing with the basic national indicators;
6. assess the baseline level of the SDGs in each region of Ukraine by comparing with the basic national indicators;

As a result of the study, several **analytical products** were generated, which will be an important guide and source for local authorities in writing regional reports and tracking the progress of both national and regional SDGs. In particular, these are:

- a summary table of the SDG indicators for all regions of Ukraine;
- region ranking tables for each of the 17 SDGs;
- tables of the SDGs indicators in comparison with the baseline national rates for each of the 24 regions;
- an analytical report with conclusions on the SDG indicators for each region of Ukraine, compared to the baseline national indicators, the impact of each region's performance on the rate of achievement of the country-level SDGs.

We should emphasize that the absolute majority of the indicators included in the report are taken as of baseline year for the National Baseline Report, which is 2015. This, on the one hand, facilitated the collection of statistical data, due to the fact that almost all of this data has already been formed. On the other hand, 2015 is marked with the deepest decline of Ukraine's economy over the last five years, which damaged the most economically developed regions. This means that, given the changes that have occurred in these regions, the baseline rates may not be sufficient to objectively reflect the current progress of the SDGs.

1.2. Executive summary

This analytical study represents the next consecutive step towards the implementation in Ukraine of 17 Sustainable Development Goals (SDGs) and 169 targets, approved at the United Nations Summit on Sustainable Development in 2015. Indeed, the 2030 Sustainable Development Agenda. adopted at this Summit, is a universal collective responsibility that covers global, national and territorial (regional and local) levels. The SDGs implementation is governed by 'leaving no one behind' principle. This means that the implementation of the SDGs should entail both direct and reciprocal links between the global challenges facing mankind and the daily life of every person, wherever the latter lives and whoever he/she is.

The SDGs have been incorporated into the agendas of governments of many nations and major international financial and humanitarian organizations making a fully fledged 'road map' for the mankind. This laid the groundwork for the allocation of significant global, public and private investment to meet the indicators and achieve the SDGs at all levels of governance, including regional and local ones. These investments aimed at promoting innovative solutions and changes at all levels in areas, relevant to the transformations in four dimensions of the SDGs, namely economic, social, environmental and institutional.

Ukraine has at the highest national level recognized the Resolution of the Summit 'Transforming our world: the 2030 Agenda for Sustainable Development', which set the SDGs, and launched the process of their adaptation. The UN system and the United Nations Development Program (UNDP)

in Ukraine in particular, promotes and supports the implementation of the 2030 Agenda and the SDGs in Ukraine both at the national, regional and local levels. In 2017 the Government of Ukraine, with support from UNDP, made first step on this way and prepared the National Baseline Report 'Sustainable Development Goals: Ukraine'[1]. which delivers a vision of the benchmarks for Ukraine to achieve the Sustainable Development Goals and launches the National System of Goals (86 national development targets and 172 indicators for their monitoring). As one of the next steps towards making sustainable development a reality for the people of Ukraine, two important challenges need to be addressed: creation of relevant institutional mechanism and localization of the SDGs at the level of regions (oblasts) and local communities (hromadas).

Strengthening the capacity for the SDG-based planning and potential integration into regional strategies and programs, as well as promotion of the establishment of augmented monitoring system for the achievement of the SDGs, are the main steps in addressing mentioned challenges, which laid the basis for this study.

This study concerns the localization of the SDGs at the regional level. The first steps have been already taken with the support of UNDP in Ukraine and with the financial assistance of partners providing international technical support. In particular, with the participation of regional authorities and wide network of public organizations and territorial communities, a series of discussions were held in the regions and regional reports on SDGs were prepared in Dnipropetrovsk and Volyn oblasts[2]. These reports present the results of the discussion of adapted tasks, indicators for monitoring and target values of indicators of sustainable development for these regions. On the one hand, these two pilot projects provided the relevant regional authorities with their first experience of localization of the SDGs and raised the awareness of the need to align the regional development strategies and programmes with the SDGs, and, on the other hand, identified a number of problems to be addressed systematically across all regions. One of these problems is the establishment of a coherence between the goals, targets and indicators, defined by the National Baseline Report and relevant regional reports. It is crucial both for the preparation of such reports and relevant regional strategies, and for the monitoring of the achievement of the SDGs at the national, regional, and, prospectively, local levels.

For the SDGs to become effective elements of strategic planning at the regional level, it is necessary **to create an appropriate assessment tool of measurement of the SDGs at this level**.

A detailed approach to the definition of indicators is described in **Chapter 2**.

It should be noted that the regional-level SDG indicators play rather informative than prescriptive role. For the purposes of decision-making (including decisions on the development of a strategy to achieve the SDGs), an in-depth analysis of causes of regional indicators' deviations from the national average should be conducted at the regional level.

As a result of the study, a set of relevant indicators of the regional-level SDGs was formed (as enlisted in **Annex 1**). Also, **an assessment of the baseline level by each SDG in the regions of Ukraine was made together with** regional ranking based on the obtained indicators. The results of this assessment are presented in **Chapter 3** of the study. Mentioned chapter describes the starting point, with regards to each of the goals in the regions of Ukraine, provides conclusions on the main troubled regions for the relevant goal and presents a ranking of regions by the baseline of the indicators for each of the goals. The summarized data on SDGs in terms of 'leading indicators' in the regions of Ukraine as of the baseline year are shown in Figure 1.

One of the key tasks of the study was to **measure the SDGs targets baseline in each region of Ukraine** and to define the point of departure for each goal, compared to the basic national indicators. **Chapter 4** of the study reveals the main results of aforesaid analysis, like the baseline level of the SDGs in each region based on received regional indicators, the outcomes of the comparative analysis of regional and national indicators, the conclusions on the most challenging goals for given region. In addition, each region of Ukraine is **provided with spreadsheets and lists of strategic and planning documents recommended for the consideration and monitoring of the SDG indicators** (given as separate references for each region in **Chapter 4**). The summarized data on baseline of the SDGs by 'leading indicators' in each of the regions of Ukraine are shown in Figure 2.

The summarized conclusions of the analysis of the collected data on the role of regions in the

[1] National Baseline Report 'Sustainable Development Goals: Ukraine', 2017. Access mode: https://bit.ly/2FF5xYR

[2] Sustainable Development Goals: Dnipro-2030. Regional report, 2018. URL: https://bit.ly/2V1JuB0
Sustainable Development Goals: Volyn, Regional Report, 2018. URL: https://bit.ly/2FwlJKK

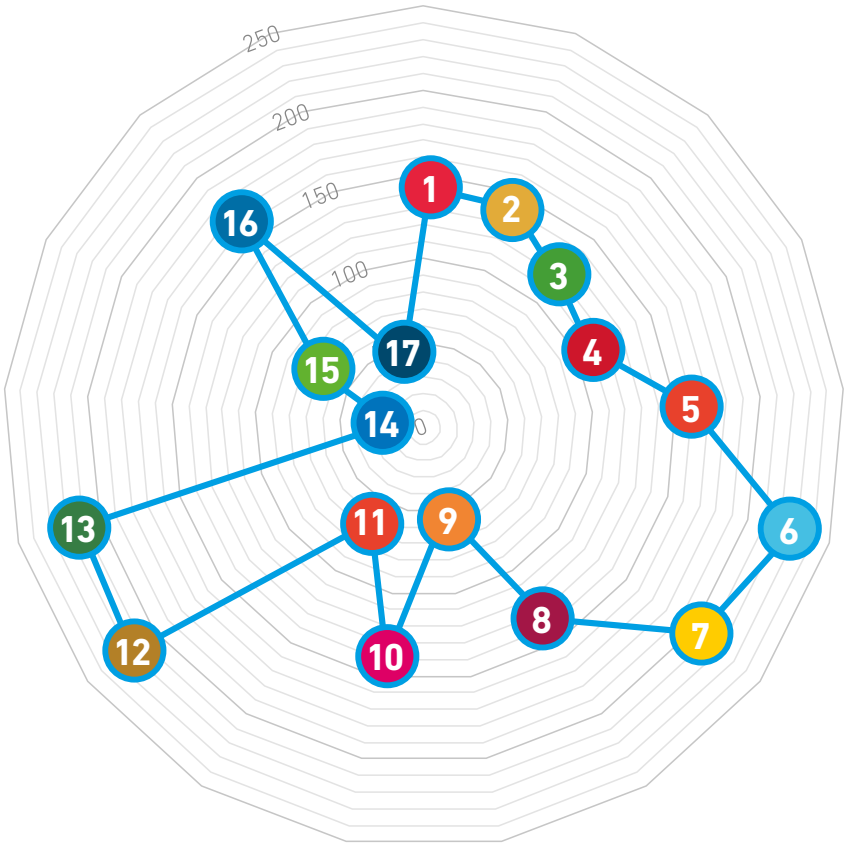


Figure 1. SDGs in terms of 'leading indicators'[3] in the regions of Ukraine as of the baseline year, points

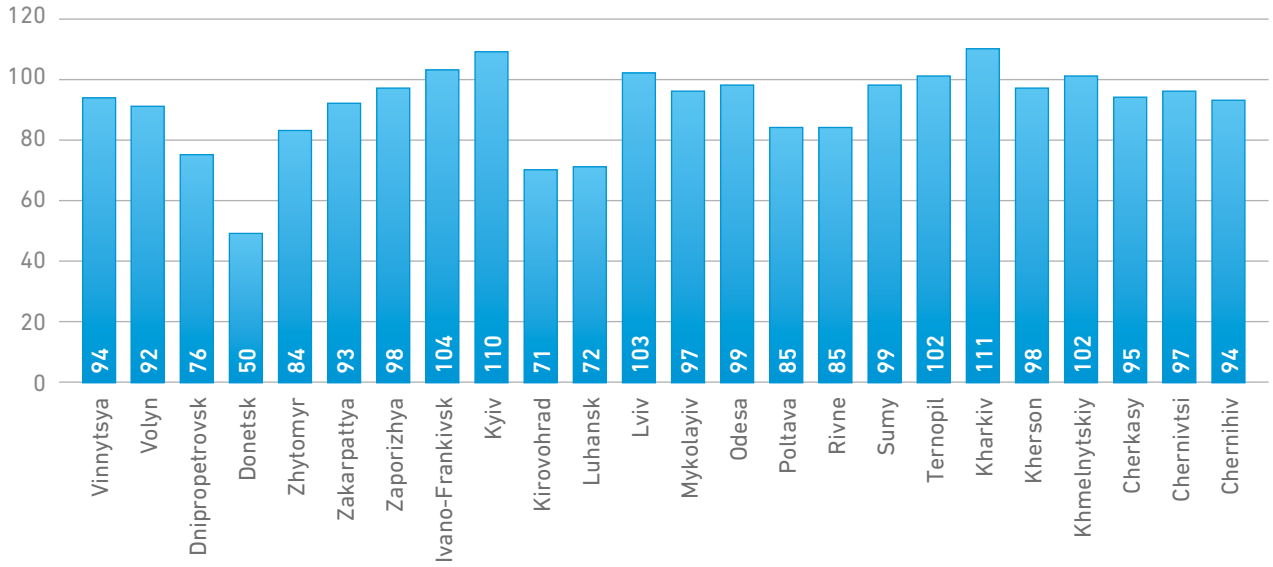


Figure 2. Baseline of the SDGs by 'leading indicators' in each of the regions of Ukraine, points

[3] 'Leading Indicators' are selected for the each of Goals for the purpose of comparative analysis. Please see the detailed description in Chapter 2.

SDGs in Ukraine, both in terms of the baseline of the SDGs by all regions and the contribution of each region to the achievement of the SDGs, as well as the recommendations for the alignment of the regional strategic documents with the SDG, are given in **Chapter 5** of this study.

It should be noted, that these conclusions do not consider the late changes of 2016-2018, and the definition of such rating shall not be the main aim of this study. At the same time, it allows to draw attention, both at regional and national levels, to those areas that should be of prior concern of national and regional policies and get necessary financial resources.

Also, a significant uneven regional distribution often cannot be reasonably explained in the process of analysis of indicators themselves. The difference can be caused with the specifics of the organization of accounting and data collection in the region, the specifics of the baseline year 2015, random events, finally - very different prerequisites for development etc. To explain the differentiation, a more in-depth analysis of collateral statistics is required, not foreseen by this study.

The obtained database of indicators for the region-level SDGs forms a basis for developing the tools for setting target indicators for the future (2020, 2025 and 2030), which will allow to perform systematic monitoring of the quality of regional development, provide an opportunity for public assessment of the development of regions and progress of the region level SDGs with the involvement of non-governmental organizations and think-tanks.

Regular update of the database indicators (on the annual basis, ideally) for subsequent periods would allow to perform systematic monitoring of changes in each area of the SDGs. The identification of progress and challenges of sustainable development of the regions of Ukraine creates the basis for further development of the regional targets of achieving the SDGs subject to the peculiarities of each of the regions.

The potential practical application of the results includes the following: development of measures on the implementation of the 2030 Agenda for region-level SDGs through regional reports, accounting the sustainable development and related indicators in regional dimension during the development and improvement of regional development strategies and relevant operational plans, sectoral strategies, including the introduction of appropriate indicators into the 2027 State Strategy for Regional Development.

2

CHAPTER

THE METHOD AND ITS LIMITATION


SUSTAINABLE DEVELOPMENT GOALS

For the purpose of the study. authors developed a method for determining the region level SDGs achievement indicators and their comparative analysis.

The national indicators defined in the National Baseline Report served as the basis for the regional indicators of the SDGs. In the case that regional disaggregation of national indicators is impossible for certain reasons (lack of data or statistical observation), a relevant indicator is used as a substitute and the number of such indicator was marked by (a) letter. The definition of substitute region level indicators is conditioned with the approaches applied globally and nationally in the process of selecting and establishing appropriate indicators, subject to the criteria and classification developed by the Interagency and Expert Group on SDGs (IAEG-SDG)[4].

The general requirements for the definition of substitute indicators are as follows. The indicators should:

1. Be measurable in ordinary and commonly used units, for example, kg, ha, million UAH, tones, days, etc.;
2. Meet the requirements of monitoring stability and take into account the frequency or cyclical nature of the studied phenomenon;
3. Be verifiable, if necessary, by independent assessment or by other methods;
4. Be affordable for data collection (i.e., be low cost);
5. Be relevant and adequate within the context, that is, to correspond to the subject of study and to be closely related to the monitored goals, to have a logical connection with the goals and targets of the studied process or phenomenon;
6. Be reliable and intrinsic, that is, reliable sources of information responsible for collecting the indicators should be identified;
7. Be sensitive to changes that need to be tracked but sufficiently resistant to side effects/changes;
8. Indicate progress in achieving the desired result. Indicators of a result is a specific measure of a phenomenon or process, which demonstrates actual progress in achieving the desired result;
9. Be simple and clear for understanding.

As a result, 167 region level indicators unified for all regions and maximally approximated to the national ones were identified, including the preservation of the nationally established corresponding numbering. The baseline level is set as of the end of 2015. Summarized results for indicators at the appropriate levels are given in Table 1, with the definition of the numbers of the relevant regional indicators and their comparison with the national level.

Table 1

The national and regional SDGs indicators according to the IAEG-SDG classification

Levels of the indicators, approximated to the IAEG-SDG classification	National level[5]	Regional level
Level I: the indicator is conceptually clear, methodology and standards are available, and data is produced and published at a regular basis	124	86
Level II: the indicator is conceptually clear, a methodology and standards are available, but data is produced and published at a non-regular basis	26	68
Level III: the indicator has no defined methodology or standards so far	22	13
Total indicators	172	167

[4] Sustainable Development Goal indicators website. Access mode: https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/

[5] Indicators for monitoring the state of achievement of Sustainable Development Goals: data collection and calculation method. Analytical Report. N. Vlasenko. Access mode: https://bit.ly/2UVzOI9

Tablel 2.

‘Leading Indicators’ for each SDG

SDG		SDG ‘leading indicator’
Goal 1.	No Poverty	1.1.1. (a) Share of the population whose average per capita equivalent money income per month is lower than the actual minimum subsistence level in the total number of population, %
Goal 2.	Zero Hunger	2.2.1. Labor productivity in agricultural companies measured with prices fixed in 2010, UAH 1.000 per one employee
Goal 3.	Good Health and Well-Being	3.5.1. (a) Average expected lifespan for men upon reaching age of 15
Goal 4.	Quality Education	4.5.1. (a) Number of persons who attended educational institutions (I-IV accreditation grade), per 10.000 persons of population
Goal 5.	Gender Equality	5.6.1. Ratio of average wages for men and women, %
Goal 6.	Clean Water and Sanitation	6.4.1. Water intensity of GRP, cubic meters of water used per UAH 1.000 of GRP (actual prices)
Goal 7.	Affordable and Clean Energy	7.4.1. (a) Energy intensity of GRP (consumption of energy-yielding materials and petro-chemical products) conventional tons per UAH million of GRP
Goal 8.	Decent Work and Economic Growth	8.3.1. (a) Employment rate among persons aged 15-70, %
Goal 9.	Industry, Innovation and Infrastructure	9.5.1. Share of expenditure on research and technical work in GRP, %
Goal 10.	Reduced Inequalities	10.1.1. (a) Income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income
Goal 11.	Sustainable Cities and Communities	11.1.2. (a) Housing per capita/ per household, sq.m
Goal 12.	Responsible Production and Consumption	12.4.1. (a) Volume of waste generated per unit of GRP, kg per USD 1.000 in actual prices
Goal 13.	Climate Action	13.1.1. (a) Volume of emissions of air pollutants from stationary sources, tones per sq.km, of the region's area
Goal 14.	Life Below Water	14.1.1. (a) Share of discharges of polluted wastewater into surface waters of the region in total discharges of sewage water of the region, %
Goal 15.	Life on Land	15.1.2. Share of area of territories and objects of the natural reserve fund in the total area of the region, %
Goal 16.	Peace, Justice and Strong Institutions	16.1.2. (a) Number of killed and injured victims of crimes in oblast, cases per 1.000 persons
Goal 17.	Partnerships for the Goals	17.3.1. Number of projects of public-private partnership, inter alia concession and property lease in oblasts as of end of period, units

Subject to the nature of the identified regional indicators of the SDGs, which can be divided into relative[6] and absolute[7] according to the calculation method, and into stimulator and de-stimulator[8] according to their contribution to the result, the following approaches are offered for determining the impact of each region on the level of the CDG achievement:

1. **The method of horizontal benchmarking** is applied to analyze each indicator by finding a deviation from the value of the baseline level of the national indicator. In absolute terms. it is used by finding absolute deviation. The resulting value is the absolute deviation (+/-) from the national value. For the relative indicators, it is used by finding a relative deviation. The resulting value is the ratio (times, >1/<1) to the national value. The results are interpreted in tabular form. The corresponding deviation value is given in color, while the stimulator/de-stimulator is considered as follows: in particular, the greater the deviation value is for the stimulator and less for the de-stimulator, the closer the color of the corresponding cell in each of the 17 Goal tables is to the color of the particular goal;
2. **The method of multidimensional comparisons** is used to compare the baseline rates of the indicators for each goal by region. The source data for each indicator in each region is normalized to the interval [0;1] of the minimum and maximum aggregate values, subject to the stimulators and de-stimulators[9]. The resulting interval is divided into ten equal segments in increments by 0.1. Each value of the normalized rate receives a point from 1 to 10, depending on which segment it belongs to. Thus, the maximum point associates with the value of the indicator of the region, which in the baseline period had the highest rate, and the minimum point - respectively, with the lowest rate. Due to certain limitations, the accessibility and availability of data for all regions, and in order to avoid distortion of summarized data, it is proposed not to use the integral calculations of the entire aggregate of calculated data. Instead, for comparative analysis and graphical interpretation of data, one 'leading indicator' for each target is selected (Table 2) by analogy with the calculation of the World's First SDG Index[10], considering the following criteria:

Feasibility. Data must be available in good quality and for all regions;

Suitability. The indicator should be multifaceted and have a close conceptual fit with a Goal;

Relevance. The indicator complies as close as possible with the selected indicators of the SDG Index.

It is clear, that the selected 17 'leading indicators' do not provide the full picture of sustainable development across all regional indicators, and important aspects can be missed, therefore this approach is predominantly used for graphical interpretation of the data obtained and the comparative characterization of the baseline level of the SDGs achievement. Thus, based on selected 17 'leading indicators', general diagrams were constructed, in particular:

- the charts of baseline levels of the region-level SDGs achievement are presented for each Goal (Chapter 3).
- the charts of baseline levels of the SDGs achievement are presented for each region (Chapter 4).

As an auxiliary tool for the analysis of baseline SDGs achievement by each region, in comparison with others, the indicator values in terms of each Goal are used. To demonstrate these indicator values, 17 charts were designed in spreadsheets for each region.

At the same time, this study suggests a more detailed analysis of the baseline level of regional indicators of the SDGs in terms of goals (Chapter 3) and regions (Chapter 4), using the initial data of each SDG indicator, summarized in the corresponding spreadsheets.

Please note that baseline data for this study originates from the official sources of information (see Annex 1), is available for all users and is highly commended by the international organisations[11]. Data on Donetsk and Luhansk oblasts is available only for the government-controlled territories, except for data on population size which is given with account of occupied territories.

---

[6] The name of the indicator often begins with the words 'share', 'ratio'

[7] The name of the indicator often begins with the words 'number', 'area'

[8] Stimulator - the greater the value of the indicator is, the better the result is; de-stimulator - on the contrary, the greater the value of the indicator is, the worse the result is.

[9] The normalized value of the stimulator rate is inversely proportional to the normalized value of the de-stimulator.

[10] The SDG Index for reach countries, 2015. Access mode: https://bit.ly/1itGWYo

[11] Adapted Global Assessment of the National Statistical System of Ukraine, Jan Byfuglien, Gabriel Gamez, Peter Hackl, Claudia Junker, Bronislava Kaminskiene, and Kurt Wass.), 2012,– p.5. URL: https://bit.ly/2TFX4bE

CHAPTER 3

SUSTAINABLE DEVELOPMENT GOALS BASELINE IN THE REGIONS OF UKRAINE

THE CONTENT OF THIS CHAPTER

Chapter 3 is made of 17 paragraphs which contain the estimate of baseline level of achievement of each of the SDG by the regions of Ukraine. Each paragraph is devoted to separate goal and provides the following information.

Resume of situation with respective goal achievement in the regions of Ukraine as of 2015. Baseline of the goal achievement is described using actual data of the SDG region level indicators which describe the goal at regional level together with their comparison with relevant nation level indicators. Based on this data comparison, a range of particular conclusions was made on the most urgent challenges for each region in relevant development area as of baseline 2015. As the authors stress, firstly this research has no purpose to rate regions according to their development in separate development areas, and secondly the data provided describes solely the situation in baseline year. At the same time, performed research allows to define areas of development that should get utmost attention and resources. In some cases, the difference in values of separate indicators for various regions cannot be explicitly explained, therefore it might be caused either by peculiarities of procedures of registration and collection of data in some regions or by peculiarities of baseline year conditions, or by any other reasons. In such cases the dependable explanation of differentiation can be offered only upon in-depth analysis subject to further research.

Tables of data on indicators which measure respective SDG at regional level, in the context of regions. In vertical order (in lines), the table shows a data responding to nation level goals and targets, as well as to indicators of goal at regional level. A system of the SDG region level indicators is based on national indicators defined in the National Report 'Sustainable Development Goals: Ukraine' dated 2017. Direct regional disaggregation is impossible for some indicators (please see details in Chapter 2). Due to this, any such indicator was replaced with other appropriate indicator, and its number was supplemented with mark (a). In horizontal order, the table contains data in two columns for each indicator. *First column* keeps data on respective region level indicators in baseline 2015. *Second column* contains the data on difference between baseline values of regional indicators and baseline values of respective national indicators (or the deviation of regional data from national one), namely absolute divergence is marked with '+/-', and relative divergence is marked '>1/<1'. Can the divergence to the less or to the bigger values speak for positive picture? This depends on whether the indicator is stimulator or de-stimulator. To make things clear, this issue is illustrated with colored background of table cells; namely, the cells are colored differently - from transparent to utmost dark color which corresponds to maximum deviation towards positive picture. Thus, the darker is the cell's background coloring, the better.

Bar or pie charts of values of indicators which measure respective goal, for regions. These charts for region level indicators illustrate data as shown in first column of the previous table. They are ranked from bigger to smaller value. Together with this, the bar charts provide data both in regional and national contexts (values of national indicators), which makes data easy to compare. In certain cases, the data is inseparable from the whole dimension, then the pie charts were applied to illustrate it.

Goal 1. No Poverty

There is a good reason to open a list of globally set goals for sustainable development with the 'end poverty' goal. Poverty, especially wide scaled one, significantly reduces the capacity of national communities to develop in a united, balanced and strategically oriented way. The challenge of eradicating poverty is growing more comprehensive and tough due to multi-dimensional phenomenon of poverty, which aggravates over the global community evolution. At the same time, there are new frontiers for success in addressing this challenge, as well as in mitigating those drivers of poverty that cannot be promptly eliminated.

Regional differentiation of poverty indicators can reach quite significant scale. Its level is affected by the demographic structure of region's population (share of employable population, the gender and age composition of population, etc.) and the level of region's economic development, which determines economics' ability to ensure all employable members of communities with opportunity to get appropriate earned or business income. In its turn, the organizational capacity of regional authorities defines the effectiveness of poverty eradication measures in the form of targeted assistance from state budget (rendered indirectly through intergovernmental transfers) and local budgets.

One should keep in mind, that regional authorities have a restricted ability to influence certain range of parameters that define the poverty rate in the region. Some of such parameters are: national overall price level and its trend, basic social standards (in particular, minimum wages and subsistence minimum), rates of financing the national obligations and competence delegated at regional level, corresponding rates of wages in public sector, etc.

At the same time, regional authorities possess a wide array of powers and tools allowing them to create significant effect on overall poverty rate in the region. These tools include targeted assistance in money and kind, provision of free basic services to certain groups of citizens, enhancement of opportunities for employment, productive labor and entrepreneurial activity on behalf of economically active population.

A comparison of regional dimensions of the selected basic indicators selected as baseline for Goal 1 has demonstrated a significant differentiation rate. Using the real subsistence minimum indicator (officially calculated by the Ministry of Social Policy), gives the opportunity to compare levels of official income of the population of the regions; and, which is important, comparing with the average income indicator, also allows to estimate income distribution. The city of Kyiv (42,7%), Zaporizhzhia (50,5%), Kyiv (51.3%), Kharkiv (54.4%), Chernihiv (55,0%), Odesa (55.3%) and Dnipropetrovsk (56.6%) oblastshave shown considerably better results in comparison with the all Ukrainian indicator (62.6%). At the same time, more than 70% of the population get lower than the real subsistence minimum in ten oblasts of Ukraine, mostly Rivne (85,0%) and Kmelnytsky (76.4%). This indicator has certain correlation with average wages levels: generally, leaders and outsiders coincide by both indicators. However, some regions show significant deviations. E.g., Rivne oblast is 11th from top in average wage levels, Khmelnitsky is ranked 17th. Dnipropetrovsk oblast, ranking 3rd by wage (after Kyiv and Donetsk), shows 56,6% of people, earning below real subsistence minimum.

Since 2015, poverty indicators in Ukraine improved significantly. In particular, the proportion of population with equivalent incomes below the real subsistence minimum rate has decreased to 49.0% (2017), while thir minimum rate itself increased by 1.3 times.

Existence of population living below the poverty rate dictates the need in targeted state assistance allocation. Meanwhile, statistics data on social care coverage for distressed people is quite differentiated. Poltava (100%), Kirovohrad (99.7%), Kharkiv (98.6%), Khmelnytskyi (97.4%), and Mykolaiv oblasts (96.3%) report the highest coverage rates, while less than half of those in need are covered in Volyn (20%) and Cherkasy (47%) oblasts, according to reported data.

Obviously, significant differentiation at this level depends on 'loose' interpretation of the methodology of identifying individuals requiring social care services, as well as of registry system for rendered social care services (in particular mechanism for registering the sufficiency of rendered services). In particular, the absence of a unified register of assisted people brings to unavoidable double counting of individuals receiving assistance in kind; in 2015 in Ukraine the share of the latter constituted 81% of all assisted people. Therefore, subsequent use of this indicator for the success measurement of achieving the sustainable development goals at regional level is impossible without improvement of accountancy of people receiving social care services and standardization of levels of assistance.

Goal	Goal 1. No Poverty							
Target	1.1 Reduce the poverty level by 75 percent, in particular through the elimination of its extreme forms		1.2 Increase the coverage of poor people with targeted social assistance programmes		1.3 Increase the resilience of socially vulnerable groups of the population			
Indicator	1.1.1. (a) Share of the population whose average per capita equivalent money income per month is lower than the actual minimum subsistence level in the total number of population, %		1.2.1. (a) Share of social service coverage for people finding themselves in difficult life circumstances in total number of such people, %		1.3.1. (a) Share of households which report themselves as poor while assessing their material well-being, %		1.3.2. Share of food expenditure in total household spending, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**62.60**		**56.30**		**70.70**		**53.10**	
Oblasts								
Vinnytsya	64.70	2.10	59.50	3.20	81.40	10.70	52.80	-0.30
Volyn	72.70	10.10	20.00	-36.30	45.60	-25.10	59.80	6.70
Dnipropetrovsk	56.60	-6.00	56.00	-0.30	80.20	9.50	52.90	-0.20
Donetsk	65.50	2.90	100.00	43.70	65.10	-5.60	60.10	7.00
Zhytomyr	73.70	11.10	71.50	15.20	50.10	-20.60	54.20	1.10
Zakarpattya	61.10	-1.50	73.30	17.00	100.00	29.30	49.00	-4.10
Zaporizhya	50.50	-12.10	90.96	34.66	85.90	15.20	46.50	-6.60
Ivano-Frankivsk	67.60	5.00	93.00	36.70	90.60	19.90	50.90	-2.20
Kyiv	51.30	-11.30	82.30	26.00	85.00	14.30	53.40	0.30
Kirovohrad	68.20	5.60	99.70	43.40	15.60	-55.10	53.20	0.10
Luhansk	68.90	6.30	83.80	27.50	75.40	4.70	48.00	-5.10
Lviv	70.00	7.40	74.10	17.80	64.00	-6.70	57.20	4.10
Mykolayiv	70.70	8.10	96.30	40.00	91.00	20.30	52.80	-0.30
Odesa	55.30	-7.30	94.50	38.20	83.40	12.70	57.50	4.40
Poltava	63.90	1.30	100.00	43.70	49.90	-20.80	50.00	-3.10
Rivne	85.00	22.40	85.73	29.43	56.80	-13.90	58.40	5.30
Sumy	72.30	9.70	90.40	34.10	82.40	11.70	48.50	-4.60
Ternopil	72.70	10.10	88.70	32.40	60.60	-10.10	55.60	2.50
Kharkiv	54.40	-8.20	98.60	42.30	82.80	12.10	50.00	-3.10
Kherson	71.40	8.80	84.40	28.10	94.50	23.80	59.10	6.00
Khmelnytskiy	76.40	13.80	97.40	41.10	65.00	-5.70	57.80	4.70
Cherkasy	67.40	4.80	47.02	-9.28	98.00	27.30	56.40	3.30
Chernivtsi	71.10	8.50	88.50	32.20	79.40	8.70	49.10	-4.00
Chernihiv	55.00	-7.60	82.30	26.00	63.80	-6.90	52.60	-0.50
City of Kyiv	42.70	-19.90	-	-	29.50	-41.20	-	-

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 1.1.1 (a), 1.3.1 (a), 1.3.2 – de-stimulator, given the converse readings in colors.

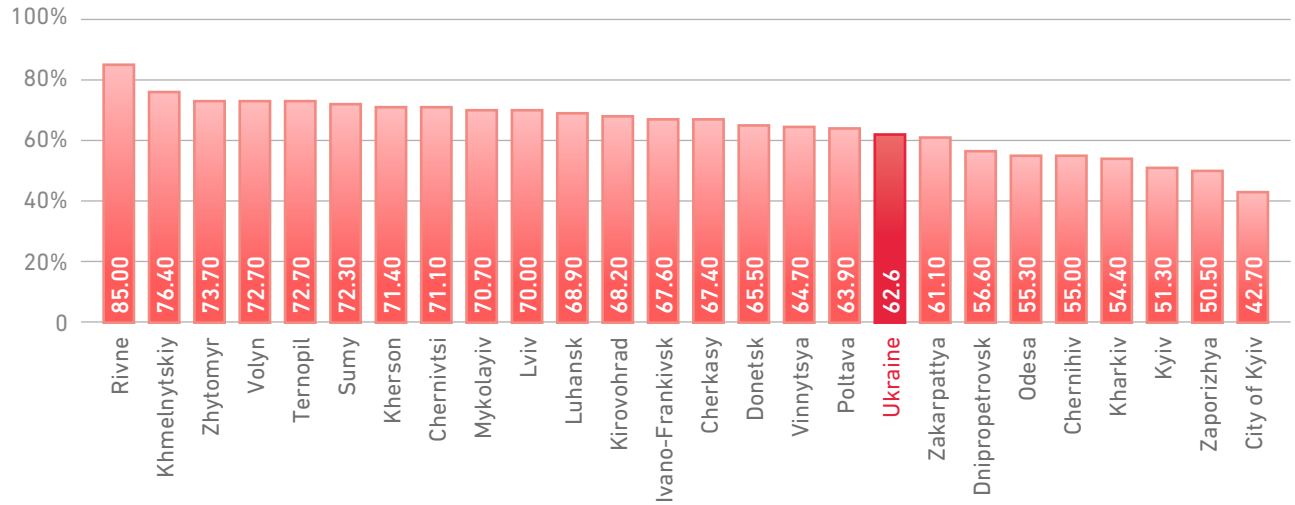
A comparison of households' self-assessments indicators (reporting themselves as poor ones) and indirect assessment of poverty rates due to the share of food expenditure in total household expenses is quite illustrative as for the available opportunities for realistic assessment of poverty rate in a regional dimension. Within first indicator, Zakarpattia (100% of households consider themselves poor), Cherkasy (98.0%), Kherson (94.5%), Mykolaiv (91.0%), Ivano-Frankivsk (90.6%) oblasts report themselves as the poorest oblasts in Ukraine. Instead of this, 15.6% of households in Kirovohrad oblast, 29.5% in the city of Kyiv, 45.6% in Volyn, and 49.9% in Poltava oblasts consider themselves as poor. This indicator does not correlate with the structure of household spending at all. The largest share of food expenditure is reported by Donetsk (60.1%), Volyn (59.8%), Kherson (59.1%), and Rivne (58.4%) oblasts, where (except for Kherson) self-assessment of poverty is lower than the average rate in Ukraine. Meanwhile, oblasts with the smallest share of food expenditure (Zaporizhzhia - 46.5%, Luhansk - 48.0%, Sumy - 48.5%, Zakarpattia - 49.0%, Chernivtsi - 49.1%) have worse perception of their poverty in comparison with perception of poverty in Ukraine as a whole. In a whole, poverty perception does not correlate at all with the real income rates. According to the statistics, leading regions (Zaporizhzzhia, Kyiv and Kharkiv oblasts) report more than 80% of households self-attributed as poor, while in Rivne and Khmelnytsky oblasts their shares are, respectively, 56,8 and 65,0%.

Conducted comparison proves the importance of non-monetary drivers affecting the self-referral of people to the poor, which is, as noted earlier, sometimes more important in ending systemic phenomenon of poverty than a mechanistic income increase. In particular, the impact of the demonstration effect of the neighboring countries on feelings of the poor inhabitants of Zakarpattia and Ivano-Frankivsk oblast and inadequate level of infrastructure (which determines the quality of life) revealed by the various sociology polling surveys in a number of southern oblasts (Kherson, Mykolaiv, Zaporizhzhia) is evident.

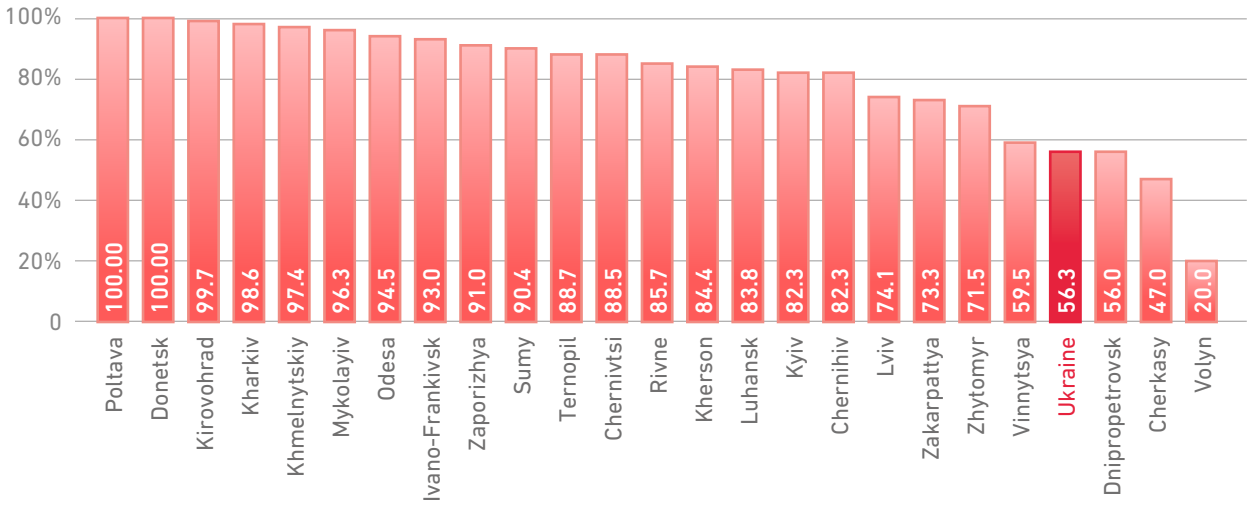
Thus, the diversity of poverty rate indicators for each of Ukraine's oblasts demonstrates a systemic nature of this phenomenon and the complexity of drivers for their creation. The embodiment of qualitative changes in improving these indicators and reducing their differentiation shall be a possible and necessary step in achieving the sustainable development goals and will primarily result from changes at macro level. However, regional authorities still have the powers and options which might speed up the achievement of target level indicators.

Baseline indicators of goal in 2015:

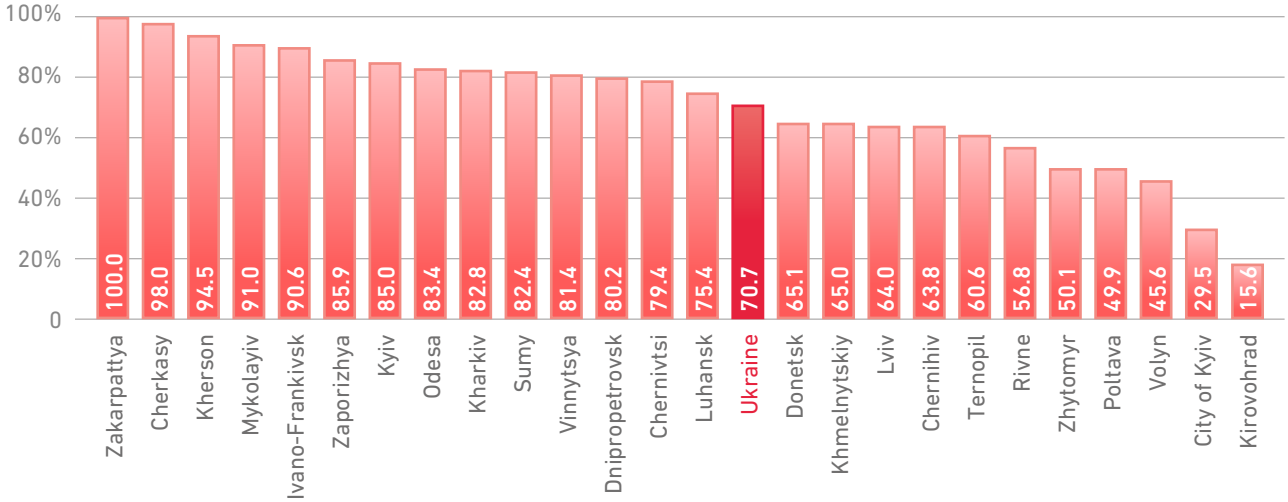
1.1.1. (a) Share of the population whose average per capita equivalent money income per month is lower than the actual minimum subsistence level in the total number of population, %



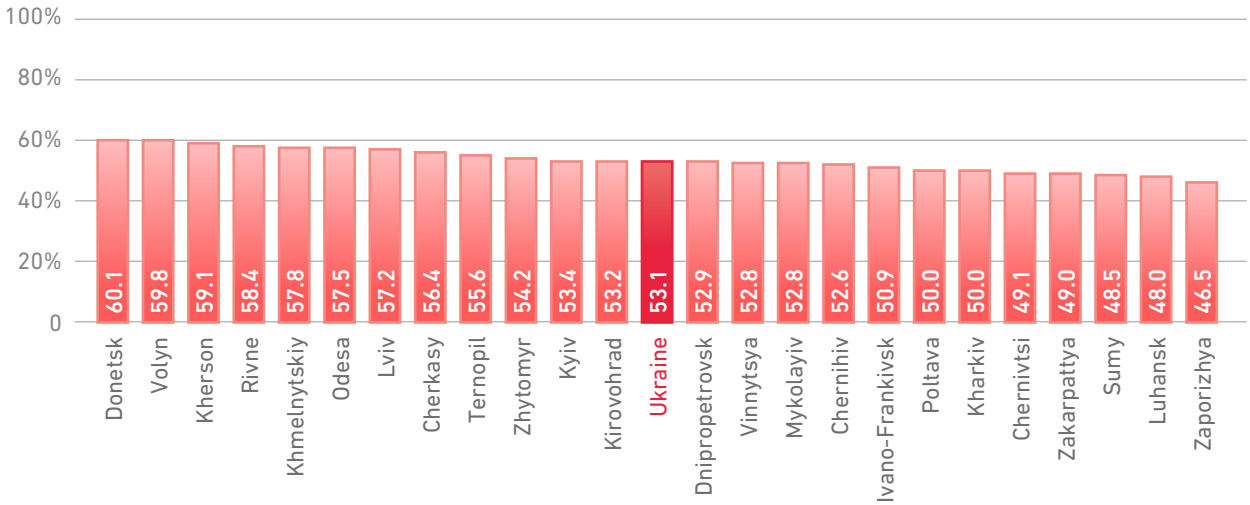
1.2.1. (a) Share of social service coverage for people finding themselves in difficult life circumstances in total number of such people, %



1.3.1. (a) Share of households which report themselves as poor while assessing their material well-being, %



1.3.2. Share of food expenditure in total household spending, %



Goal 2. Zero Hunger

Ending hunger as a goal is currently irrelevant for Ukraine. The existing income level of population complemented with public social care systems ensures certain basic level of food consumption even to those citizenswho cannot ger food directly from their farmlands, as rural dwellers can, therefore actual cases of hunger are rather social deviations, as a rule.

However, the low overall income of the overwhelming majority of Ukrainian citizens affects primarily the quality of food patterns. Experts note that in 2015 the average citizen consumed only 64% of scientifically grounded norm of meat and meat products, 55% of milk and dairy products, 43% of fish and fish products, 67% of fruit and berries[12]. Regional differentiation of food consumption is determined by the disparity of incomes of the population, settlement structure of oblasts, regional market prices trends. At the same time, a well-developed food market virtually evens the gap in available food products assortment in regional context, so even in case of local decline in production an intra-regional availability (and hence actual price levels for consumer) may vary significantly depending on availability of retail networks (markets, supermarkets, municipal stores) and market behavior in these networks (events of market collusion and free competition of manufacturers).

It should be noted that regional authorities have no mechanisms of direct interference with regional food supply development and with price trends since agricultural sector is privately owned mostly. Instead of this, regional authorities possess of quite powerful tools of indirect regulation of both production of agricultural products and their supply to the market.

First group of tools is applied for creating appropriate conditions for the functioning of agricultural companies, especially those supplying the domestic market, with highest priority to private farmers and small manufacturing companies who ensure inclusiveness of agricultural production which is of great importance for rural development in general.

Available tools for influencing market logistics embrace the following: retail networks promotion (setting municipal stores up, arranging agricultural trade fairs, signing contracts for the supply of agricultural products to cities, etc.), facilitation of logistic cooperation of producers, dissemination of information on availability of product offering, etc.

Comparison of regional indicators of levels of basic foodstuff consumption shows significant disparity, which correlates with the rates of incomes of regions' population. In particular, there is half as much difference between highest (Kyiv oblast) and lowest[13] (Chernivtsi oblast) levels of meat and meat products consumption. Significant differentiation of the indicator values catches the eye; namely there are only nine oblasts with over-index of average Ukrainian indicator, and fifteen oblasts with below-the-average reading, while seven of these fifteen lag behind by 10% or more. The lowest consumption of meat and meat products is registered in Luhansk, Chernivtsi, Ivano-Frankivsk, Mykolaiv, and Zakarpattia oblasts, which (except for Mykolaiv) are characterized by the lowest indicators of available income per person. The highest level of consumption is found in Kyiv, Dnipropetrovsk, Donetsk, Kirovohrad, Cherkassy, Kharkiv, Zaporizhzhia, Vinnytsia and Kherson oblasts. As we can see, these leaders can boast with combination of highly-populated urban regions ranking first in the per capita income (Dnipropetrovsk, Kyiv, Kharkiv oblasts) and agrarian regions with developed livestock farming. It should be noted that the dependence of meat consumption on the level of income is aggravated by the prices' trends: in the course of 2014 and 2015, prices for meat and meat products in Ukraine rose by 1.6 times.

A picture of milk and dairy products consumption by the population of regions is somewhat different. The growth of milk prices in 2014 constituted only 13.7%, making 1.4 times in two years together. Apart of this, it is necessary to pay due attention to peculiarities of consumption of this product. Unlike meat, individual farms can produce milk and dairy products throughout a year, at much lower cost of livestock maintenance. Furthermore, this source of animal protein substitutes meat products to a certain extent: despite same 1.5 times gap between maximum and minimum consumption rates, the consumption of milk and dairy products exceeded the average Ukrainian rate in 15 oblasts. The highest per capita consumption was registered mostly in oblasts with low incomes: Ivano-Frankivsk, Chernivtsi,

[12] Sustainable Development Goals: Ukraine, 2017 National Baseline Report.- P. 20.

[13] Upon statistical data, the lowest per capita meat and meat products consumption was registered in Luhansk oblast in 2015. However, armed conflict brings some peculiarities into process of statistical data collection and processing, therefore it is necessary to handle such reading carefully.

Goal	Goal 2. Zero Hunger									
Target	2.1 Ensure accessibility to balanced nutrition to the level of scientifically based standards for all population groups						2.2 Double agricultural productivity, primarily through innovative technologies			
Indicator	2.1.1. (a) Consumption of meat and processed meat per capita, kg/year		2.1.2. (a) Consumption of milk and processed milk per capita, kg/year		2.1.3. (a) Consumption of fruit, berries and grapes per capita, kg/year		2.2.1. Labor productivity in agricultural companies measured with prices fixed in 2010, UAH 1.000 per one employee		2.2.2. The index of agricultural production, %	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	+/-
Ukraine (2015)	**50.90**		**209.90**		**50.90**		**223.31**		**95.20**	
Oblasts										
Vinnytsya	51.30	1.01	214.00	1.02	54.30	1.07	274.22	1.23	91.80	-3.40
Volyn	50.30	0.99	221.30	1.05	43.90	0.86	242.45	1.09	95.40	0.20
Dnipropetrovsk	58.80	1.16	194.70	0.93	57.10	1.12	211.88	0.95	106.30	11.10
Donetsk	53.30	1.05	171.20	0.82	40.90	0.80	179.66	0.80	64.90	-30.30
Zhytomyr	48.70	0.96	230.80	1.10	47.20	0.93	204.42	0.92	91.20	-4.00
Zakarpattya	45.70	0.90	223.00	1.06	48.90	0.96	103.42	0.46	95.10	-0.10
Zaporizhya	51.60	1.01	186.40	0.89	46.50	0.91	172.02	0.77	109.30	14.10
Ivano-Frankivsk	41.70	0.82	259.30	1.24	44.20	0.87	321.27	1.44	95.50	0.30
Kyiv	63.30	1.24	222.80	1.06	72.10	1.42	226.90	1.02	89.20	-6.00
Kirovohrad	53.20	1.05	207.80	0.99	45.40	0.89	215.63	0.97	97.70	2.50
Luhansk	37.50	0.74	144.80	0.69	36.70	0.72	160.44	0.72	77.80	-17.40
Lviv	47.00	0.92	235.50	1.12	48.40	0.95	261.78	1.17	97.10	1.90
Mykolayiv	44.20	0.87	206.80	0.99	51.10	1.00	192.03	0.86	102.10	6.90
Odesa	48.00	0.94	194.50	0.93	60.20	1.18	160.23	0.72	96.20	1.00
Poltava	49.60	0.97	223.60	1.07	52.60	1.03	209.79	0.94	107.30	12.10
Rivne	46.10	0.91	213.10	1.02	40.60	0.80	229.79	1.03	92.80	-2.40
Sumy	48.60	0.95	203.50	0.97	38.60	0.76	298.87	1.34	95.40	0.20
Ternopil	47.90	0.94	235.10	1.12	41.70	0.82	258.11	1.16	88.80	-6.40
Kharkiv	52.80	1.04	228.30	1.09	52.20	1.03	249.01	1.12	97.20	2.00
Kherson	50.90	1.00	195.60	0.93	47.20	0.93	240.58	1.08	105.00	9.80
Khmelnytskiy	48.60	0.95	233.00	1.11	55.60	1.09	264.00	1.18	87.30	-7.90
Cherkasy	53.00	1.04	226.90	1.08	48.90	0.96	277.24	1.24	99.40	4.20
Chernivtsi	41.20	0.81	243.90	1.16	58.40	1.15	135.40	0.61	91.10	-4.10
Chernihiv	45.80	0.90	239.20	1.14	43.20	0.85	226.17	1.01	98.10	2.90
City of Kyiv	-	-	-	-	-	-	-	-	-	-

Goal	Goal 1. Zero Hunger							
Target	2.3 Ensure the development of sustainable food production systems that help maintain ecosystems and gradually improve the quality of land and soil, primarily through innovative technologie						2.4 Reduce the volatility of food prices	
Indicator	2.3.1. The index of food production, %		2.3.2. Share of food industry and agricultural raw materials processing production (groups 15-24) in exports of Ukrainian Classifier of Goods for Foreign Economic Activity groups 1–24, %		2.3.3. (a) Share of agricultural land under organic amendment, %		2.4.1. The consumer price index for food and non-alcoholic beverage (up to December of current year), %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**89.30**		**38.20**		**2.50**		**141.50**	
Oblasts								
Vinnytsya	106.80	17.50	6.20	-32.00	1.10	-1.40	142.00	0.50
Volyn	41.20	-48.10	2.40	-35.80	1.70	-0.80	145.40	3.90
Dnipropetrovsk	98.50	9.20	24.00	-14.20	2.80	0.30	138.70	-2.80
Donetsk	83.60	-5.70	5.70	-32.50	0.70	-1.80	145.00	3.50
Zhytomyr	94.80	5.50	13.00	-25.20	0.40	-2.10	139.70	-1.80
Zakarpattya	58.10	-31.20	21.20	-17.00	9.30	6.80	142.30	0.80
Zaporizhya	93.70	4.40	66.30	28.10	7.30	4.80	137.30	-4.20
Ivano-Frankivsk	65.20	-24.10	74.60	36.40	0.30	-2.20	140.20	-1.30
Kyiv	-	-	3.30	-34.90	1.50	-1.00	139.10	-2.40
Kirovohrad	93.30	4.00	26.70	-11.50	3.20	0.70	141.60	0.10
Luhansk	90.40	1.10	59.80	21.60	0.50	-2.00	142.40	0.90
Lviv	100.10	10.80	60.10	21.90	0.30	-2.20	142.90	1.40
Mykolayiv	96.70	7.40	22.40	-15.80	5.70	3.20	141.70	0.20
Odesa	113.40	24.10	17.00	-21.20	5.90	3.40	143.40	1.90
Poltava	76.80	-12.50	37.00	-1.20	1.50	-1.00	140.60	-0.90
Rivne	89.60	0.30	38.20	0.00	2.30	-0.20	140.30	-1.20
Sumy	100.50	11.20	29.60	-8.60	1.40	-1.10	139.20	-2.30
Ternopil	97.60	8.30	53.70	15.50	0.30	-2.20	144.80	3.30
Kharkiv	69.00	-20.30	53.90	15.70	5.70	3.20	138.00	-3.50
Kherson	91.50	2.20	51.50	13.30	4.60	2.10	140.20	-1.30
Khmelnytskiy	93.00	3.70	29.00	-9.20	1.60	-0.90	140.10	-1.40
Cherkasy	104.10	14.80	56.90	18.70	2.60	0.10	143.20	1.70
Chernivtsi	87.20	-2.10	-	-	-	-	140.90	-0.60
Chernihiv	104.10	14.80	56.90	18.70	2.60	0.10	143.20	1.70
City of Kyiv	87.20	-2.10	-	-	-	-	140.90	-0.60

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions:
2.4.1 (a) - de-stimulator, given the converse readings in colors

Ternopil, as well as in oblasts with a developed dairy livestock farming (Chernihiv, Zhytomyr, Cherkasy, Poltava, Kharkiv, Kyiv, Volyn and others).

Low dairy products consumption was registered in steppe regions, where animal husbandry is mainly represented by the meat one: namely in Zaporizhzhia, Odesa, Kherson, Mykolaiv oblasts. Separate study is necessary for low consumption in Sumy oblast, which should have belonged to a group of leaders in private production of milk sector.

A specific trend of fruit crop productivity causes a significant volatility of prices in this sector. Throughout 2014 and 2015, fruits have risen in price by 2.3 times, which made them significantly less affordable for the population. Consequently, the consumption is found primarily in oblasts with the highest fruit yield and explicable ability to consume their own grown fruits and buy local products in the markets. Due to the poor harvest logistics, fruit markets remain highly localized and have great price discrepancy in regions; in this way, regions with a registered decline fruits consumption demonstrate simultaneous highest rates of food prices growth). Per capita consumption of fruits, berries and grapes over-indexed the average Ukrainian indicator in 9 regions represented by Kyiv (by 41.7%), Odesa, Chernivtsi, Dnipropetrovsk, Khmelnytskyi, Vinnytsia, Poltava, Kharkiv, and Mykolaiv oblasts. To the contrary, northern (Sumy, Rivne, Chernihiv, Volyn) oblasts showed the lowest level of fruit consumption.

The year 2015 was marked with 4.8% drop of agricultural production, therefore it cannot illustrate the trends. An adverse weather impact (therefore crop yield decreased by 5.2%) was registered together with macroeconomic factors (in particular, a loss of foreign livestock product markets that decreased production by 3.7%). Only four oblasts (Dnipropetrovsk, Poltava, Mykolaiv and Zaporizhzhia) demonstrated a growth in production, which in no way correlated with labor productivity of agricultural companies. The latter is logically differentiated due to the sectoral structure of agricultural sector: the highest labor productivity is registered in the North and West of the country (Ivano-Frankivsk, Sumy, Cherkassy, Vinnytsia, Khmelnytskyi, Lviv, Ternopil oblasts) with the highest share of fruit and vegetable, milk farms. The traditionally grain-growing oblasts tend to show average productivity in Ukraine due to the statistical predominance of this type of production in gross output. Worst labor productivity indicators belong to mountainous Zakarpattia and Chernivtsi regions, as well as Odesa, Zaporizhzhia, Donetsk and Mykolaiv, where less profitable production of open-ground vegetables and meat husbandry prevails.

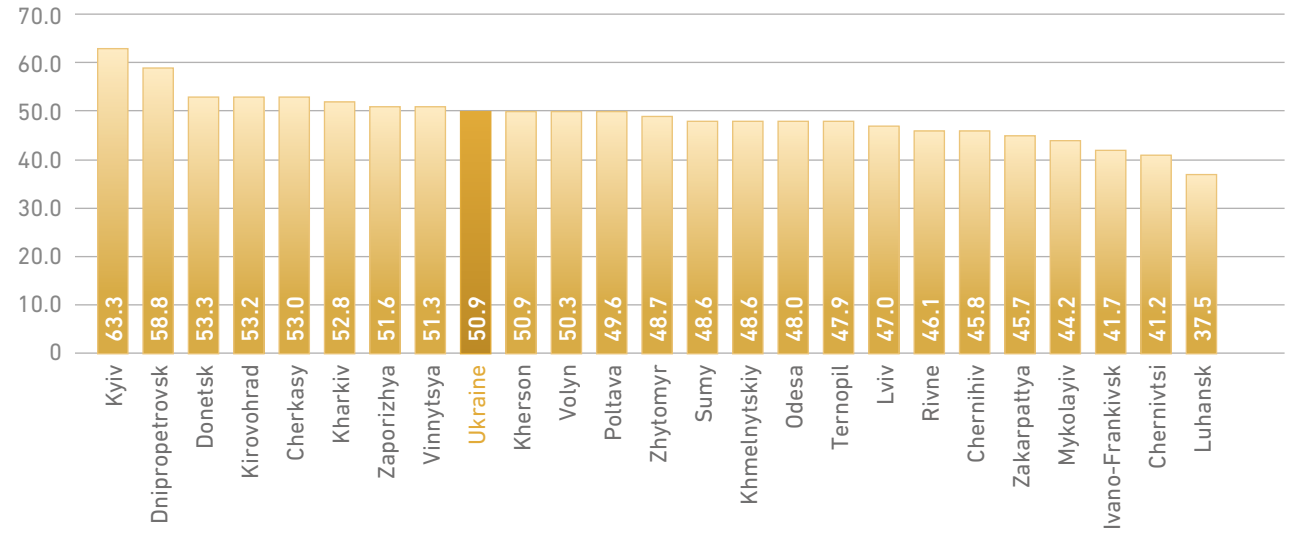
The year 2015 also cannot witness the long-term trends in foodsuff production. Despite a general decline in production by 10.7%, five oblasts managed to show an increase: Rivne (by 13.4%), Dnipropetrovsk, Chernihiv, Kharkiv, and Odesa oblasts. Following Donetsk oblast, the deepest decline in production was recorded in Ivano-Frankivsk (41.9%), Kirovohrad, Khmelnytskyi, and Sumy oblasts. A decline in foodstuff production was much stronger than agricultural production decline. That proved a negative trend of reduction of agricultural products processing. It should be noted that food industry is a powerful stimulator of regional development, since it normally relies upon small and medium-sized enterprises using local raw materials, providing income to raw materials producers, creating jobs, paying taxes to local budgets, etc.

An important role in the development of the agri-food sector of the country belongs to the export structure of relevant products. On a national scale, agricultural raw materials make up 61.8% of the total exports of food industry and agricultural raw materials (Ukrainian Classifier of Goods for Foreign Economic Activity groups 1–24). Meanwhile, the regional structure has rather clearly distinguished oblasts with more than half of the exports of the group 1-24 represented by processed food products (Vinnytsia (78.4%), Kirovohrad, Kyiv, Odesa, Mykolaiv, Chernihiv, Khmelnytskyi, Kherson and Cherkasy oblasts), as well as raw materials exporters with more than 80% of exports of the group 1-24 represented by agri-raw materials (Donetsk, Luhansk, Zakarpattia, Dnipropetrovsk, Zaporizhzhia and Rivne oblasts).

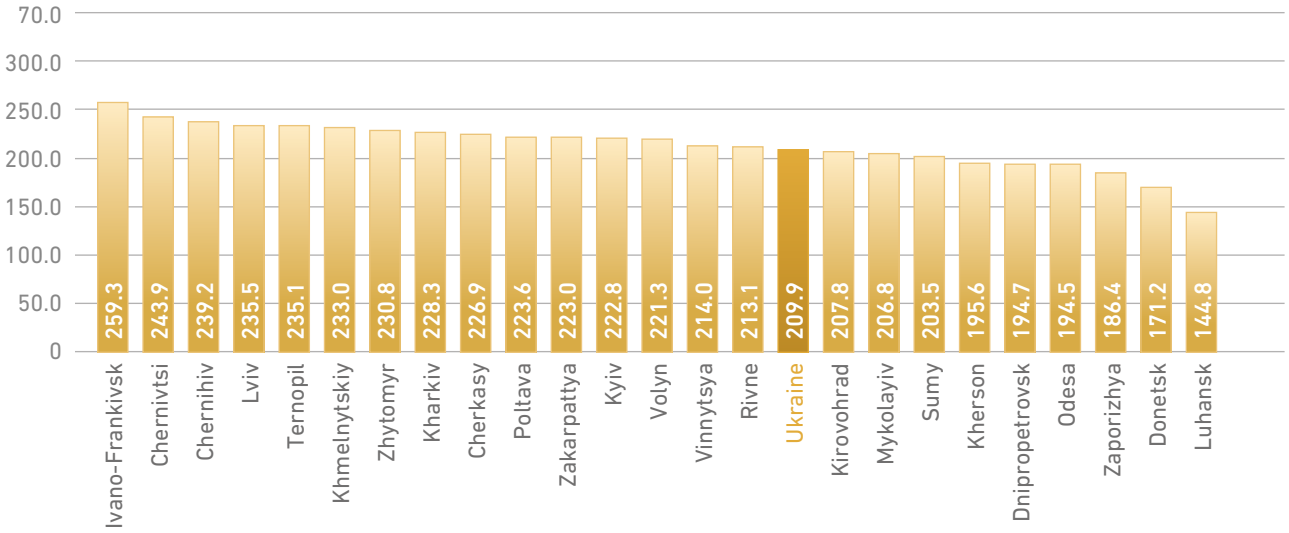
The structure of applied soil improvement technologies speaks to a certain extent for the quality of food products. According to statistical data, organic agricultural production share in Ukraine is rather low: the biggest shares of soil treated with organic fertilizers belong to Ivano-Frankivsk and Kyiv oblasts (9.3% and 7.3% respectively). In general, countrywide this reading makes 2.5% owing to ten oblasts with share of such areas not exceeding 1.5%. We should note that low popularity of organic fertilizers is associated with its low efficiency in comparison with industrial farming, which subverts the quality of products to its quantity and commercial effect. In certain oblasts there is a considerable lack of organic fertilizers resulting from longstanding permanent livestock reduction.

Baseline indicators of goal in 2015:

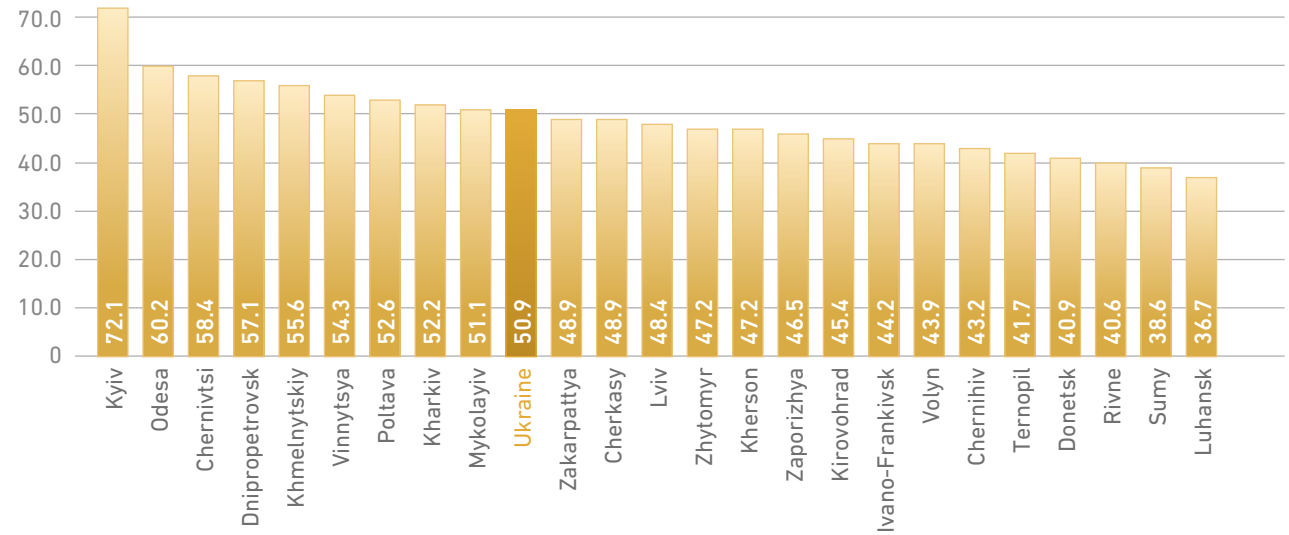
2.1.1. (a) Consumption of meat and processed meat per capita, kg/year



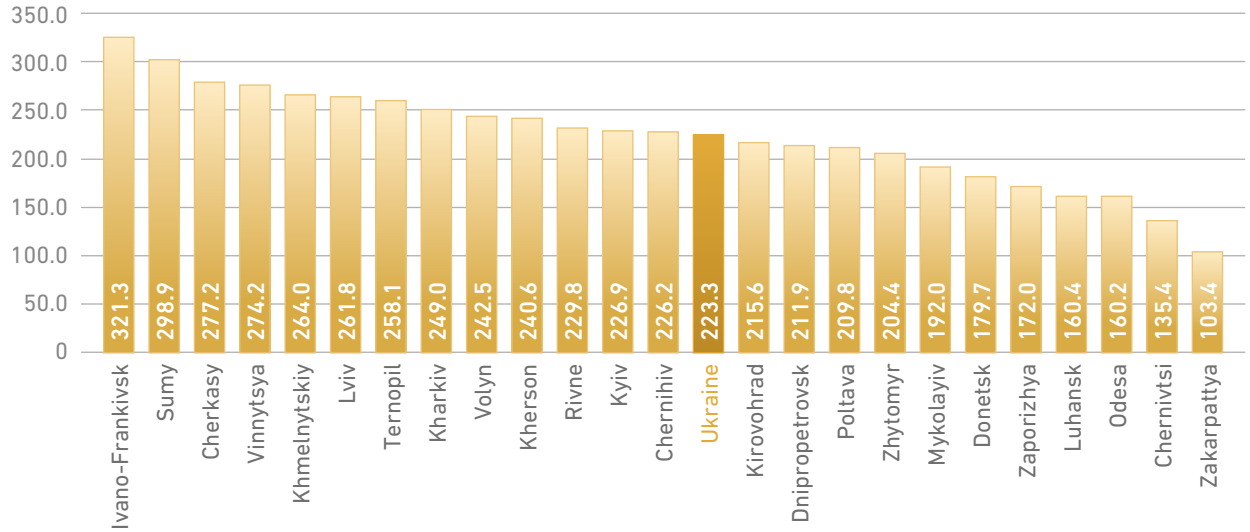
2.1.2. (a) Consumption of milk and processed milk per capita, kg/year



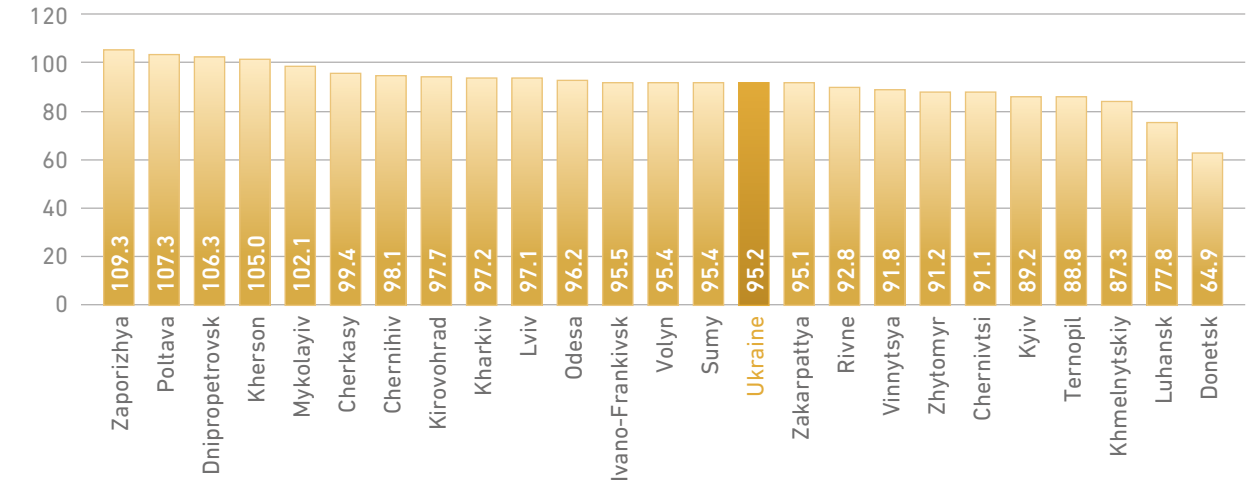
2.1.3. (a) Consumption of fruit. berries and grapes per capita, kg/year



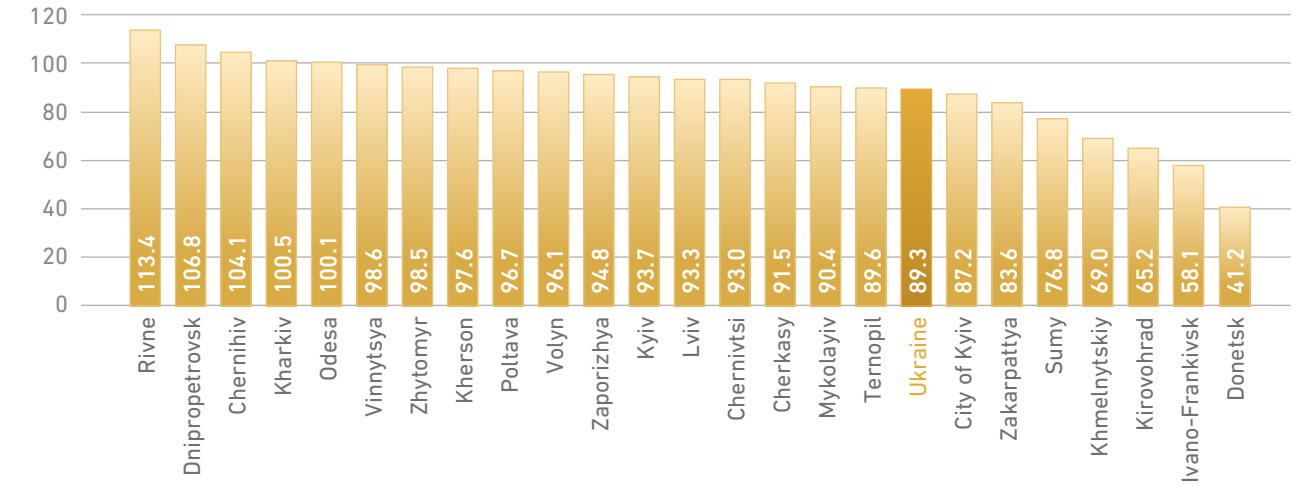
2.2.1. Labor productivity in agricultural companies measured with prices fixed in 2010, UAH 1.000 per one employee



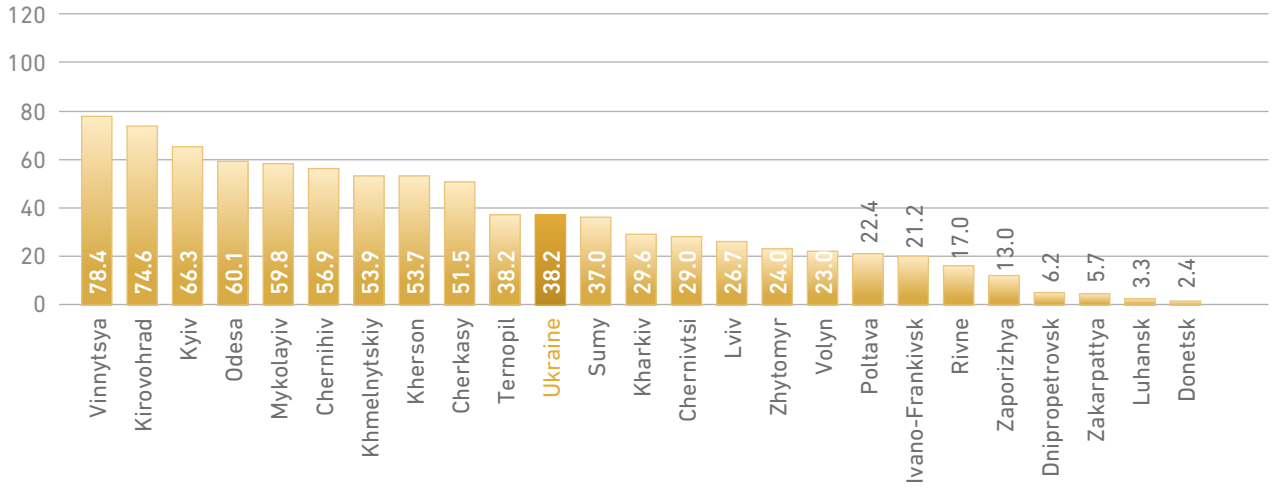
2.2.2. The index of agricultural production, %



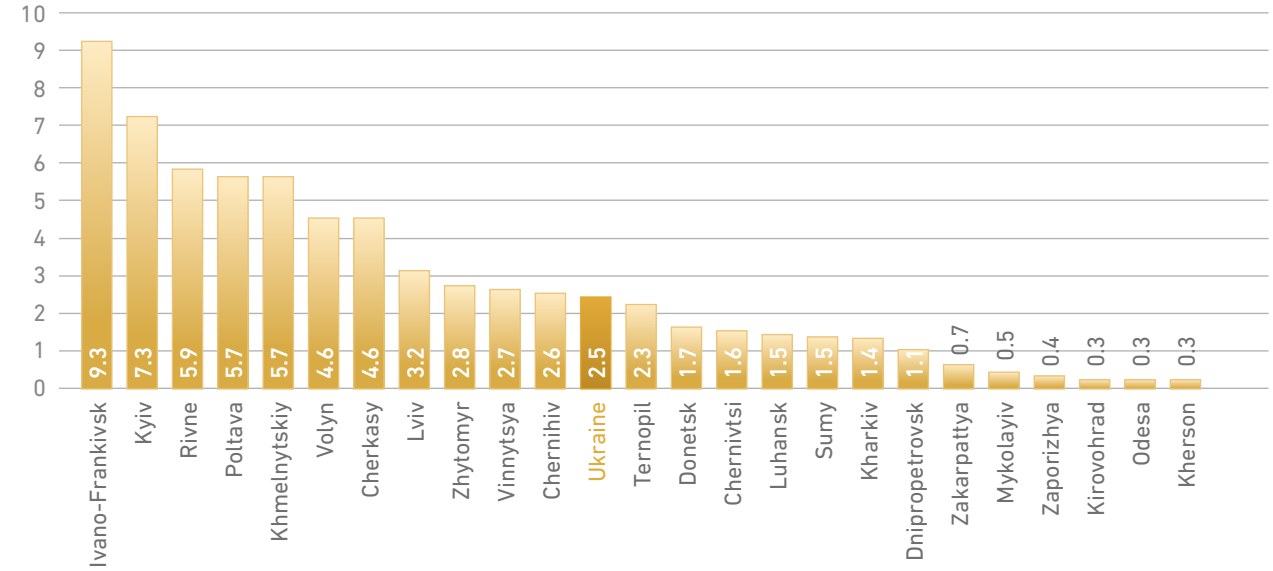
2.3.1. The index of food production, %



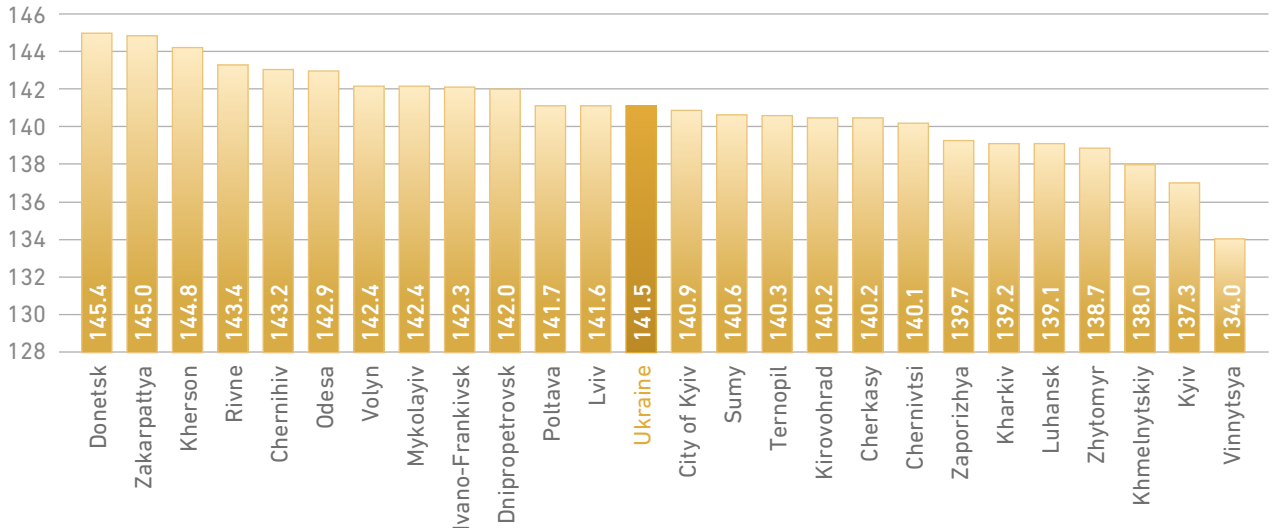
2.3.2. Share of food industry and agricultural raw materials processing production (groups 15-24) in exports of Ukrainian Classifier of Goods for



2.3.3. (a) Share of agricultural land under organic amendment, %



2.4.1. The consumer price index for food and non-alcoholic beverage (up to December of current year), %



Goal 3. Good Health and Well-Being

Human health is one of the key factors of expected lifespan and quality of life. Health care expenses are the most efficiently spent money bringing to the increase of human potential and fostering the productive activity. Also, health condition influences heredity and in this way sets programs of the nation's development in the next generations. Continuous progress of medical science creates new frontiers in preserving human health and preventing diseases.

In Ukraine regional differentiation of health care indicators is quite high. First of all, this fact demonstrates the dissimilarity in environmental and economic situation in regions, and the attention paid by public and regional authorities to ensuring high-quality and affordable medical care services, and to healthy well-being promotion. While the issues of quality depend mostly on equipment availability in health care institutions together with medical personnel qualification and are funded mostly from the state budget throughout medical reform, local authorities are entirely responsible for ensuring access to health care services.

Regional authorities have the power to improve healthcare and promote healthy well-being. These are as follows: the provision of targeted assistance to health care institutions in acquiring equipment, the development of a network of rural health posts, the creation of transportation facilities from remote settlements to medical institutions, the provision of landline and Internet connection, housing and appropriate social and living conditions for medical personnel. In addition, regional and local authorities shall ensure the development of stadiums, swimming pools, fitness centers, financing of additional sport clubs and sections in educational institutions, which will promote healthy well-being among youth. Also, there is a number of tools of indirect influence on public health, in particluar, the measures aimed at improving environmental conditions, labor conditions, supporting socially vulnerable groups of the population, raising public awareness campaigns on health hazards issues, in particular, smoking, etc.

A comparison of the regional dimension selected as indicators of the baseline for achieving Goal 3 has demonstrated their significant differentiation.

One of the most important indicators is the maternal (per 100,000 live births) and infant (per 1000 live births) mortality, since child's future health is formed already at birth. Indicators demonstrate that the city of Kyiv is the most prosperous in this regard, whereas it concentrates the largest number of highly qualified specialists and medical equipment (2.8 and 8.1, respectively). Lviv oblast closely follows Kyiv city, which (together with Kherson oblast) can boast with zero maternal mortality (with infant mortality rate of 9.5 infants). Luhansk oblast has the most difficult registered situation in this respect (37.7 and 12.8), which is largely due to hostilities on its territory and to the deterioration of health care system. Zaporizhzhia (42.2), Sumy (40.8) and Rivne oblasts (37.3) also experience significant problems with maternal mortality, while Zakarpattia, Kharkiv, Kirovohrad and Donetsk oblasts suffer from children mortality (13.5, 11.7, 11.4 and 11.2 correspondingly).

Ukraine faces a challenge of extreme gravity in terms of HIV and tuberculosis spreading speed and scale which are close to epidemic thresholds. The worst indicators of the number of patients diagnosed with HIV and tuberculosis for the first time per 100,000 persons of population, are registered in Odessa (100.1 and 102.7 respectively) and Mykolaiv (74.4 and 69.2 respectively) oblasts. Dnipropetrovsk (88.3 and 78.7), Kyiv (56.4 and 69.2) and Kirovohrad (53.5 and 77) oblasts are following them closely in this negative ranking. The situation in Western regions is much better, in particular in Ternopil (10.9 and 38.4) and Chernivtsi (10.8 and 40.1) oblasts.

Still the mortality caused by cardiovascular diseases, especially among men, remains to be the most pressing issue. Men's mortality on these causes is twice as high as that of women in virtually all regions, which speaks for the improper life style, the spread of unhealthy habits among this group of population, which urges regional authorities to step in. By considering the number of male and female deaths caused by cerebrovascular diseases at the age of 30-59 (the most productive age) per 100,000 people of the same gender, it is possible to identify areas of concern with the highest indicators for both male and female. These areas of concern reveal systemic problems in oblasts mentioned below and lead to this type of disease regardless of gender. Kherson (93.1 and 49), Zaporizhzhia (76.3 and 36.4), Poltava (74.4 and 37.4), Odessa (73.2 and 38.1), Sumy (72.6 and 37.6) and Chernihiv (89.9 and 32.9) oblasts are registered as anti-leaders here. Chernivtsi (33.9 and 14.6), Ternopil (40.6 and 14), and Ivano-Frankivsk (47 and 14.5) oblasts demonstrate the best situation, being the most environmentally sound areas in Western part of Ukraine.

In Ukraine female mortality from malignant tumors sits high ranks in death causes. Regional

Goal	Goal 3. Good Health and Well-Being									
Target	3.1 Reduce maternal mortality		3.2 Minimize preventable mortality among children under 5		3.3 End the epidemics of HIV/AIDS and tuberculosis, including through innovative practices and treatments				3.4 Reduce premature mortality from noncommuni-cable diseases	
Indicator	3.1.1. Number of cases of maternal mortality, per 100.000 live births		3.2.1. Mortality of children under 5, cases per 1.000 live births		3.3.1. Number of patients diagnosed with HIV for the first time, per 100.000 persons		3.3.2. Number of patients diagnosed with active tuberculosis for the first time, per 100.000 persons		3.4.1. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 men of corresponding age	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**15.30**		**9.66**		**37.20**		**56.00**		**61.07**	
Oblasts										
Vinnytsya	18.29	1.20	8.84	0.91	18.95	0.51	47.40	0.85	53.39	0.87
Volyn	29.41	1.92	3.12	0.32	26.73	0.72	62.80	1.12	60.33	0.99
Dnipropetrovsk	8.98	0.59	10.36	1.07	88.31	2.37	78.70	1.41	67.54	1.11
Donetsk	23.67	1.55	11.24	1.16	-	-	-	-	52.42	0.86
Zhytomyr	7.30	0.48	9.34	0.97	36.89	0.99	66.30	1.18	64.35	1.05
Zakarpattya	11.90	0.78	13.51	1.40	5.65	0.15	59.60	1.06	44.20	0.72
Zaporizhya	42.17	2.76	9.46	0.98	32.58	0.88	61.70	1.10	76.27	1.25
Ivano-Frankivsk	12.82	0.84	8.08	0.84	13.05	0.35	61.20	1.09	46.96	0.77
Kyiv	9.90	0.65	7.57	0.78	56.41	1.52	69.20	1.24	66.90	1.10
Kirovohrad	10.53	0.69	11.37	1.18	53.48	1.44	77.00	1.38	76.96	1.26
Luhansk	37.74	2.47	12.83	1.33	-	-	-	-	31.55	0.52
Lviv	0.00	0.00	9.53	0.99	18.03	0.48	59.90	1.07	55.42	0.91
Mykolayiv	26.09	1.71	8.61	0.89	74.36	2.00	69.20	1.24	61.29	1.00
Odesa	29.20	1.91	10.07	1.04	100.11	2.69	102.70	1.83	73.22	1.20
Poltava	14.81	0.97	7.41	0.77	31.33	0.84	54.90	0.98	74.41	1.22
Rivne	37.27	2.44	10.06	1.04	21.46	0.58	54.80	0.98	63.31	1.04
Sumy	40.82	2.67	9.18	0.95	20.07	0.54	55.80	1.00	72.57	1.19
Ternopil	9.26	0.61	8.80	0.91	10.90	0.29	38.40	0.69	40.55	0.66
Kharkiv	12.05	0.79	11.69	1.21	19.45	0.52	43.60	0.78	73.14	1.20
Kherson	-	-	9.65	1.00	48.98	1.32	82.30	1.47	93.12	1.52
Khmelnytskiy	7.25	0.47	9.71	1.00	14.98	0.40	55.90	1.00	62.48	1.02
Cherkasy	17.39	1.14	9.39	0.97	43.58	1.17	57.60	1.03	68.29	1.12
Chernivtsi	18.69	1.22	10.37	1.07	10.81	0.29	40.10	0.72	33.92	0.56
Chernihiv	21.98	1.44	10.55	1.09	47.80	1.29	65.00	1.16	89.93	1.47
City of Kyiv	2.81	0.18	8.09	0.84	46.32	1.25	46.00	0.82	50.65	0.83

Goal	Goal 3. Good Health and Well-Being									
Target	3.4 Reduce premature mortality from noncommunicable diseases						3.5 Reduce by a quarter premature mortality, including through the introduction of innovative approaches to diagnosing diseases			
Indicator	3.4.2. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 women of corresponding age		3.4.3. Number of deaths from malignant breast tumors at the age of 30–59, per 100.000 women of appropriate age		3.4.4. Number of deaths from malignant cervical tumors at the age of 30–59, per 100.000 women of appropriate age		3.5.1. (a) Average expected lifespan for men upon reaching age of 15		3.5.2. (a) Average expected lifespan for women upon reaching age of 15	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**27.58**		**24.03**		**11.13**		**52.20**		**62.02**	
Oblasts										
Vinnytsya	22.49	0.82	18.79	0.78	12.53	1.13	52.70	1.01	62.71	1.01
Volyn	26.65	0.97	23.54	0.98	17.32	1.56	51.43	0.99	63.10	1.02
Dnipropetrovsk	31.88	1.16	28.35	1.18	10.84	0.97	50.54	0.97	60.76	0.98
Donetsk	22.87	0.83	12.86	0.54	6.87	0.62	-	-	-	-
Zhytomyr	31.12	1.13	20.87	0.87	21.24	1.91	49.73	0.95	61.25	0.99
Zakarpattya	26.16	0.95	22.10	0.92	10.68	0.96	52.81	1.01	60.60	0.98
Zaporizhya	36.37	1.32	33.46	1.39	11.15	1.00	51.69	0.99	61.80	1.00
Ivano-Frankivsk	14.53	0.53	24.43	1.02	10.90	0.98	54.02	1.03	63.66	1.03
Kyiv	27.44	0.99	31.46	1.31	11.83	1.06	50.26	0.96	61.05	0.98
Kirovohrad	33.07	1.20	28.48	1.19	14.24	1.28	51.02	0.98	61.37	0.99
Luhansk	16.28	0.59	9.09	0.38	3.22	0.29	-	-	-	-
Lviv	20.96	0.76	22.39	0.93	11.28	1.01	54.27	1.04	63.88	1.03
Mykolayiv	28.07	1.02	27.70	1.15	11.60	1.04	51.09	0.98	60.89	0.98
Odesa	38.13	1.38	29.30	1.22	14.84	1.33	51.83	0.99	60.50	0.98
Poltava	37.38	1.36	28.04	1.17	16.88	1.52	51.77	0.99	61.82	1.00
Rivne	25.12	0.91	27.96	1.16	11.75	1.06	52.00	1.00	62.49	1.01
Sumy	37.60	1.36	25.44	1.06	11.77	1.06	51.76	0.99	62.15	1.00
Ternopil	13.95	0.51	22.41	0.93	13.53	1.22	54.16	1.04	63.87	1.03
Kharkiv	35.25	1.28	27.73	1.15	10.81	0.97	52.38	1.00	61.54	0.99
Kherson	49.00	1.78	28.82	1.20	14.00	1.26	50.57	0.97	61.06	0.98
Khmelnytskiy	22.30	0.81	27.52	1.15	14.28	1.28	52.42	1.00	62.73	1.01
Cherkasy	30.05	1.09	24.04	1.00	9.19	0.83	52.83	1.01	62.64	1.01
Chernivtsi	14.59	0.53	23.65	0.98	7.55	0.68	54.34	1.04	63.15	1.02
Chernihiv	32.92	1.19	26.08	1.09	8.98	0.81	50.27	0.96	61.96	1.00
City of Kyiv	21.91	0.79	25.81	1.07	9.23	0.83	55.57	1.06	63.49	1.02

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions:
3.7.1 - Donetsk oblast - data as of 2016, Chernivtsi - data on children aged under 16
3.1.1, 3.2.1, 3.3.1, 3.3.2, 3.4.1, 3.6.1, 3.6.2 (a), 3.8.1 (a), 3.9.1 (a) - de-stimulator, given the converse readings, in colors

Goal	Goal 3. Good Health and Well-Being									
Target	3.6 Reduce serious injuries and deaths from road traffic accidents, including through innovative practices of resuscitation, treatment and rehabilitation after road traffic accidents				3.7 Ensure universal, quality immunization with innovative vaccines		3.8 Reduce the prevalence of smoking among the population through innovative media to inform about negative effects of smoking		3.9 Reform health care financing	
Indicator	3.6.1. Number of deaths from road traffic accidents, per 100.000 persons		3.6.2. (a) Number of injuries from transport accidents/road traffic accidents per 100.000 persons, % of 2015 level		3.7.1. Immunization coverage under the National immunization programme (as prescribed), %		3.8.1. (a) Share of persons aged over 12 who smoke in total population aged 12 and over, %		3.9.1. (a) Share of households any member of which failed to get medical care, buy medicines and medical devices in the last 12 months in total number of households in which any member requested such medical care. medicines and medical devices, %	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**11.22**		**100.00**		**50.00**		**18.40**		**29.30**	
Oblasts										
Vinnytsya	12.51	1.12	100.00	1.00	-	-	13.30	-5.10	70.60	2.41
Volyn	16.01	1.43	100.00	1.00	-	-	16.20	-2.20	33.90	1.16
Dnipropetrovsk	12.16	1.08	100.00	1.00	-	-	21.30	2.90	28.80	0.98
Donetsk	4.44	0.40	100.00	1.00	-	-	22.40	4.00	30.20	1.03
Zhytomyr	16.70	1.49	100.00	1.00	-	-	16.90	-1.50	20.00	0.68
Zakarpattya	11.91	1.06	100.00	1.00	-	-	17.80	-0.60	94.30	3.22
Zaporizhya	12.33	1.10	100.00	1.00	-	-	24.10	5.70	37.40	1.28
Ivano-Frankivsk	10.13	0.90	100.00	1.00	-	-	16.00	-2.40	43.20	1.47
Kyiv	21.61	1.93	100.00	1.00	-	-	13.60	-4.80	5.90	0.20
Kirovohrad	12.49	1.11	100.00	1.00	-	-	19.90	1.50	12.60	0.43
Luhansk	2.26	0.20	100.00	1.00	-	-	16.00	-2.40	9.60	0.33
Lviv	12.42	1.11	100.00	1.00	-	-	15.70	-2.70	6.20	0.21
Mykolayiv	10.76	0.96	100.00	1.00	-	-	20.60	2.20	48.80	1.67
Odesa	11.45	1.02	100.00	1.00	-	-	18.20	-0.20	14.30	0.49
Poltava	14.27	1.27	100.00	1.00	-	-	22.20	3.80	16.10	0.55
Rivne	16.96	1.51	100.00	1.00	-	-	16.10	-2.30	4.60	0.16
Sumy	10.64	0.95	100.00	1.00	-	-	15.10	-3.30	54.00	1.84
Ternopil	10.21	0.91	100.00	1.00	-	-	13.30	-5.10	14.70	0.50
Kharkiv	10.46	0.93	100.00	1.00	-	-	17.50	-0.90	33.50	1.14
Kherson	11.74	1.05	100.00	1.00	-	-	19.90	1.50	29.60	1.01
Khmelnytskiy	12.71	1.13	100.00	1.00	-	-	17.50	-0.90	9.50	0.32
Cherkasy	13.71	1.22	100.00	1.00	-	-	20.70	2.30	29.60	1.01
Chernivtsi	11.87	1.06	100.00	1.00	-	-	16.80	-1.60	3.10	0.11
Chernihiv	14.09	1.26	100.00	1.00	-	-	19.00	0.60	67.50	2.30
City of Kyiv	8.39	0.75	100.00	1.00	-	-	20.40	2.00	29.40	1.00

indicators of number of deaths from malignant neoplasms of the malignant breast and cervical tumors at the age of 30-59 per 100,000 women of the corresponding age show the most difficult situation in Odesa (29.3 and 14.8), Poltava (28 and 16.9) and Kherson (28.8 and 14) oblasts, which together with previously mentioned indicators speak for the poor level of health care in these regions.

In addition to deaths caused by diseases, there is a large number of deaths caused by other factors, including car accidents. In order to study this widespread phenomenon, indicators of car accident deaths per 100,000 persons are subject to analysis. In future, indicators of the number of road accidents' victims will also be subject to relevant analysis. Upon analytic data, north-western region is the most problematic in this regard due to busy transport corridors from west and north, namely in Kyiv (21.6), Rivne (17), Zhytomyr (16.7) and Volyn (16) oblasts. Despite the largest number of people and vehicles, Kyiv city demonstrates the best situation (8.4).

A smoking habit is another health deteriorating driver. Developed countries have been pursuing a powerful and successful campaign aimed at a significant abating of this phenomenon which results in a steady decline in number of smokers in Europe and the United States. In Ukraine, the share of population aged over 12 who reported smoking in total population of this age constitutes 18.4%; that is one in five people smokes. As for the regions, the highest percentage of smokers is registered in Zaporizhzhia (24.1%), Donetsk (22.4%), Poltava (22.2%), Cherkasy (20.7%) and Mykolaiv (20.4%) oblasts. The lowest number of smokers is reported in Vinnytsia (13.3%), Ternopil (13.3%) and Kyiv (13.6%) oblasts.

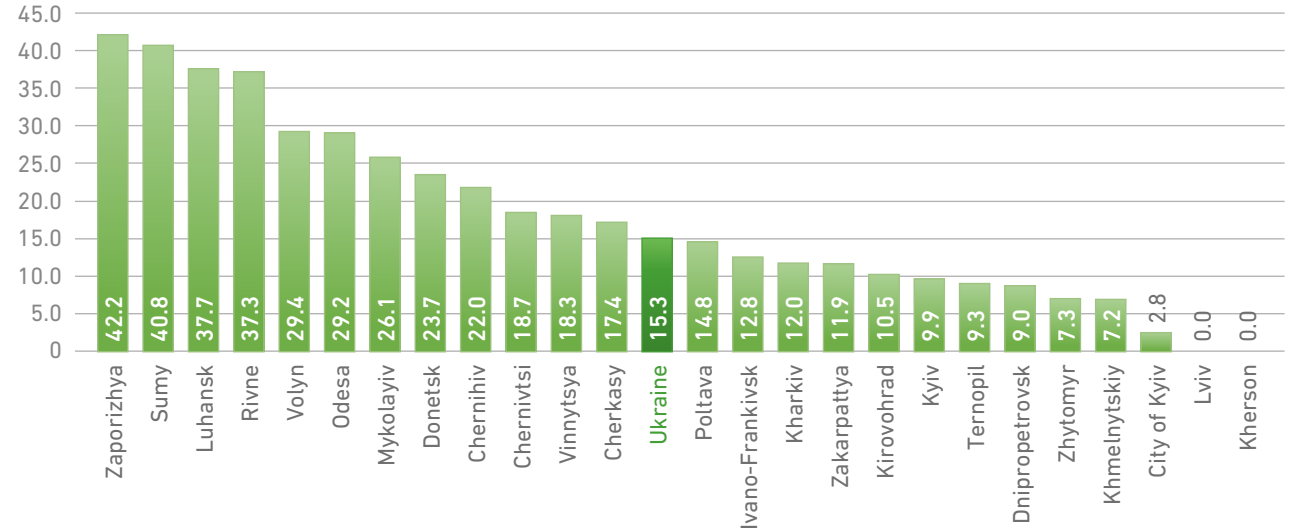
Given high mortality from various causes, it is vitally important to ensure the access to health care and prevent the deprivation of medical aid. However, throughout this year approximately one third of Ukrainians reported their inability to get medical aid or to buy medicines. The situation in Zakarpattia oblast (indicator is 94.3%) is extremely difficult and might be explained with mountainous terrain as an obstacle to reaching doctor or medicine. Still, plain located Vinnytsia (70.6%) and Chernihiv (67.5%) oblasts demonstrate the same grave situation. The most accessible health care services are found in western regions (except for Zakarpattia), namely in Ternopil (3.1%), Rivne (4.6%), Lviv (6.2%) and Kyiv (5.9%) oblasts.

This section summary indicator is the implicitly average expected lifespan. In general, this indicator characterizes the socio-economic and environmental country's conditions, since it reflects the quality of human life. The correlation between the standard of living and life duration is absolutely straightforward, as evidenced by global statistics. The average expected lifespan for men and women aged 15 has been analyzed. The average expected lifespan for women is almost 10 years higher than for men, which dictates a need to develop target promotion programs for healthy lifestyle for men. All over Ukraine the largest expected lifespan is registered in Kyiv (55.6 and 63.5 years respectively) and in western regions of the country, namely in Chernivtsi (54.3 and 63.2), Ternopil (54.2 and 63.9), Lviv (54.3 and 63.9) and Ivano-Frankivsk (54 and 63.7) oblasts. The most difficult situation is reported in Dnipropetrovsk oblast (50.5 and 60.8), in the southern part of the country, namely in Mykolaiv (51.1 and 60.9), Odesa (51.8 and 60.5), Kherson (50.6 and 61.1) oblasts, and in the northern part of the country, namely Zhytomyr (49.7 and 61.3), Kyiv (50.3 and 61.1) and Chernihiv (50.3 and 62) oblasts.

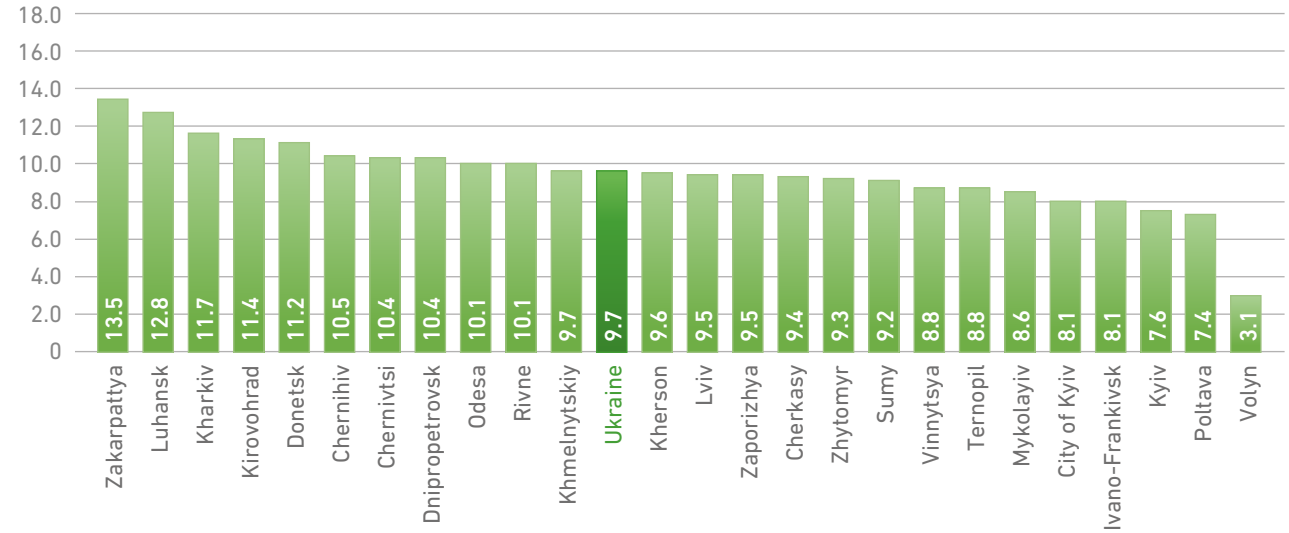
Therefore, the problems associated with morbidity, health care system and lifestyle are overwhelmingly complex in geographical context. Almost each region has problems with certain indicators and needs to focus on its inherent problems. It is absolutely possible and necessary to improve the selected indicators and reduce the differentiation of these indicators in the process of sustainable development goals achievement. Immediate joint coordinated actions of central and regional authorities are of urgent need.

Baseline indicators of goal in 2015:

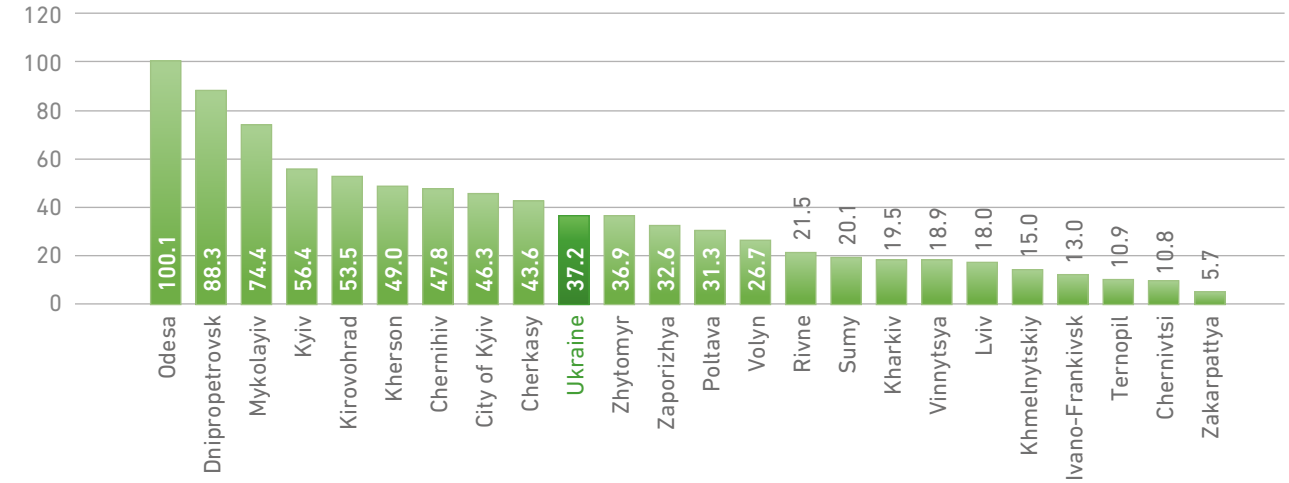
3.1.1. Number of cases of maternal mortality, per 100.000 live births



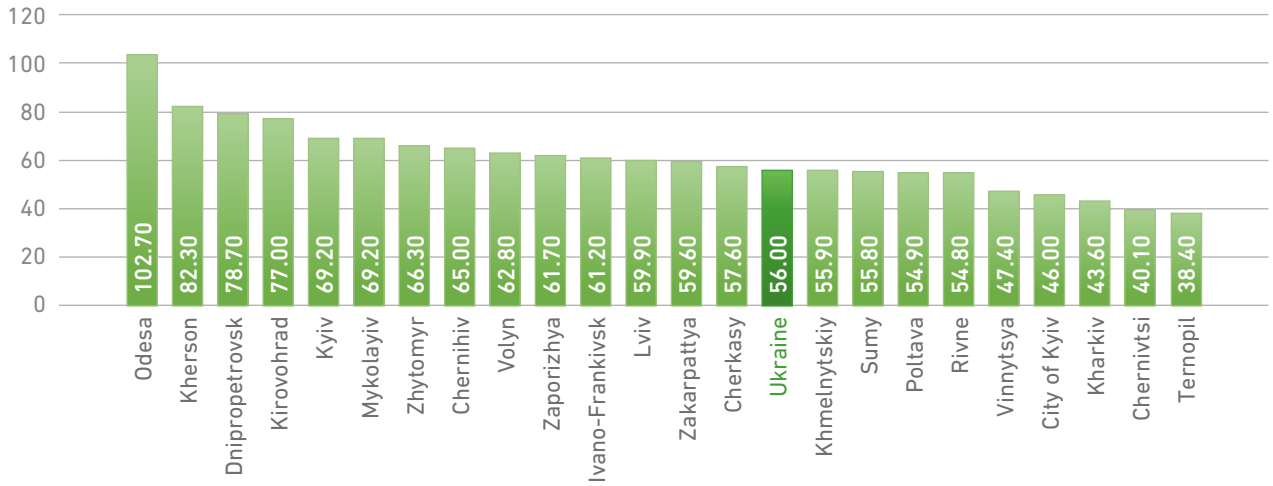
3.2.1. Mortality of children under 5, cases per 1.000 live births



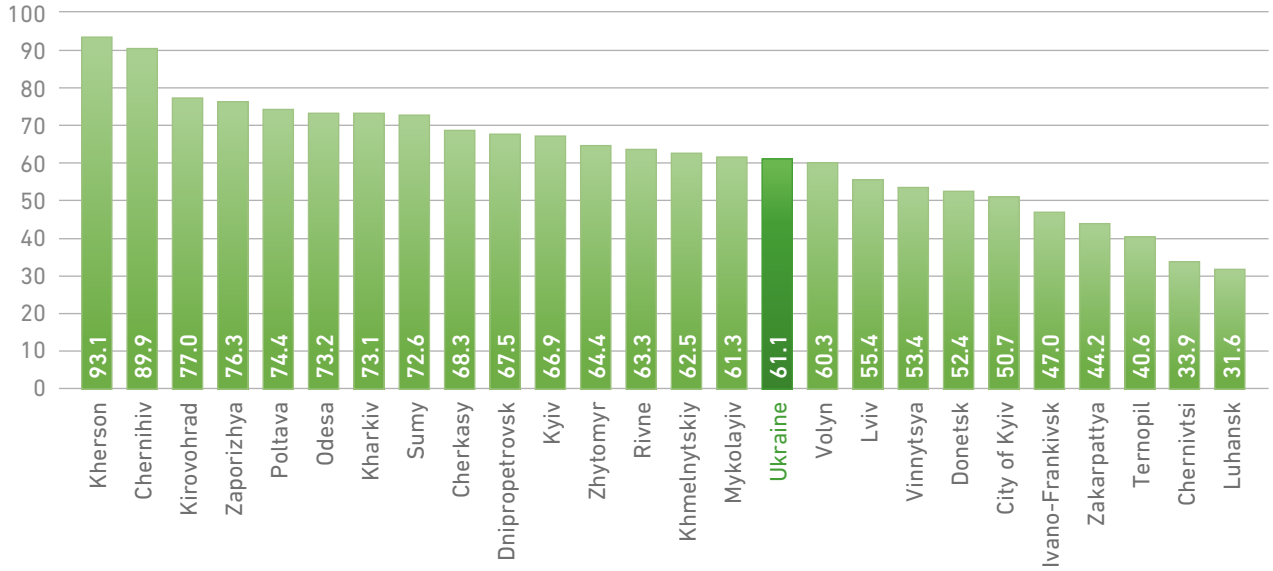
3.3.1. Number of patients diagnosed with HIV for the first time, per 100.000 persons



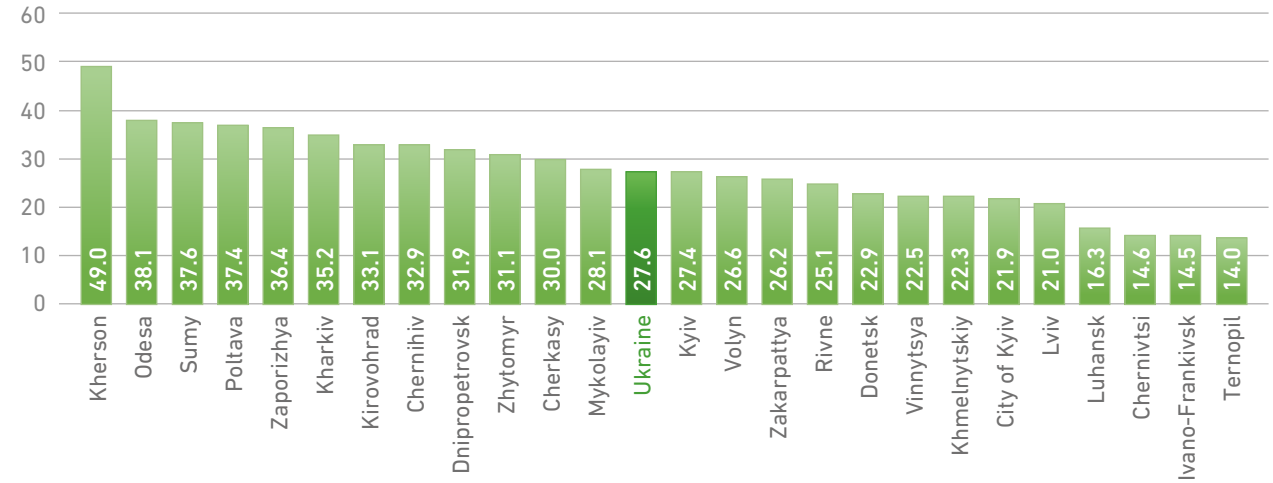
3.3.2. Number of patients diagnosed with active tuberculosis for the first time, per 100.000 persons



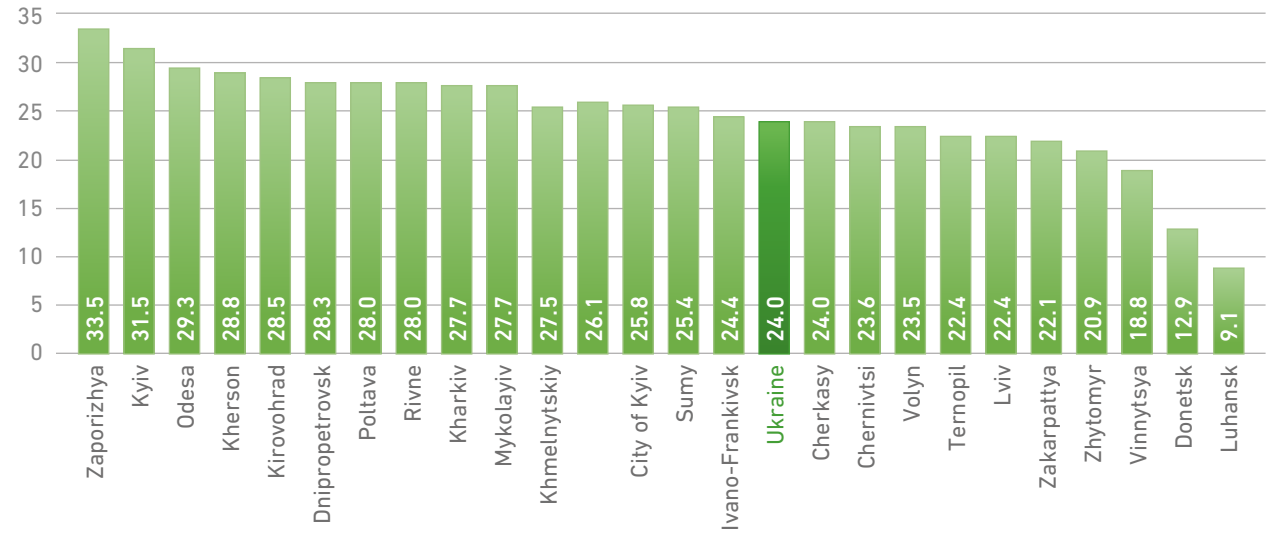
3.4.1. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 men of corresponding age



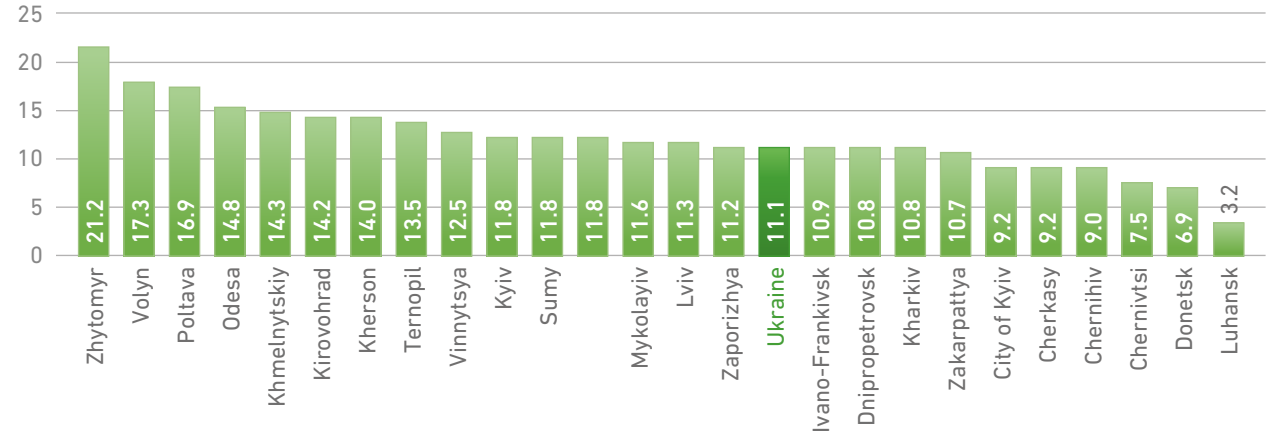
3.4.2. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 women of corresponding age



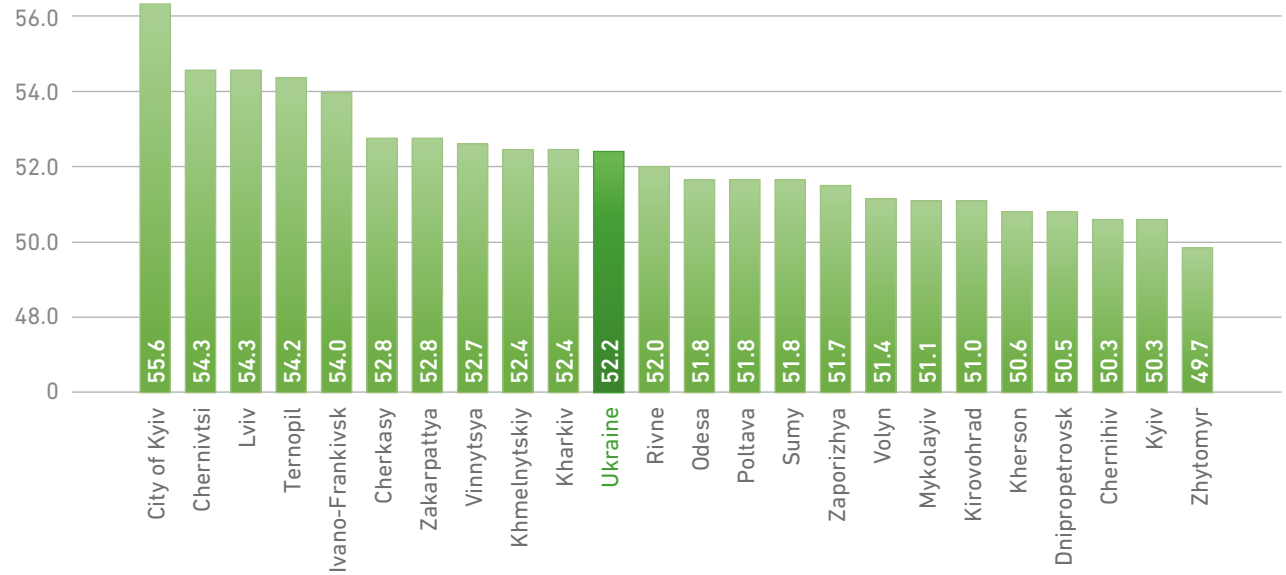
3.4.3. Number of deaths from malignant breast tumors at the age of 30–59, per 100.000 women of appropriate age



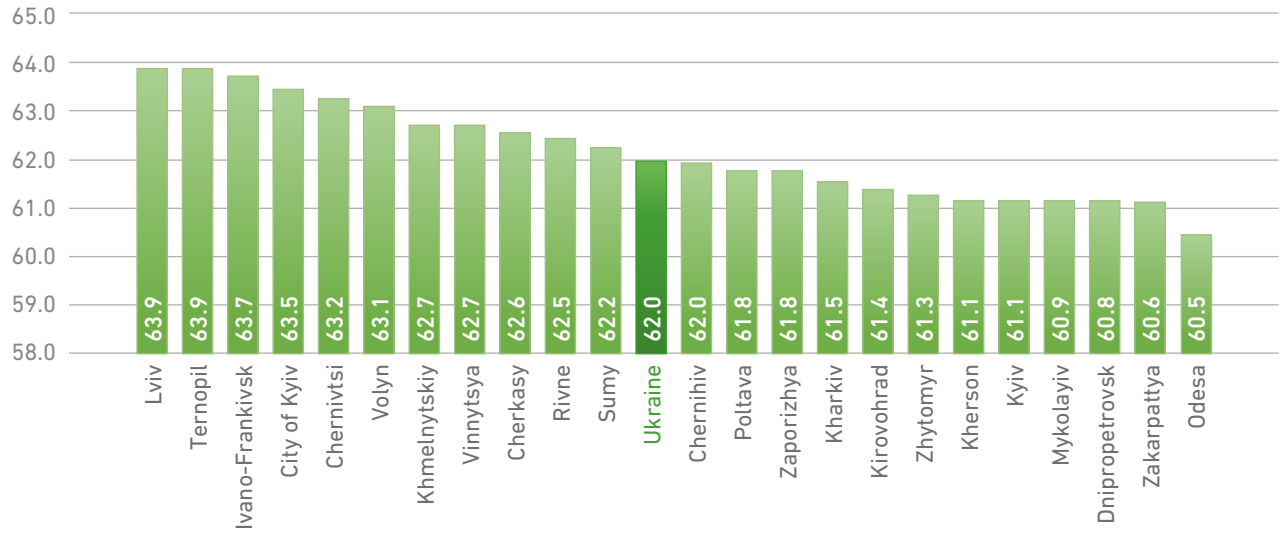
3.4.4. Number of deaths from malignant cervical tumors at the age of 30–59, per 100.000 women of appropriate age



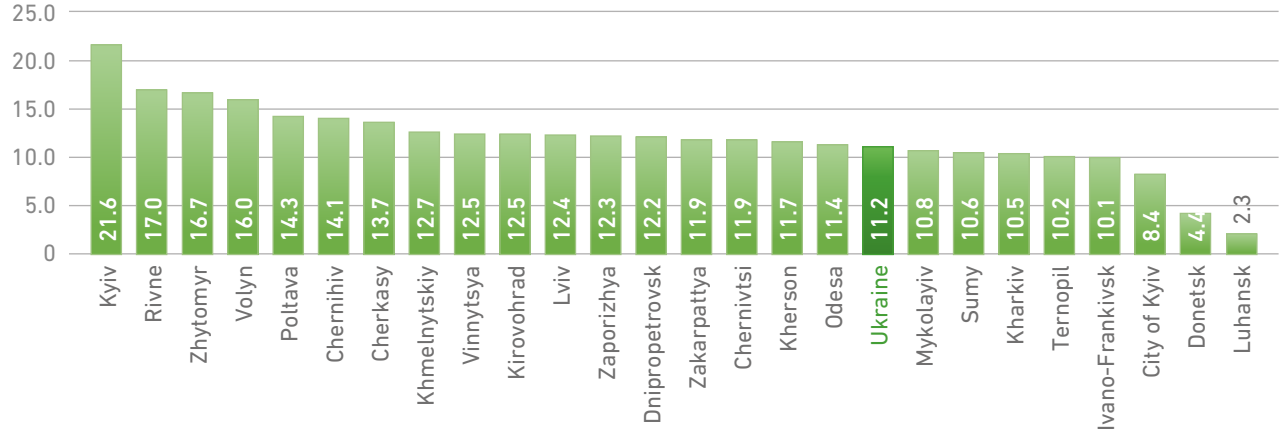
3.5.1. (a) Average expected lifespan for men upon reaching age of 15



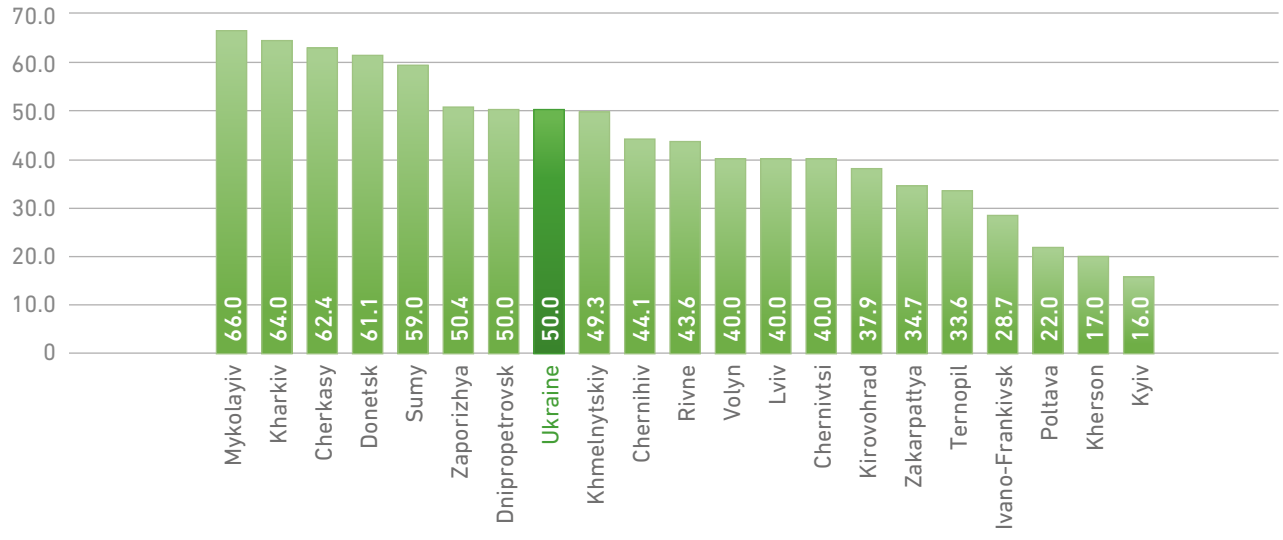
3.5.2. (a) Average expected lifespan for women upon reaching age of 15



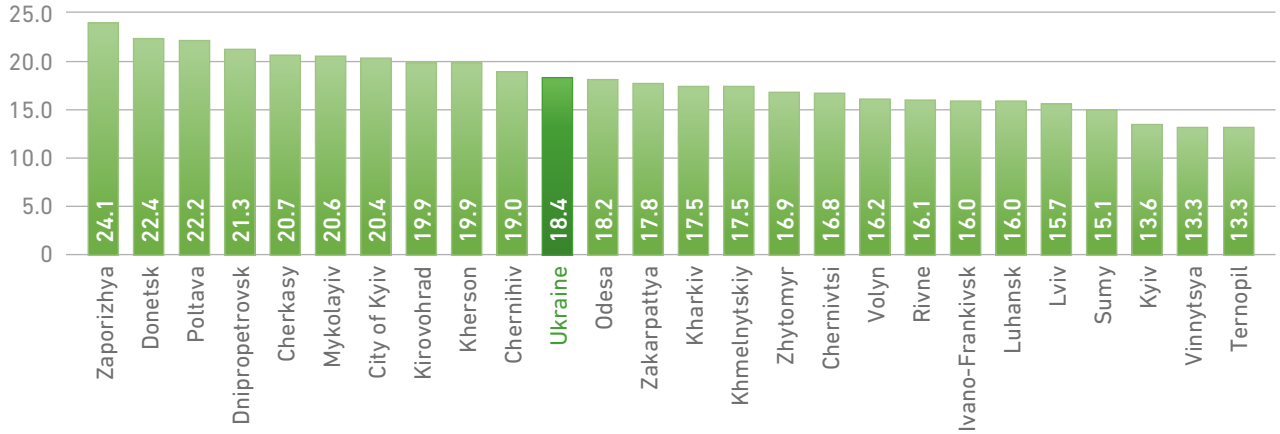
3.6.1. Number of deaths from road traffic accidents, per 100.000 persons



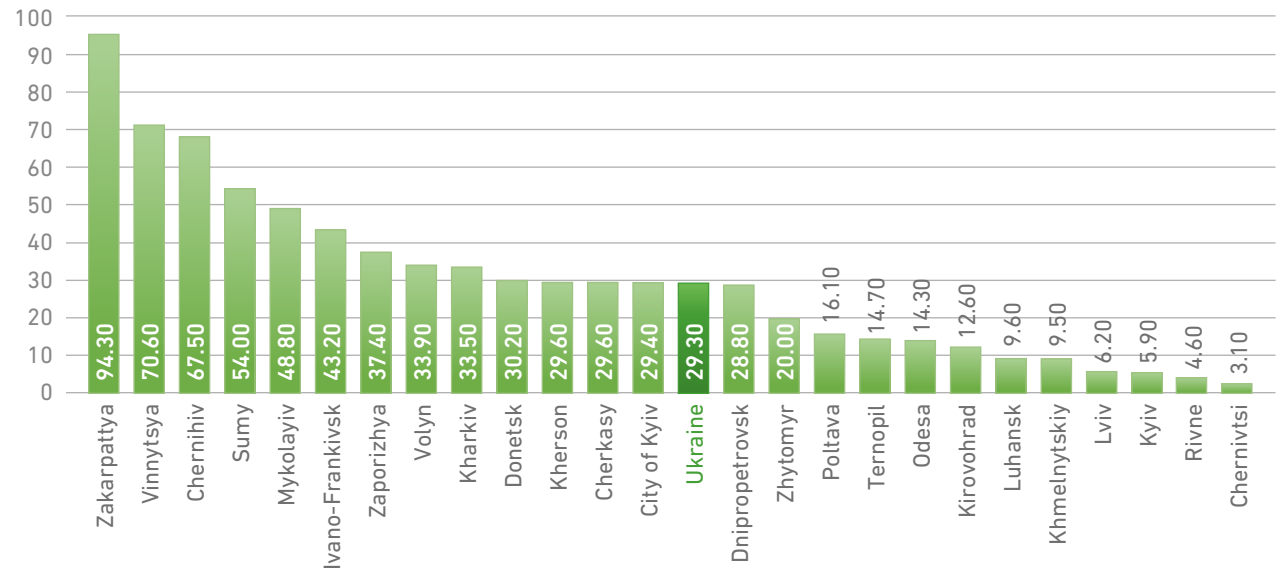
3.7.1. Immunization coverage under the National immunization programme (as prescribed), %



3.8.1. (a) Share of persons aged over 12 who smoke in total population aged 12 and over, %



3.9.1. (a) Share of households any member of which failed to get medical care, buy medicines and medical devices in the last 12 months in total



Goal 4. Quality Education

The issue of high-quality and inclusive education is one of the key points in the system of sustainable development goals identified both globally and in the National baseline report 'Sustainable Development Goals: Ukraine'. Achieving this goal is a critically important component of building human capital, which becomes decisive in both national and reigonal competitiveness. Moreover, inclusiveness and continuity of education take on greater importance. All this dictates a need in radical changes of education system both in terms of forms and methods. In its turn reforms require additional funding to ensure qualified personnel, material support throughout educational process, which include the use of newest information technologies.

Ukraine traditionally has high density of various types of educational institutions and services ranging from pre-school educational institutions to higher education institutions. The main problem is to ensure the ability of regional and local authorities, and hromadas to provide financial resources and qualified teaching staff for the implementation of new forms of education, as well as to perform proper interaction between government and regional and local authorities on the issues of the educational programs content, forms and methods of their introduction.

The implementation of educational programs in Ukraine involves all levels of government and public administration together with newly formed amalgamated territorial hromadas, emerging in the process of decentralization and assuming responsibility for the development of the most important link in education – pre-schooling institutions and secondary school. The regional tier is responsible mostly for specialized and vocational education, and the central tier regulates higher education institutions of III and IV accreditation grade. In addition to state, regional and municipal educational institutions, private educational institutions get widespread. The latter, on the one hand, are intended to satisfy the demand for the education services that the public sector is unable to cover, and on the other hand, serve as the platforms for the implementation of the latest educational technologies and innovative educational approaches.

Therefore, in terms of impact on goal achievement, the educational process is distributed between different levels of authorities, different forms of ownership and funding systems. This requires an exceptional coherence between various responsible authorities in organizing the educational process and the educational space. Actively deployed urbanization and decentralization in Ukraine are those important drivers for such coherence. Urbanization is manifested through the mass migration of the population from rural to urban settlements in search of work and better services, in particular educational ones. At the same time, the process of decentralization manifests itself in rendering the territorial hromadas greater powers in organizing the educational process, including choosing a model for providing high-quality educational services to rural population through the establishment of basic schools and the closure of underfilled ones, ensuring their transport accessibility for all pupils within the school district. However, the introduction of an educational subvention (aimed at funding teachers' salaries mostly) and the dependence of most amalgamated territorial hromadas from a basic subsidy (income equalizing grants) to some extent make regional and local authorities policy in the field of education a hostage of the country's macroeconomic situation, as well as of the ability of the central government to fulfill its obligations to provide intergovernmental transfers to lower tiers of governance.

The analysis of the baseline forfor Goal 4 for the regions have shown following indicative patterns.

The average rate of pre-school education coverage in Ukraine in 2015 is 55%, however most oblasts demonstrate significantly higher rates. A below-the-average indicator is registered in most western oblasts. This is explained with the structure of the population in urban and rural areas (the higher proportion of the urban population affects the higher coverage rates), existing traditions of raising children, and the efforts made by the local authorities to satisfy demand in kindergartens. In 1990s economic and demographic situation resulted in a mass closure and conversion of kindergartens, especially in urban areas; with negative trends being changed to positive ones a problem of kindergarten shortage emerged. In 2000s, local authorities implemented special programs for pre-school institutions quantity input and for reducing the queues. Considering the National goal to cover 95% of children under 5 up to 2030, its achievement will require not only financial investments, but also educational work to encourage pre-school education in preschools and allow parents to work after the birth of a child.

Goal	Goal 4. Quality Education							
Target	4.1 Ensure access to quality school education for all children and adolescents		4.2 Ensure access to quality pre–primary development for all children		4.3 Ensure access to vocational education		4.4 Improve the quality of tertiary education and ensure its close relationship with science, and promote the establishment of towns of education and science in the country	
Indicator	4.1.1. (a) Share of attendants of secondary education institutions in total permanent population aged 6-17, %		4.2.1. Net pre-primary education institutions coverage for number of children of relevant age, %		4.3.1. Share of households suffering from any kind of inability of any member of the household to receive vocational training, %		4.4.1. (a) Number attendants of higher education institutions (III-IV accreditation grade) per 10.000 persons of population	
	2015	+/-	2015	+/-	2015	+/-	2015	>1/<1
Ukraine (2015)	**78.50**		**55.00**		**7.60**		**320.96**	
Oblasts								
Vinnytsya	81.50	3.00	65.00	10.00	11.10	3.50	203.24	0.63
Volyn	85.60	7.10	52.00	-3.00	6.60	-1.00	181.70	0.57
Dnipropetrovsk	86.90	8.40	63.00	8.00	6.20	-1.40	320.30	1.00
Donetsk	35.90	н/п	-	-	4.60	-3.00	43.22	0.13
Zhytomyr	83.60	5.10	66.00	11.00	3.70	-3.90	166.01	0.52
Zakarpattya	86.40	7.90	53.00	-2.00	22.20	14.60	148.42	0.46
Zaporizhya	85.80	7.30	64.00	9.00	9.20	1.60	358.54	1.12
Ivano-Frankivsk	82.10	3.60	40.00	-15.00	5.30	-2.30	224.10	0.70
Kyiv	96.10	17.60	67.00	12.00	3.30	-4.30	132.27	0.41
Kirovohrad	84.30	5.80	62.00	7.00	7.70	0.10	98.68	0.31
Luhansk	24.60	н/п	-	-	8.70	1.10	77.92	0.24
Lviv	84.30	5.80	49.00	-6.00	2.00	-5.60	437.69	1.36
Mykolayiv	83.00	4.50	68.00	13.00	13.30	5.70	234.54	0.73
Odesa	87.20	8.70	54.00	-1.00	19.60	12.00	408.97	1.27
Poltava	85.20	6.70	69.00	14.00	0.70	-6.90	290.50	0.91
Rivne	85.20	6.70	54.00	-1.00	1.00	-6.60	245.70	0.77
Sumy	82.00	3.50	73.00	18.00	10.70	3.10	295.96	0.92
Ternopil	80.20	1.70	54.00	-1.00	7.50	-0.10	307.69	0.96
Kharkiv	86.20	7.70	62.00	7.00	4.30	-3.30	595.45	1.86
Kherson	84.20	5.70	67.00	12.00	18.60	11.00	192.57	0.60
Khmelnytskiy	83.90	5.40	65.00	10.00	9.50	1.90	217.61	0.68
Cherkasy	83.40	4.90	70.00	15.00	11.40	3.80	245.22	0.76
Chernivtsi	82.80	4.30	57.00	2.00	3.30	-4.30	244.67	0.76
Chernihiv	86.30	7.80	65.00	10.00	4.00	-3.60	145.85	0.45
City of Kyiv	89.10	10.60	65.00	10.00	6.10	-1.50	1261.18	3.93

Goal	Goal 4. Quality Education							
Target	4.4 Improve the quality of tertiary education and ensure its close relationship with science, and promote the establishment of towns of education and science in the country				4.5 Increase the prevalence of knowledge and skills required for decent jobs and entrepreneurship among the population			
Indicator	4.4.1-1. Share of teaching and academic staff of higher education institutions (III-IV accreditation grade) having scientific degree, %		4.4.2. (a) Number of higher education institutions (III-IV accreditation grade), per 100.000 persons of population		4.5.1. (a) Number of persons who attended educational institutions (I-IV accreditation grade), per 10.000 persons of population		4.5.2. Share of the population who reported using the Internet over the past 12 months	
	2015	+/-	2015	>1/<1	2015	>1/<1	2015	+/-
Ukraine (2015)	**55.22**		**0.67**		**374.67**		**48.90**	
Oblasts								
Vinnytsya	64.99	9.77	0.37	0.56	278.66	0.74	42.90	-6.00
Volyn	65.63	10.41	0.38	0.57	254.92	0.68	40.20	-8.70
Dnipropetrovsk	51.23	-3.99	0.70	1.05	382.61	1.02	53.20	4.30
Donetsk	51.14	-4.08	0.14	0.21	55.20	0.15	51.10	2.20
Zhytomyr	58.67	3.45	0.40	0.59	249.60	0.67	42.00	-6.90
Zakarpattya	56.21	0.99	0.40	0.59	174.46	0.47	51.80	2.90
Zaporizhya	54.29	-0.93	0.57	0.85	405.91	1.08	54.80	5.90
Ivano-Frankivsk	53.79	-1.43	0.36	0.54	277.38	0.74	52.20	3.30
Kyiv	55.56	0.34	0.35	0.52	173.65	0.46	46.50	-2.40
Kirovohrad	59.47	4.25	0.41	0.61	165.68	0.44	43.40	-5.50
Luhansk	50.33	-4.89	0.18	0.27	89.61	0.24	41.00	-7.90
Lviv	55.36	0.14	0.83	1.23	494.30	1.32	44.60	-4.30
Mykolayiv	49.84	-5.38	0.43	0.64	285.76	0.76	56.80	7.90
Odesa	54.11	-1.11	0.88	1.31	469.95	1.25	45.40	-3.50
Poltava	54.06	-1.16	0.48	0.72	343.01	0.92	46.90	-2.00
Rivne	41.82	-13.40	0.43	0.64	318.18	0.85	28.90	-20.00
Sumy	50.24	-4.98	0.54	0.80	337.80	0.90	51.40	2.50
Ternopil	67.00	11.78	0.75	1.11	381.13	1.02	46.60	-2.30
Kharkiv	61.37	6.15	1.36	2.02	666.70	1.78	54.50	5.60
Kherson	52.61	-2.61	0.75	1.12	255.29	0.68	45.50	-3.40
Khmelnytskiy	53.46	-1.76	0.69	1.03	257.56	0.69	45.70	-3.20
Cherkasy	49.35	-5.87	0.40	0.60	313.86	0.84	37.90	-11.00
Chernivtsi	64.29	9.07	0.44	0.65	343.22	0.92	45.70	-3.20
Chernihiv	60.03	4.81	0.29	0.42	203.97	0.54	42.30	-6.60
City of Kyiv	53.43	-1.79	2.45	3.65	1333.01	3.56	68.50	19.60

Goal	Goal 4. Quality Education							
Target	4.6 Eliminate gender disparities among school teachers		4.7 Create a modern learning environment in schools, including inclusive education, through innovative approaches					
Indicator	4.6.1. Share of men among school teachers, %		4.7.1. Share of rural full-time secondary schools with Internet access, %		4.7.2. Share of rural full-time secondary schools with computer software training, %		4.7.3. Share of full-time secondary schools with inclusive education, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**15.30**		**80.99**		**60.10**		**9.40**	
Oblasts								
Vinnytsya	15.60	0.30	80.70	-0.29	80.70	20.60	6.20	-3.20
Volyn	10.00	-5.30	60.00	-20.99	73.00	12.90	19.00	9.60
Dnipropetrovsk	14.70	-0.60	81.60	0.61	60.50	0.40	7.00	-2.40
Donetsk	11.00	-4.30	82.10	1.11	76.00	15.90	2.50	-6.90
Zhytomyr	18.70	3.40	49.50	-31.49	39.60	-20.50	1.50	-7.90
Zakarpattya	14.30	-1.00	71.10	-9.89	43.30	-16.80	12.30	2.90
Zaporizhya	15.10	-0.20	100.00	19.01	100.00	39.90	7.59	-1.81
Ivano-Frankivsk	17.40	2.10	78.50	-2.49	53.10	-7.00	5.70	-3.70
Kyiv	13.70	-1.60	100.00	19.01	89.40	29.30	35.60	26.20
Kirovohrad	16.22	0.92	100.00	19.01	100.00	39.90	10.69	1.29
Luhansk	16.40	1.10	92.00	11.01	89.40	29.30	35.60	26.20
Lviv	14.90	-0.40	48.60	-32.39	30.40	-29.70	3.80	-5.60
Mykolayiv	14.00	-1.30	91.10	10.11	91.00	30.90	3.00	-6.40
Odesa	11.00	-4.30	71.00	-9.99	49.00	-11.10	4.70	-4.70
Poltava	17.70	2.40	70.50	-10.49	70.70	10.60	11.53	2.13
Rivne	18.00	2.70	100.00	19.01	100.00	39.90	10.30	0.90
Sumy	16.00	0.70	89.50	8.51	45.60	-14.50	4.52	-4.88
Ternopil	16.80	1.50	91.10	10.11	77.10	17.00	8.00	-1.40
Kharkiv	14.00	-1.30	100.00	19.01	100.00	39.90	8.00	-1.40
Kherson	17.40	2.10	92.10	11.11	85.20	25.10	11.30	1.90
Khmelnytskiy	14.80	-0.50	92.10	11.11	62.50	2.40	7.28	-2.12
Cherkasy	20.10	4.80	89.60	8.61	70.90	10.80	22.00	12.60
Chernivtsi	18.35	3.05	92.70	11.71	64.10	4.00	15.11	5.71
Chernihiv	16.80	1.50	98.40	17.41	99.10	39.00	8.3	-
City of Kyiv								

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 4.6.1 - data on Chernihiv oblast as of 01.10.2015; 4.7.3 - data on Ivano-Frankivsk , Mykolaiv, Khmelnytskyi oblasts as of 2016. 4.3.1 - de-stimulator, given the converse readings in colors.

In the case of secondary school education, it is suggested to measure progress with the following indicator: a share of attendants of day secondary education institutions in total permanent population aged from 6 to 17. In all oblasts (except Luhansk and Donetsk which are severely affected by the military conflict), this indicator constitutes more than 80%. Further progress should be achieved in schooling approaches throughout ongoing education reform.

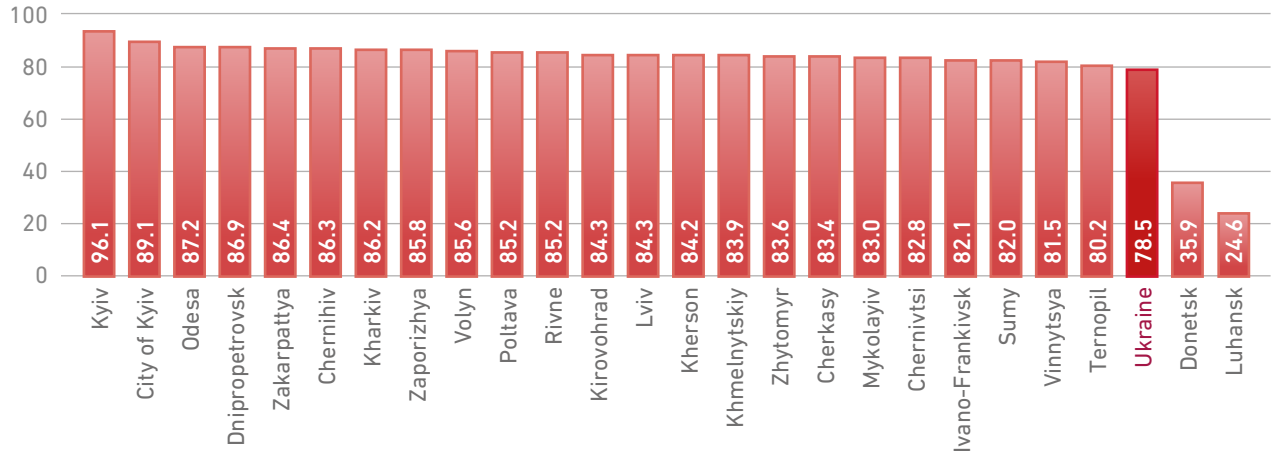
Indicator 'The share of households suffering from their deprivation from any vocational education' is to measure the vocational education availability in regions. The values for this indicator aregenerally in line with the national indicator. The average value of this indicator made 7.6% in 2015. There is a significant divergence ranging from 22.2 in Zakarpattia to 0.7 in Poltava oblast. Southern oblasts (Odesa, Kherson, Mykolaiv) and several oblasts of Central and Eastern Ukraine are the areas requiring significant improvement. Ensuring access to vocational education poses a particularly urgent challenge due to the changes in the labor market caused by global technological changes. The latter can cause the disappearance of many traditional professions and the emergence of new ones requiring new professional and workflow skills. In recent years the vocational education (neglected due to deindustrialization process) is being transferred under the regional regulation, regional authorities gain additional responsibilities on vocational education handling in accordance with newest requirements and high demand in vocational education.

Indices of the implementation of target indicators 4.5, 4.6, 4.7 relate mainly to the improvement of the educational process and the scale of coverage of the population of a certain region. Indicator 4.5.1. 'Number of persons who attended educational institutions (I-IV accreditation grade), per 10,000 thousand of population', reflects the universities in traditional educational centers – cities of Kyiv, Kharkiv, Odesa, Lviv, Dnipro, as well as Zaporizhzhia and Ternopil with readings exceeding average ones. Yet in other oblasts this indicator is also quite significant and is close to average across Ukraine. In general, this describes a traditional inclination of Ukrainian people to get higher education which is considered as an important prerequisite of choosing future occupation. At the same time, especially in western oblasts, in addition to domestic competition between higher educational institutions there is a growing competition with higher educational institutions of neighboring EU countries, especially Poland. If foreign universities satisfy certain portion of educational demand, this indicator will be undermined in future. Indicator 4.5.2. 'Share of the population who reported using the Internet over the past 12 months' is also an important one reflecting the access of population to the modern forms of education which determine the future of the educational process. According to the National SDGs, by 2030 this value must be increased by 1.6 times from 48.9% to 80%. However, in 2015 (baseline year) 16 oblasts had this indicator values below average.

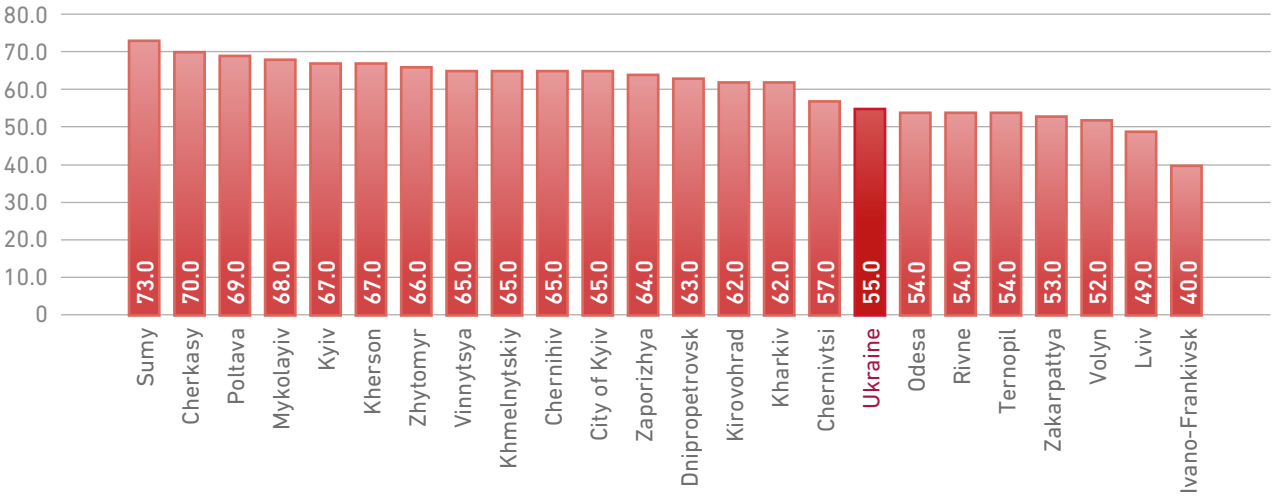
Target 4.7. 'Create modern educational settings in schools, including inclusive, based on innovative approaches is the final one necessary to achieve Goal 4. Its progress is measured by indicators that reflect the availability of the Internet, relevant educational programs and inclusive forms of education introduction. While first two indicators show high level of implementation, i.e. separate areas are fully provided with the Internet and computer educational programs (100%), inclusive education is being achieved with varying results from oblast to oblast. Kyiv oblast reported 35.6%, while Ternopil oblast achieved 1.4% only. This might be explained with lack of understanding of inclusive education concept and might require more attention in rendering methodic suport throughout schooling at local, regional and national levels.

Baseline indicators of goal in 2015:

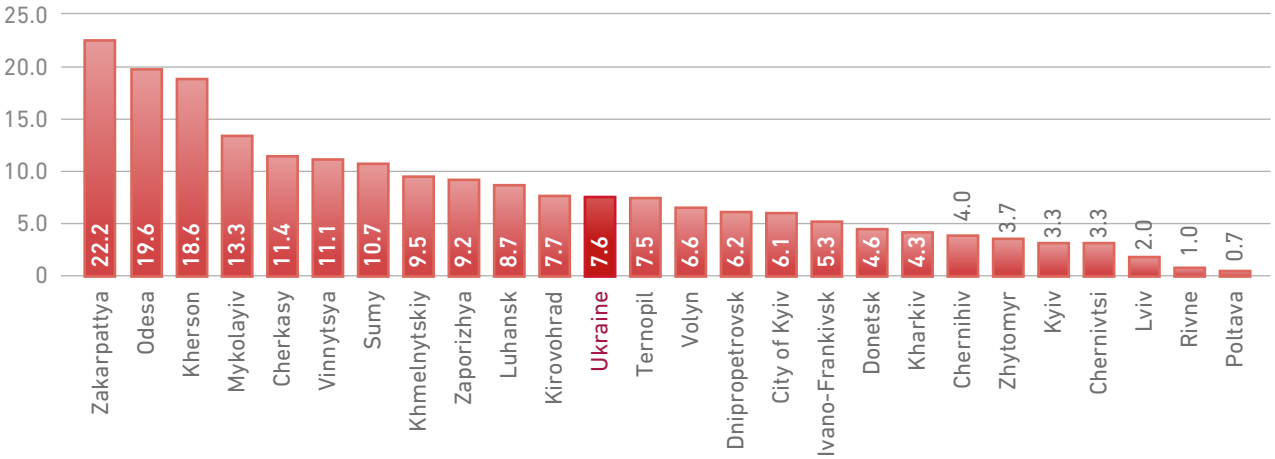
4.1.1. (a) Share of attendants of secondary education institutions in total permanent population aged 6-17, %



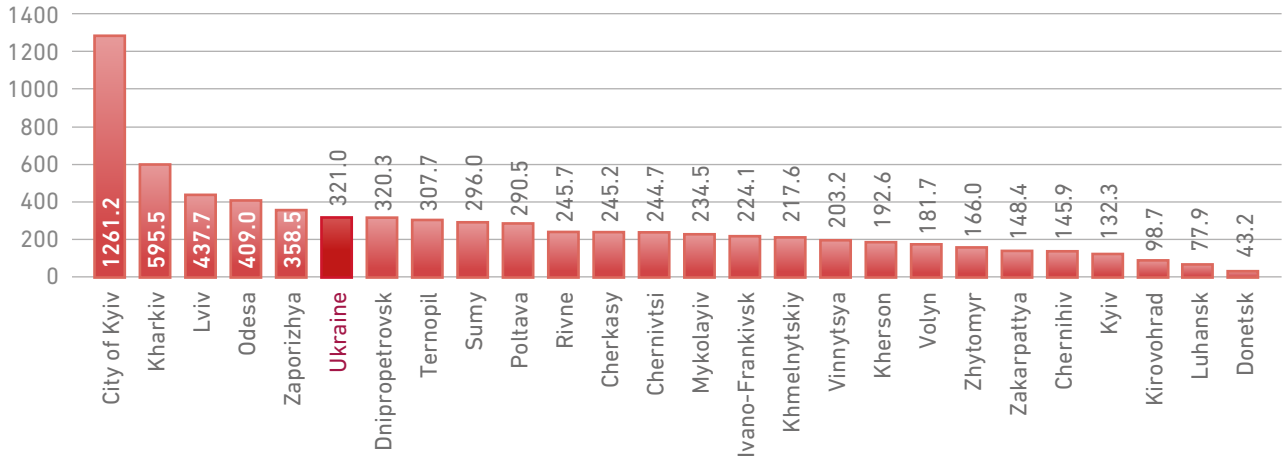
4.2.1. Net pre-primary education institutions coverage for number of children of relevant age, %



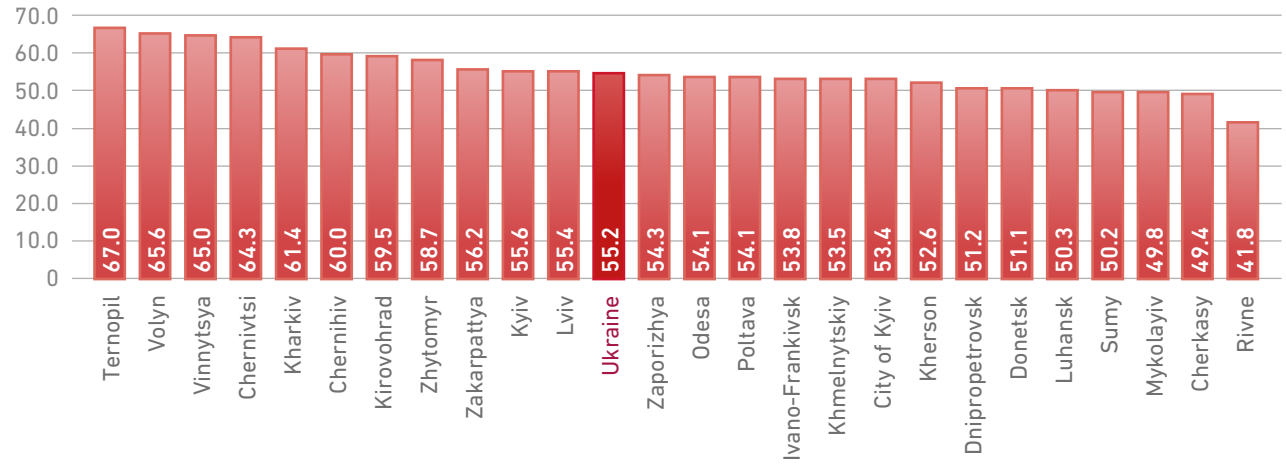
4.3.1. Share of households suffering from any kind of inability of any member of the household to receive vocational training, %



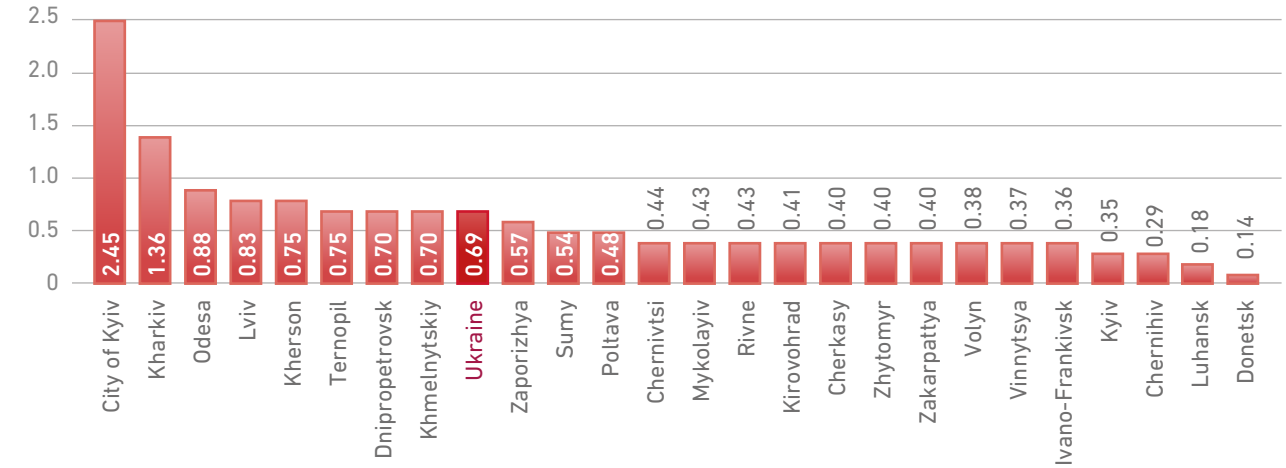
4.4.1. (a) Number attendants of higher education institutions (III-IV accreditation grade) per 10.000 persons of population



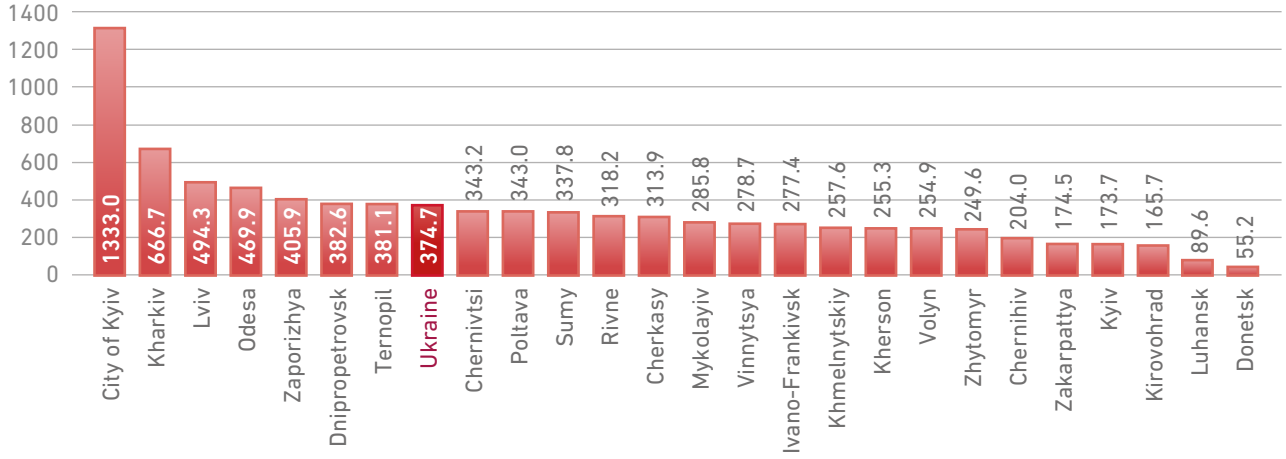
4.4.1-1. Share of teaching and academic staff of higher education institutions (III-IV accreditation grade) having scientific degree, %



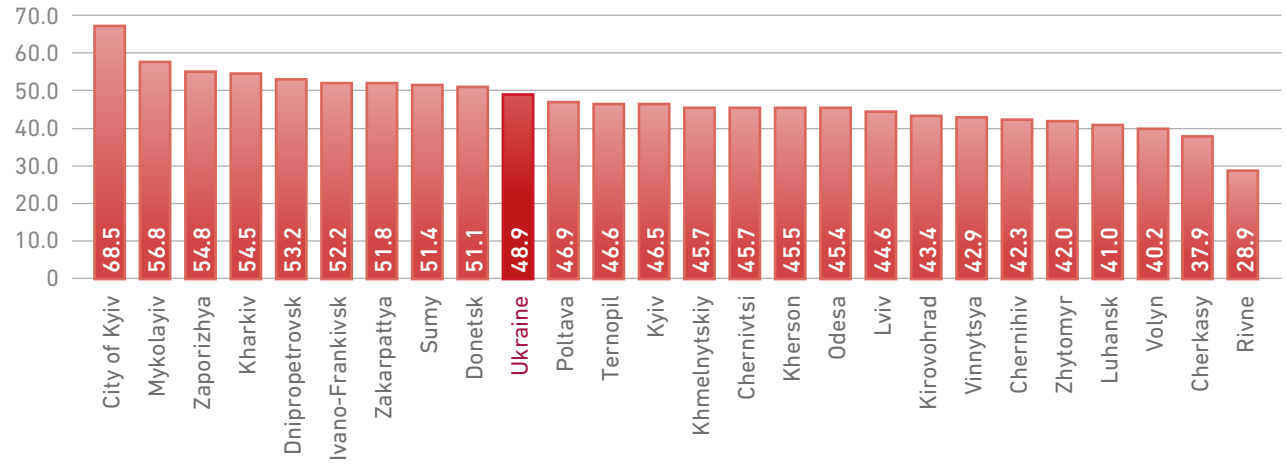
4.4.2. (a) Number of higher education institutions (III-IV accreditation grade) per 100.000 persons of population



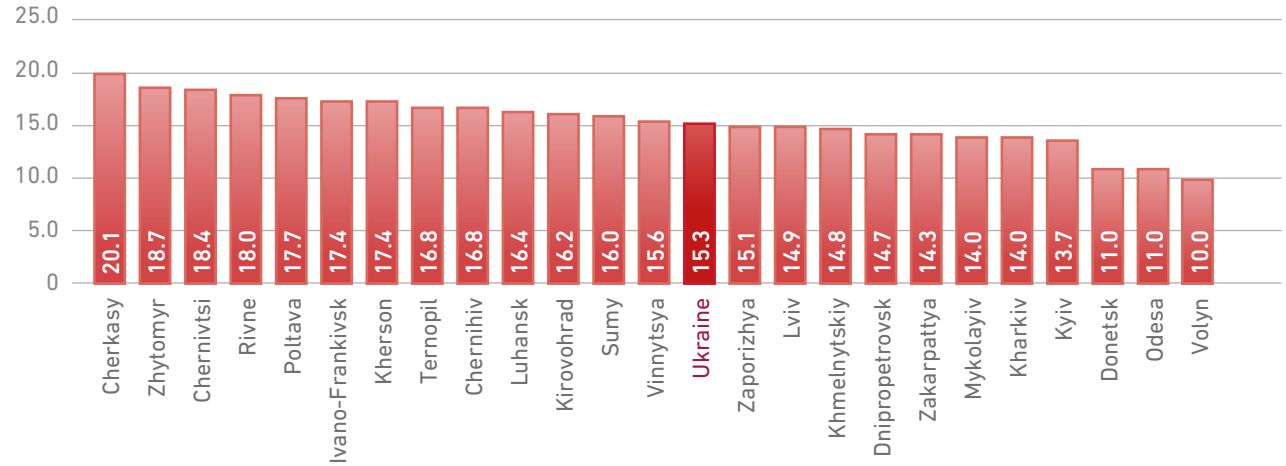
4.5.1. (a) Number of persons who attended educational institutions (I-IV accreditation grade), per 10.000 persons of population



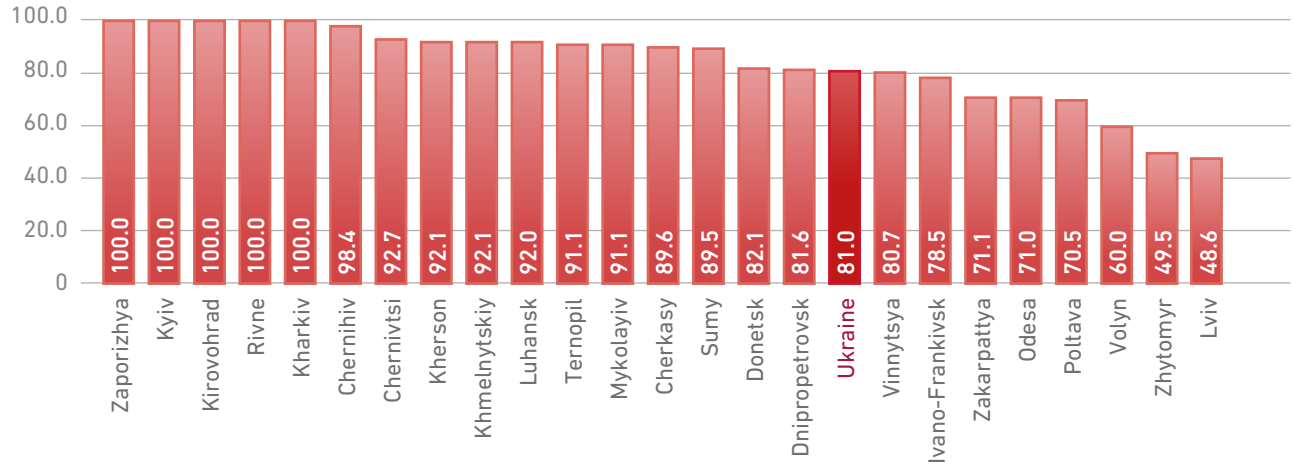
4.5.2. Share of the population who reported using the Internet over the past 12 months



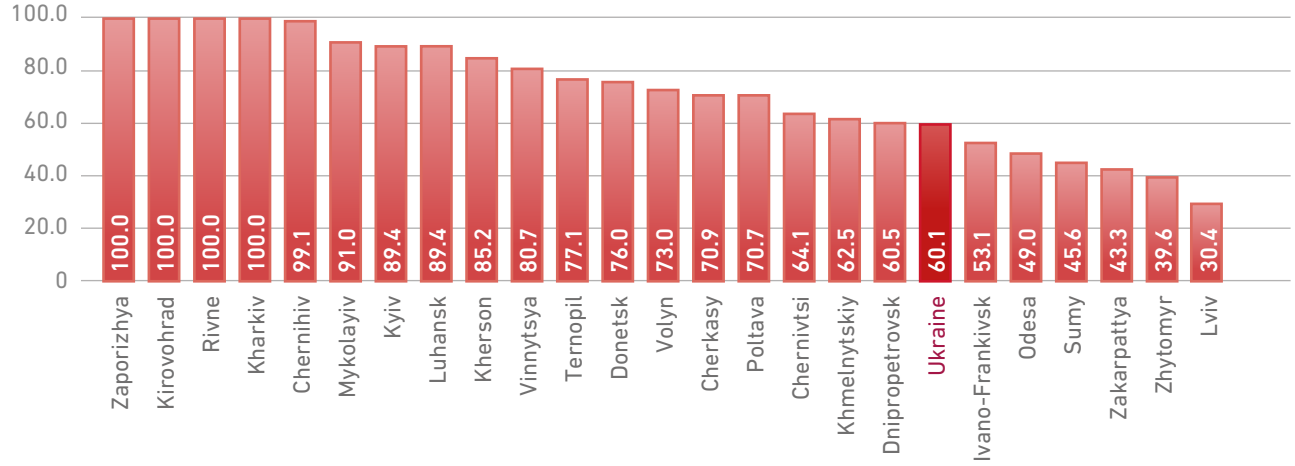
4.6.1. Share of men among school teachers, %



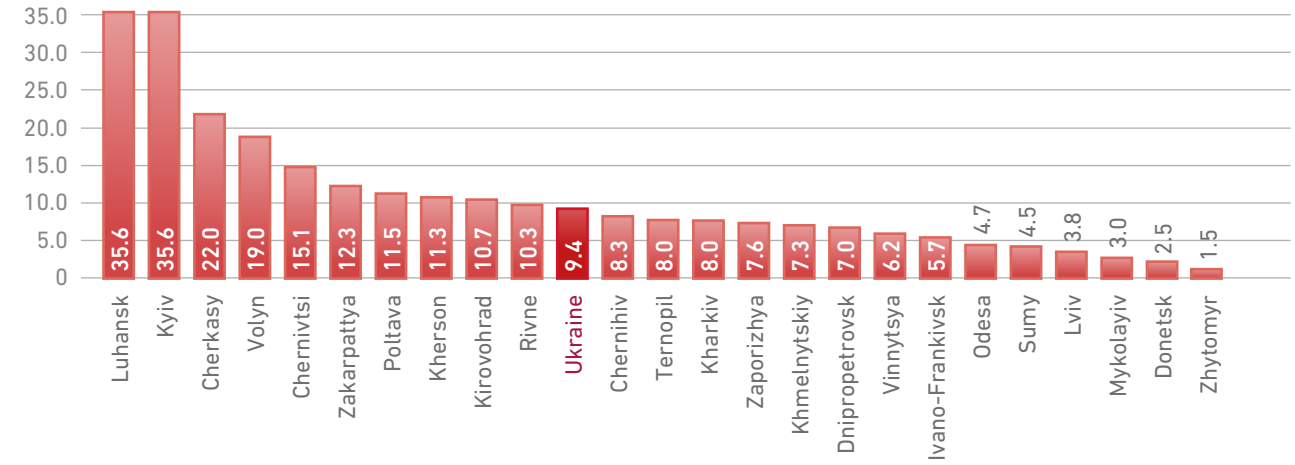
4.7.1. Share of rural full-time secondary schools with Internet access, %



4.7.2. Share of rural full-time secondary schools with computer software training, %



4.7.3. Share of full-time secondary schools with inclusive education, %



Goal 5. Gender Equality

The problem of gender equality is has a complex nature. It absorbs the consequences of objective drivers impact stipulated with social and biological nature of women (giving birth to children and performing related functions in the family, physical and psycho-physiological features that constrain women from some particular production processes, and simultaneously favor them to participate in other particular processes), as well as a set of social and cultural drivers defining a historical and cultural role and social perception of women in certain society (including both generally recognized norms that exist by common consent and archaic stereotypes).

Even given a full legal protection of the equal access of women and men to employment opportunities and public goods, there are unbiased systemic barriers that preserve an actual inequality exactly in terms of the implicitly established predominance of the 'standard' for a given society's functional responsibilities of women and men. Such systemic barriers, which deepen the real differentiation of conditions and quality of life on a gender basis are as follows: an imperfect system of domestic services (inclusive of their inaccessibility due to the high cost), which increases the household burden for women; an imperfect social infrastructure (nursery schools, after-school groups and classes, health care institutions, social services, etc.), which additionally affects women's activities with regard to child care, pediatric health care, care for elderly relatives, etc. Hence, a range of formally gender-neutral parameters of society is in fact of a gender-unequal impact.

Thus, regional authorities can and should take on the task of reducing the negative impact of gender inequality, which lead to a worser quality of life, lower security, weaker opportunities for social communication and self-realization of women in comparison with men. Regional authorities, especially in local hromadas, are armed with wide range of powers and options to improve the living environment, make it 'friendly' for the performance of household functions, develop social care services that will reduce the burden of upbringing children, taking care of disabled and elderly people. Participation in local self-governance gives women a broad range of instruments for the socialization, even if they arenot involved in economiuc activity. This is particularly crucial due to the growing share of women in settlements with negative labor migration. Also, regional authorities can pursue educational and information policies aimed at correcting gender archaisms. Such policies must take account of specifics of the gender, age and cultural composition of region's population. Mentioned tools might mitigate the risks of inefficiency and non-inclusiveness of some international programs that tend to apply standardized international approaches to combating gender inequality.

Personal security as the core asset of any person, undoubtedly, should be the cornerstone of the struggle against gender inequality. For women the issue of personal security is more pressing than for men, although it depends on the same factors: indicators of the safety of the local environment (street lighting, handling of public space sites, transport efficiency, etc.) and the quality of work of law enforcement bodies. Regional differences in the share of female victims of criminal physical or sexual abuse clearly show a higher risk level for women dwelling in southern and central regions of the country, namely in Odesa, Dnipropetrovsk, Mykolaiv, Cherkasy, and Kherson oblasts. Sociological data confirm the existence of bigger number of local landscaping challenges in a number of these oblasts. Security risks are reasonably higher in urbanized regions (Dnipropetrovsk, Kharkiv oblasts). Meanwhile, western regions report much higher level of security, like Volyn, Ternopil, Ivano-Frankivsk, Chernivtsi, Rivne and other oblasts. It is noteworthy that a low share of female victims is recorded in Donetsk and Luhansk oblasts, which may be equally related to either more severe law-and-order regime or to scarce recording of so called 'minor' offenses.

The problem of gender-based violence is characterized by a high level of latency, since a very small share of the victims seek a help out of fear of public condemnation, possible revenge of the offenders, or they even might not treat domestic violence as abnormal behavior. Therefore, criminal statistics is much less informative in evaluation of this phenomenon compared to social questionnaire surveys. However, the latter remain incomparable and unrepresentative in the regional context.

The importance of unbiased approach in the perception of gender-based violence is proved with data on individuals who have suffered from criminal offenses related to domestic violence. Vinnytsia, Sumy, Zakarpattia and Volyn oblasts are the 'anti-leaders' by this indicator per 100 thousand population. It can be assumed that the high rate of recording such crimes speaks for higher confidence in law enforcement bodies and their ability to provide so to say sensible assistance, deeper maturity of civil society and greater violence intolerance. At the same time, statistical artifacts may be found in connection with the inclination or incongruity of the

Goal	Goal 5.Gender Equality											
Target	5.1 Create an environment for ending all forms of discrimination against women and girls		5.2 Reduce the level of gender-based and domestic violence, and ensure efficient prevention of its manifestations and timely assistance to victims				5.3 Encourage shared responsibility for house-keeping and childrearing		5.4 Ensure equal opportunities for representation at all levels of decisionmaking in political and public life			
Indicator	5.1.1. Number of local normative acts (issued by oblast council and oblast state administration) which were revised or adopted to provide men and women with equal rights and opportunities and to prevent discrimination against women and girls, units		5.2.1. (a) Share of women who have been victims to criminal offences and crimes connected with physical or sexual abuse (willful murder, sexual assault and attempt, willful serious bodily injury, robbery, plundering, human trafficking, domestic violence), %		5.2.2. (a) Number of victims of criminal crimes involving domestic violence, persons per 100.000 thousand of population		5.3.1. Ratio of duration of unpaid domestic work (housekeeping, care for children and other family members etc.) between men and women, %		5.4.2. Share of women among the members of oblast councils, %		5.4.3. (a) Share of women in positions of local self-government officials in registered number of officials, %	
	2015	>1/<1	2015	+/-	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**-**		**0.07**		**2.74**		**-**		**14.90**		**77.10**	
Oblasts												
Vinnytsya	0.00	-	0.03	-0.03	35.59	13.00	-	-	10.71	-4.19	70.70	-6.40
Volyn	1.00	-	0.01	-0.05	8.92	3.26	-	-	10.94	-3.96	73.70	-3.40
Dnipropetrovsk	-	-	0.11	0.04	5.39	1.97	-	-	14.00	-0.90	86.50	9.40
Donetsk	1.00	-	0.00	-0.07	0.00	0.00	-	-	10.76	-4.14	86.60	9.50
Zhytomyr	0.00	-	0.05	-0.02	5.13	1.87	-	-	7.81	-7.09	75.60	-1.50
Zakarpattya	1.00	-	0.04	-0.03	9.05	3.31	-	-	14.00	-0.90	68.80	-8.30
Zaporizhya	1.00	-	0.04	-0.03	1.31	0.48	-	-	16.67	1.77	80.80	3.70
Ivano-Frankivsk	0.00	-	0.02	-0.05	2.24	0.82	-	-	7.89	-7.01	70.60	-6.50
Kyiv	2.00	-	0.04	-0.02	0.35	0.13	-	-	14.29	-0.61	78.90	1.80
Kirovohrad	0.00	-	0.04	-0.03	2.15	0.79	-	-	17.19	2.29	77.20	0.10
Luhansk	2.00	-	0.02	-0.05	4.16	1.52	-	-	-	-	79.30	2.20
Lviv	2.00	-	0.06	-0.01	4.57	1.67	-	-	16.67	1.77	72.80	-4.30
Mykolayiv	0.00	-	0.10	0.03	1.29	0.47	-	-	15.63	0.73	80.20	3.10
Odesa	0.00	-	0.14	0.07	3.19	1.17	-	-	8.33	-6.57	77.70	0.60
Poltava	1.00	-	0.06	-0.01	2.63	0.96	-	-	11.90	-3.00	76.90	-0.20
Rivne	1.00	-	0.02	-0.04	4.91	1.79	-	-	12.50	-2.40	72.60	-4.50
Sumy	0.00	-	0.06	-0.01	12.88	4.70	-	-	20.31	5.41	76.80	-0.30
Ternopil	1.00	-	0.02	-0.05	3.56	1.30	-	-	10.94	-3.96	70.20	-6.90
Kharkiv	1.00	-	0.09	0.03	2.09	0.76	-	-	20.00	5.10	80.50	3.40
Kherson	2.00	-	0.08	0.01	1.50	0.55	-	-	15.63	0.73	77.90	0.80
Khmelnytskiy	1.00	-	0.04	-0.03	2.85	1.04	-	-	19.05	4.15	73.50	-3.60
Cherkasy	0.00	-	0.09	0.03	2.09	0.76	-	-	11.90	-3.00	75.90	-1.20
Chernivtsi	1.00	-	0.02	-0.04	1.87	0.68	-	-	15.63	0.73	70.30	-6.80
Chernihiv	0.00	-	0.06	-0.01	1.33	0.49	-	-	20.31	5.41	75.80	-1.30
City of Kyiv							-	-			63.40	-13.70

Goal	Goal 5. Gender Equality									
Target	5.5 Increase the population's access to family planning services and reduce teenage fertility				5.6 Expand economic opportunities for women					
Indicator	5.5.1. (a) Number of abortions per 10.000 women		5.5.2. Fertility rate among women aged under 20, per 1.000 women aged 15–19		5.6.1. Ratio of average wages for men and women, %		5.6.2. (a) Level of economic activity of women aged 15-70, %		5.6.3. (a) Employment rate of women aged 25–49, %	
	2015	>1/<1	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**44.53**		**27.30**		**74.90**		**56.20**		**71.90**	
Oblasts										
Vinnytsya	71.37	1.60	29.70	1.09	78.80	3.90	56.70	0.50	68.72	-3.18
Volyn	43.48	0.98	27.10	0.99	79.00	4.10	38.00	-18.20	69.80	-2.10
Dnipropetrovsk	61.47	1.38	27.30	1.00	67.30	-7.60	2.00	n/a	59.00	-12.90
Donetsk	26.84	0.60	-	-	58.90	-16.00	63.30	7.10	-	-
Zhytomyr	63.12	1.42	33.60	1.23	80.10	5.20	58.70	2.50	52.60	-19.30
Zakarpattya	37.51	0.84	52.80	1.93	83.60	8.70	54.70	-1.50	51.30	-20.60
Zaporizhya	49.60	1.11	26.40	0.97	68.70	-6.20	55.90	-0.30	71.00	-0.90
Ivano-Frankivsk	30.38	0.68	30.10	1.10	75.40	0.50	51.40	-4.80	47.20	-24.70
Kyiv	65.81	1.48	28.50	1.04	73.40	-1.50	58.20	2.00	72.60	0.70
Kirovohrad	55.97	1.26	41.50	1.52	78.80	3.90	54.00	-2.20	70.28	-1.63
Luhansk	14.50	0.33	-	-	77.70	2.80	60.00	3.80	-	-
Lviv	35.52	0.80	18.70	0.68	77.20	2.30	53.80	-2.40	71.07	-0.83
Mykolayiv	55.94	1.26	35.80	1.31	69.70	-5.20	57.70	1.50	76.90	5.00
Odesa	49.42	1.11	30.00	1.10	76.40	1.50	51.80	-4.40	61.50	-10.40
Poltava	53.62	1.20	26.00	0.95	72.20	-2.70	55.80	-0.40	49.20	-22.70
Rivne	24.09	0.54	26.20	0.96	72.70	-2.20	61.60	5.40	66.80	-5.10
Sumy	29.19	0.66	25.00	0.92	75.00	0.10	56.40	0.20	50.90	-21.00
Ternopil	21.98	0.49	25.10	0.92	85.90	11.00	58.50	2.30	36.70	-35.20
Kharkiv	39.71	0.89	20.80	0.76	77.60	2.70	46.60	-9.60	50.00	-21.90
Kherson	61.03	1.37	34.40	1.26	87.00	12.10	55.70	-0.50	71.70	-0.20
Khmelnytskiy	43.94	0.99	34.10	1.25	77.50	2.60	53.40	-2.80	48.30	-23.60
Cherkasy	42.70	0.96	29.90	1.10	82.70	7.80	72.90	16.70	46.10	-25.80
Chernivtsi	47.23	1.06	27.30	1.00	89.10	14.20	55.00	-1.20	58.80	-13.10
Chernihiv	46.46	1.04	25.60	0.94	77.10	2.20	57.30	1.10	73.60	1.70
City of Kyiv	57.21	1.28	8.20	0.30	82.90	8.00				

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 5.2.1 (a), 5.2.2 (a) - data on Donetsk and Luhansk oblasts as of 2016, 5.6.3 (a)- data on Zhytomyr oblast calculated as a share of the unemployed population of 15-24 years old in the total number of unemployed people aged 15-70 years; 5.1.1. - comparison not recommended due to rare occurrence
5.2.1 (a), 5.2.2 (a), 5.4.3 (a), 5.5.1 (a), 5.5.2 - de-stimulator, given the converse readings in colors

law enforcement bodies of certain region to record domestic violence. Exemplary, in particular, that the lowest level of registered domestic violence is inherent for Mykolaiv, Zaporizhzhia, and Kherson oblasts. Quite low indicators in a number of oblasts (in particular, Kyiv, Chernihiv, Chernivtsi, Kharkiv, Cherkasy, etc.) can also indicate the opportunities for local settlement of conflicts - within family members, together with neighbors, etc.

Distribution of regions by the share of women among the officials of regional councils is likely to be situational. Thus, women account for less than 10% in the regional councils of Zhytomyr, Ivano-Frankivsk, Odesa oblasts, 20% and more in Sumy, Chernihiv and Kharkiv oblasts. At the same time, the share of women among local self-government officials is 77.1%[14] all over Ukraine; it is significantly higher in the eastern and southern regions of the country (Donetsk, Dnipropetrovsk, Zaporizhzhia, Kharkiv, Mykolaiv, Luhansk, Kherson, Odesa and other oblasts) and lower in the western part (Zakarpattia, Ternopil, Chernivtsi, Ivano-Frankivsk, Vinnytsia, Rivne oblasts, etc.). This difference may be particularly reasoned with a greater engagement of male population physically demanding jobs, due to the peculiarities of the southern and eastern economies, and vice versa – with greater employment opportunities for women in the economic structure of the western regions.

Undoubtedly, women's mission of motherhood and the upbringing of children remains to be the main source of gender inequality. The natural combination of this physiologically determined function with the integration of women into the modern society must be ensured by the ability to effectively plan a family, which depends both from the availability of material means for this (modern birth control measures, proper medical examination and aid) and the awareness, education, and self-discipline of sexual intercourse participants. Ability for birth control is illustrated by the abortion rate for 10 thousand women. This indicator is the highest in Vinnytsia, Kyiv, Zhytomyr, Dnipropetrovsk, and Kherson oblasts. Twice or three times lower values are registered in Luhansk, Ternopil, Rivne, Donetsk, Sumy, Ivano-Frankivsk and Lviv oblasts. We can assume that low abortion rates in western regions may result from stronger local cultural and religious values and restrictions.

A significant differentiation has been demonstrated in fertility rate indicator per 1,000 women under 20 years old. Traditionally high reading of this indicator in Zakarpattia oblast (52.8) is associated with a significant proportion of Roma people and their inclination to early marriages. There is also a high birthrate among women aged under 20 in Kirovohrad, Mykolaiv, Kherson, Khmelnytskyi, and Zhytomyr oblasts (41.5 - 33.6 live births per 1,000 women of the corresponding age). These rates are almost twice as low in Lviv (18.7) and Kharkiv (20.8) oblasts, which might be explained by considerably higher level of urbanization there.

The actual inclusion of women is most spectacularly illustrated with their economic activity rate. This indicator significantly differs by regions ranging from 72.9% in Cherkassy and 61.6% in Rivne oblasts to 38.0% in Volyn and 46.6% in Kharkiv oblasts. The structures of regional economies should be considered as drivers for such differentiation. Regional economies offer a bigger of lesser number of relevant jobs, create labor market pressure on behalf of the male population and provide employment opportunities in statistically uncovered sectors.

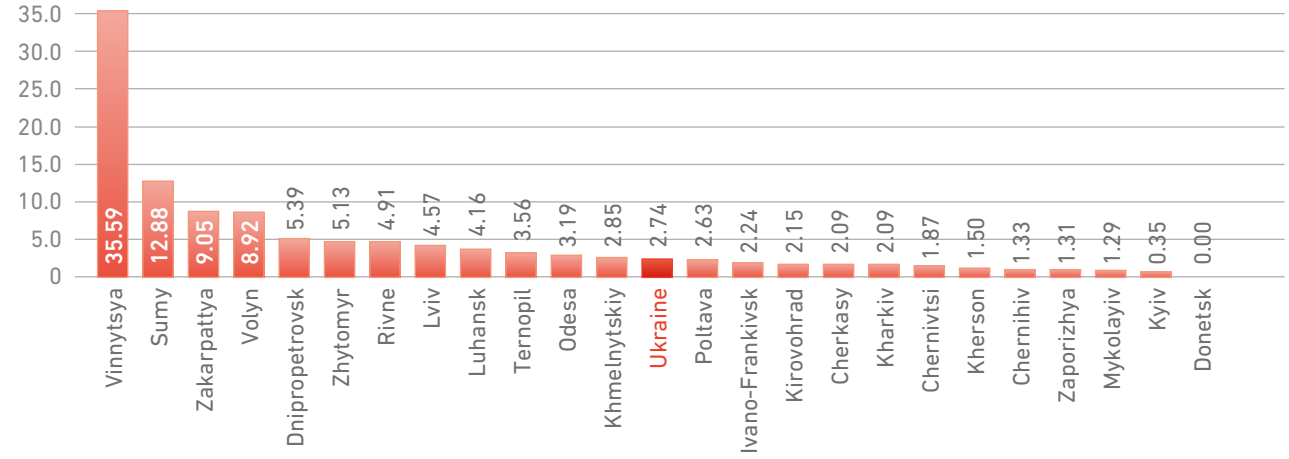
A share of employed women of the most productive age (25-49 years old) is naturally higher and constitutes 71.9% at average in Ukraine, although varies considerably by regions. The highest (70% or more) employment rate is registered in Mykolaiv, Chernihiv, Kyiv, Kherson, Lviv, Zaporizhzhia, and Kirovohrad oblasts, while the lowest (50% or less) is registered in Ternopil, Cherkasy, Ivano-Frankivsk, Khmelnytskyi, Poltava and Kharkiv oblasts. In our opinion, significant discrepancy in the indicator of economic activity relates to the engagement of women in family farmlands handling, the employment of women of retirement age (which is sometimes caused by the shortage of junior staff, in particular in the health care and education fields), as well as sporadic and unofficial employment (an unemployed person may be registered with the employment service and maintain the economically active status).

In Ukraine the wages gap between women and men is primarily based on the peculiarities of regional economies' structure. In particular, it is a well-known fact that women prevail among employees of the state-funded, low-waged sectors of the economy (education, health care, provision of social care services, etc.). On the other hand, the highest levels of wages are fixed in sectors with hard working conditions like coal-mining, metallurgy, chemical industry, where the employment opportunities for women are rather limited. This is to explain the fact that the lowest differentiation in wages (less than 20% of the difference) is registered in Chernivtsi, Ternopil, Zakarpattia, Cherkasy, and Zhytomyr oblasts. The highest (over 30%) differentiation in wages is registered in Donetsk, Dnipropetrovsk, Zaporizhzhia, and Mykolaiv oblasts.

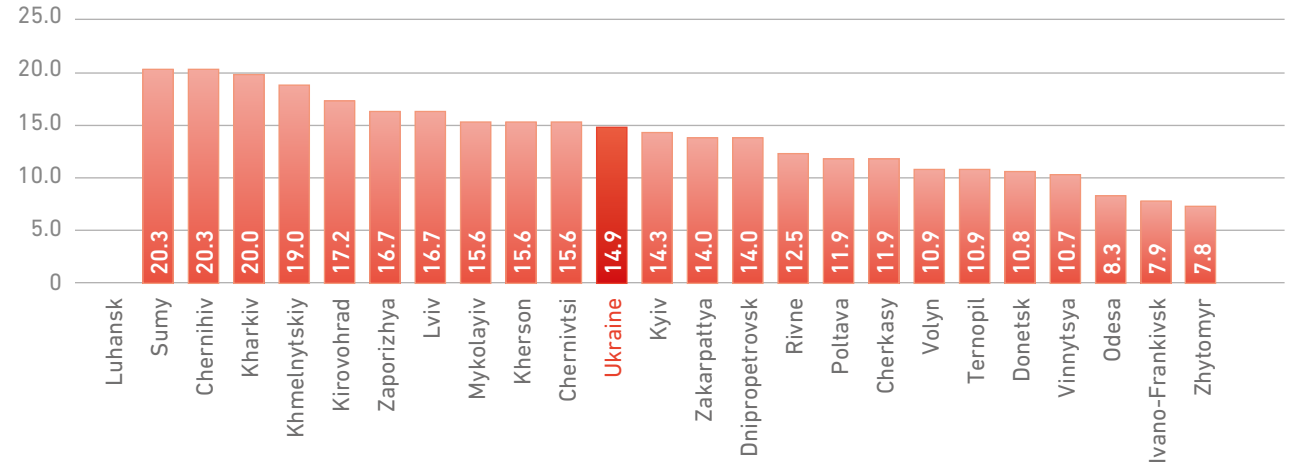
[14] The share of women is considerably lower in senior management positions. Women occupy only 16.7% of positions of high-ranking officials involved in decision-making at the highest state level (category A positions).

Baseline indicators of goal in 2015:

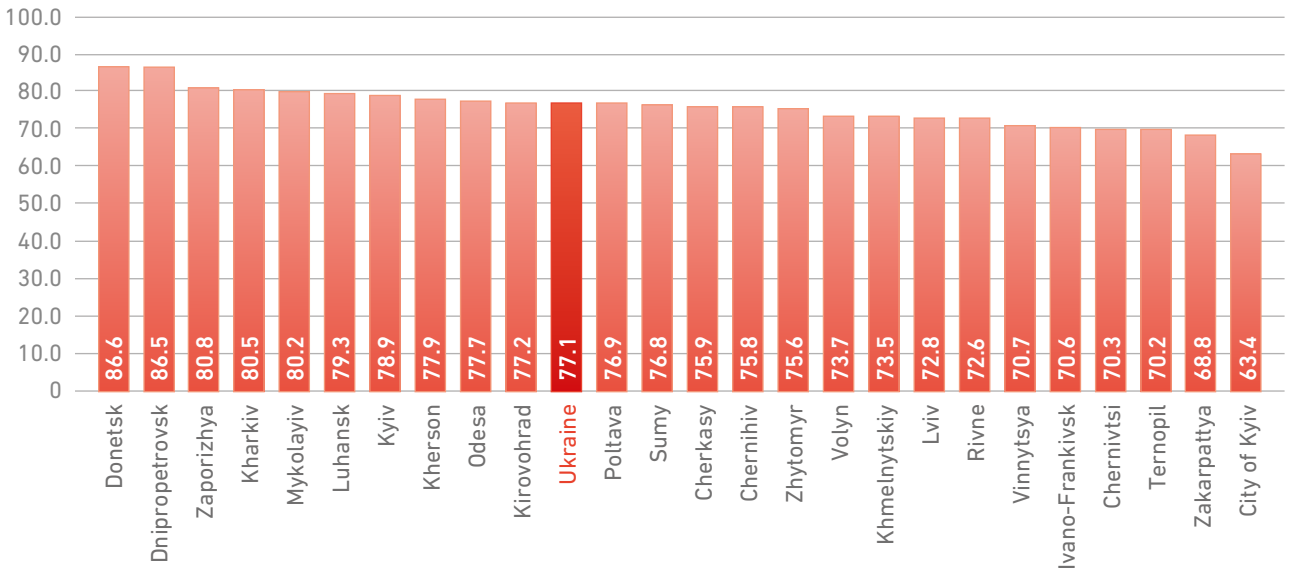
5.2.2. (a) Number of victims of criminal crimes involving domestic violence, persons per 100.000 thousand of population



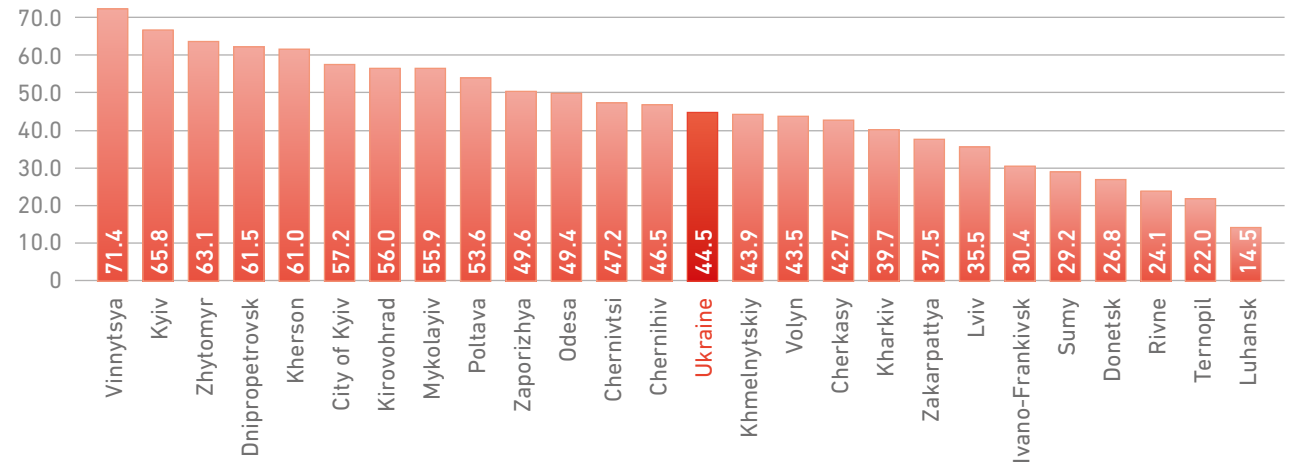
5.4.2. Share of women among the members of oblast councils, %



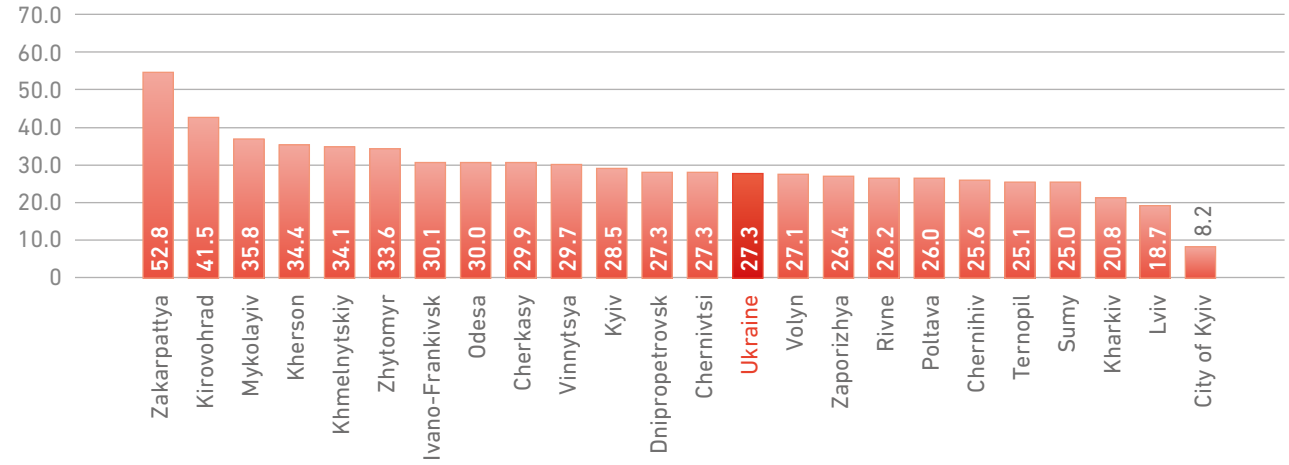
5.4.3. (a) Share of women in positions of local self-government officials in registered number of officials, %



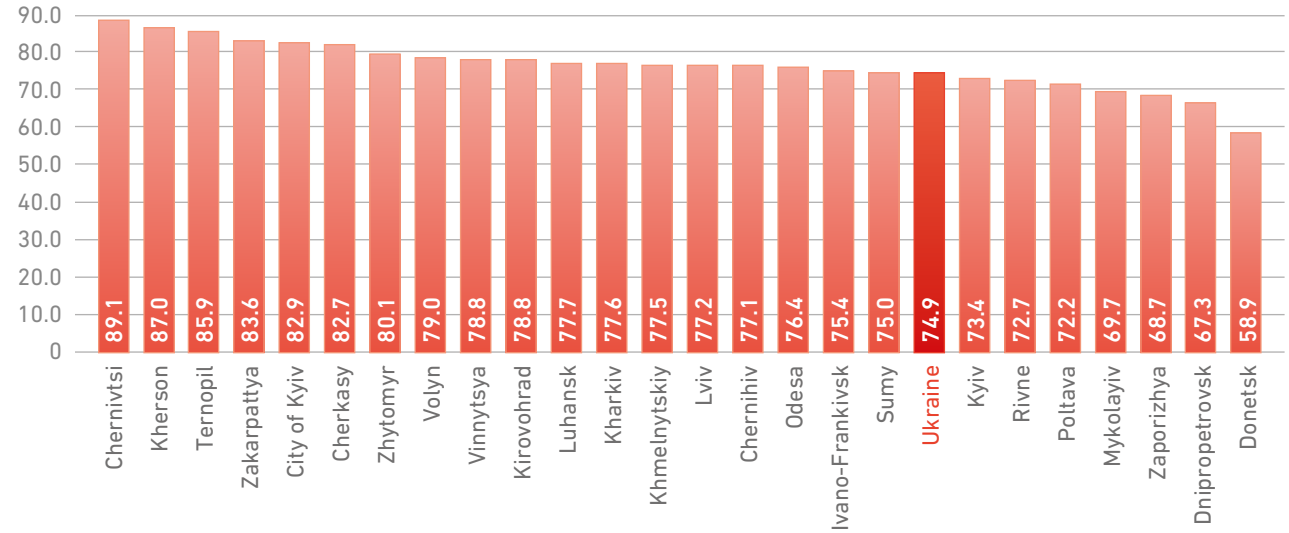
5.5.1. (a) Number of abortions per 10.000 women



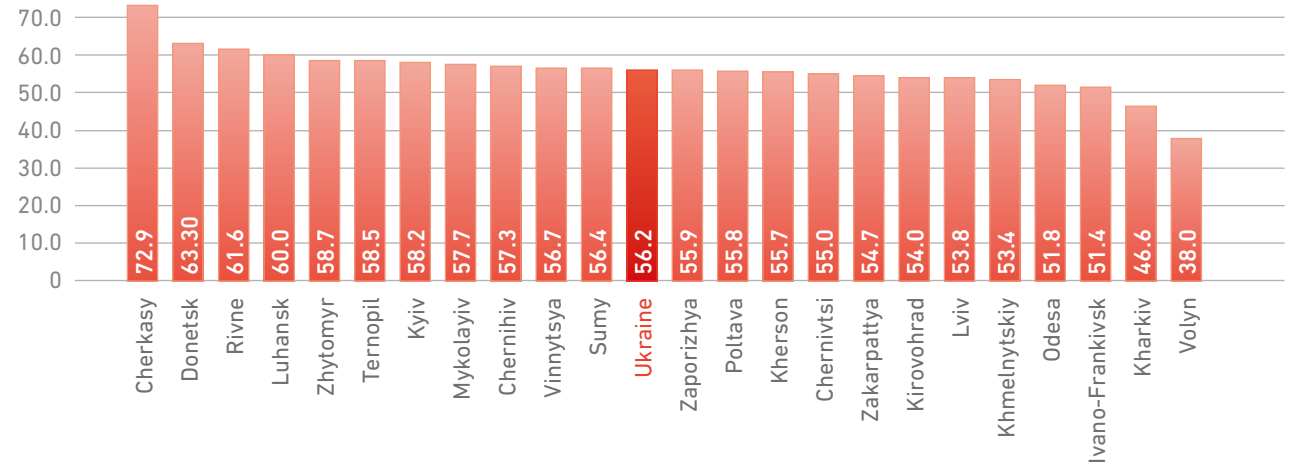
5.5.2. Fertility rate among women aged under 20, per 1.000 women aged 15–19



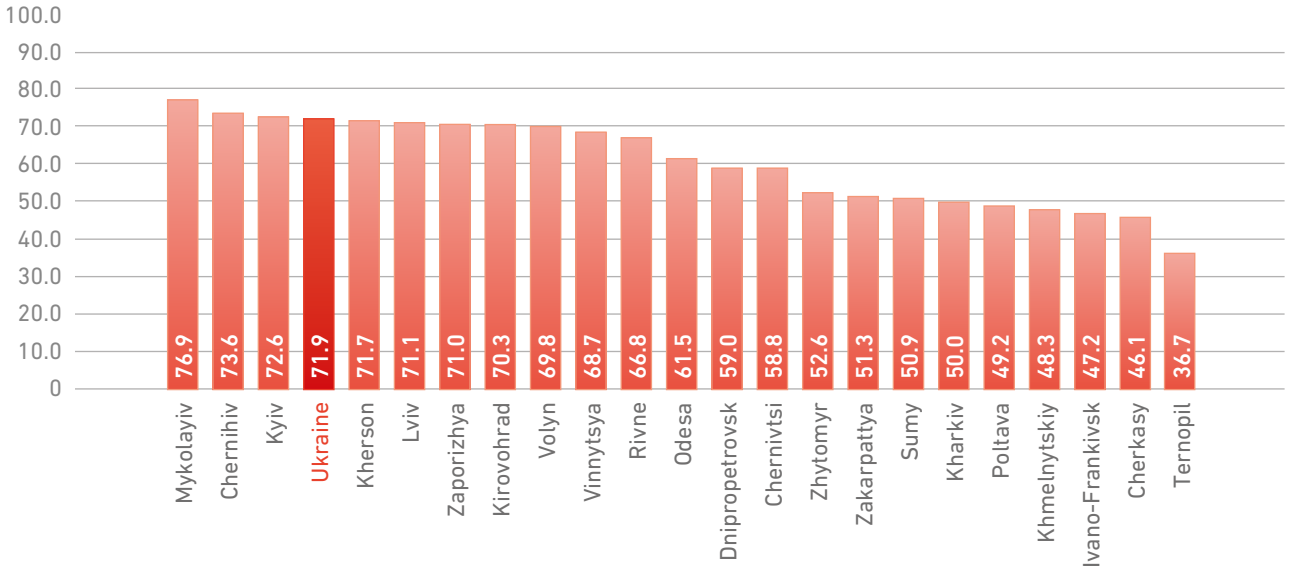
5.6.1. Ratio of average wages for men and women, %



5.6.2. (a) Level of economic activity of women aged 15-70, %



5.6.3. (a) Employment rate of women aged 25–49, %



Goal 6. Clean Water and Sanitation

Unlike many countries of the world, Ukraine has good water potential, yet inefficient use together with insufficient level of wastewaters treatment pose a threat to the country's environmental safety and public health.

Regional differentiation of water supply, water use and drainage indicators is quite high. This depends, first of all, on a difference in the geographical location, economic development and specialization of the regions, and a variable attitude of local authorities to the problems of water supply and drainage. In some regions a situation with water supply and drainage systems seems to be not so bad, still even their existing infrastructure is outdated and run down, therefore it requires significant public and private investment. Local authorities are fully responsible for addressing these issues, as well as for controlling the discharges of polluted water.

Issues of financing water supply and drainage, promoting the rational use of water, monitoring the commercial sewage depend mostly on local authorities. At the same time, regional authorities have a wide range of both financial and institutional tools for the improvement of water supply and sewage systems. Lack of budget funds can be compensated by launching public-private partnership projects, the corporatization of water supply and discharge companies and transfer of the latter into concession, by creation of conditions for attracting both domestic and foreign investors. Together with the State Environmental Inspection of Ukraine it is necessary to enhance control over the companies' waste water discharge that destroy the region's environment using all possible measures to make environmental violators responsible for their activity; measures might range from legal tools to public raising awareness campaigns. Considerable attention should be paid to the replacement of old water supply and drainage systems, poor condition of which may bring to environmental disasters. Local authorities should also create incentives for companies to use water resources efficiently. It is necessary to create and approve the river basin management plans and other water supply objects management plans.

A comparison of the regional dimension selected as indicators of the baseline for achieving Goal 6 has demonstrated an essential level of their differentiation.

A rate of rural drinking water sources compliance with health and safety regulations is an important indicator, since water in cities is of significantly higher quality owing to the installed treatment systems. The situation in the whole country and in the regions is critical - only 7.6% of rural water supply sources comply with health and safety regulations. The worst situation is registered in the industrial eastern oblasts - Dnipropetrovsk (0.8%) and Zaporizhzhia (2.3%). The best situation is witnessed in Poltava (32.9%) and in several western oblasts: Rivne (23.3%), Khmelnytskyi (17.5%) and Ternopil (15.2%).

The situation is even worse with the communal drinking water sources. The overall compliance rate for Ukraine constitutes only 4.6%. Yet again, approximately the same groups of oblasts make up the list of 'leaders' and 'outsiders', namely Dnipropetrovsk (1.2%), Zaporizhzhia (1.9%), Volyn (1.2%) oblasts and the city of Kyiv (1.3%) lag far behind, while Rivne (10.5%), Khmelnytskyi (9.5%) and Ternopil (11.4%) oblasts rank the best positions.

When we speak about centralized water supply accessibility for rural and urban population, it should be noted that the latter enjoys better advantages of water supply, therefore most oblasts report acceptable indicators in cities. The best water supply is found in Donetsk, Kyiv, Mykolaiv, Ternopil, Kherson, Cherkasy oblasts and in the city of Kyiv, where urban dwellers are almost 100% supplied with water from the centralized water supply systems. Simultaneously there are oblasts with only 70-80% of centralized water supply. For example, in Kharkiv oblast this indicator reads 71%, 73% in Kirovohrad, 77.8% in Chernivtsi - 77.8%, 78% in Vinnytsia and Chernihiv oblasts. As for the rural areas, the situation is far worse. There is virtually no centralized water supply in the countryside of some western oblasts, namely Lviv, Khmelnytskyi and Ternopil oblasts, with extremely low rates in Chernivtsi (3.7%) and Ivano-Frankivsk (6.1%) oblasts. At the same time, the southern and eastern oblasts are much better provided: Kherson (85%), Donetsk (60.9%), Mykolaiv (57%), Zaporizhzhia (55%), and Kyiv (61%) oblasts.

Roughly the same situation can be observed with the indicators of the provision of urban and rural population with centralized water drain systems. Urban population, especially of Luhansk, Mykolaiv, Ternopil and Kherson oblasts, is almost fully covered with this utility. Still in many oblasts the situation is much worse, like in Kharkiv (41%), Donetsk (43.1%), Cherkasy (55%), Vinnytsia and Zhytomyr (60% each) oblasts. In rural settlements the situation is

Goal	Goal 6. Clean Water and Sanitation							
Target	6.1 Provide access to quality services of safe drinking water, and ensure the construction and reconstruction of centralized drinking using the latest technologies and equipment							
Indicator	6.1.1. (a) Rate of rural drinking water sources compliance with health and safety regulations, %		6.1.2. (a) Use of fresh water for drinking and health and sanitary purposes, m^3 per person		6.1.3. (a) Rate of communal drinking water sources compliance with health and safety regulations, %		6.1.4. Share of the urban population with access to affordable drinking water of assured quality, %	
	2015	+/-	2015	>1/<1	2015	+/-	2016	+/-
Ukraine (2015)	**7.60**		**29.6**		**4.60**		**90.00**	
Oblasts								
Vinnytsya	8.60	1.00	18.80	0.64	7.20	2.60	-	-
Volyn	2.30	-5.30	19.00	0.64	1.20	-3.40	-	-
Dnipropetrovsk	0.80	-6.80	54.80	1.85	1.20	-3.40	-	-
Donetsk	5.50	-2.10	25.60	0.86	3.40	-1.20	-	-
Zhytomyr	8.30	0.70	16.90	0.57	2.80	-1.80	-	-
Zakarpattya	6.90	-0.70	11.50	0.39	6.50	1.90	-	-
Zaporizhya	2.30	-5.30	40.00	1.35	1.90	-2.70	-	-
Ivano-Frankivsk	4.50	-3.10	11.40	0.39	2.00	-2.60	-	-
Kyiv	10.40	2.80	24.10	0.81	5.80	1.20	-	-
Kirovohrad	4.90	-2.70	19.00	0.64	3.30	-1.30	-	-
Luhansk	3.90	-3.70	6.40	0.22	3.50	-1.10	-	-
Lviv	9.00	1.40	22.00	0.74	5.50	0.90	-	-
Mykolayiv	7.80	0.20	26.70	0.90	3.80	-0.80	-	-
Odesa	8.90	1.30	35.00	1.18	7.00	2.40	-	-
Poltava	32.90	25.30	34.30	1.16	3.00	-1.60	-	-
Rivne	23.30	15.70	15.80	0.53	10.50	5.90	-	-
Sumy	11.90	4.30	26.40	0.89	6.50	1.90	-	-
Ternopil	15.20	7.60	16.40	0.55	11.40	6.80	-	-
Kharkiv	7.50	-0.10	45.60	1.54	3.60	-1.00	-	-
Kherson	2.80	-4.80	36.40	1.23	2.80	-1.80	-	-
Khmelnytskiy	17.50	9.90	19.20	0.65	9.50	4.90	-	-
Cherkasy	5.40	-2.20	21.70	0.73	4.60	0.00	-	-
Chernivtsi	-	-	22.20	0.75	0.80	-3.80	-	-
Chernihiv	3.40	-4.20	24.50	0.83	1.70	-2.90	-	-
City of Kyiv		-7.60	62.80	2.12	1.30	-3.30	-	-

Goal	Goal 6. Clean Water and Sanitation							
Target	6.1 Provide access to quality services of safe drinking water, and ensure the construction and reconstruction of centralized drinking using the latest technologies and equipment				6.2 Provide access to modern sanitation systems, and ensure the construction and reconstruction of water intake and sewage treatment facilities using the latest technologies and equipment			
Indicator	6.1.5. Share of the rural population with access to centralized water supply utilities, %		6.1.6. Share of the urban population with access to centralized water supply utilities, %		6.2.1. (a) Share of the rural population with access to centralized water drain, %		6.2.2. Share of the urban population with access to centralized water drain, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**24.20**		**89.40**		**4.10**		**73.00**	
Oblasts								
Vinnytsya	6.72	-17.48	78.00	-11.40	0.00	-4.10	60.00	-13.00
Volyn	12.30	-11.90	88.60	-0.80	4.60	0.50	82.00	9.00
Dnipropetrovsk	50.00	25.80	87.60	-1.80	16.50	12.40	85.40	12.40
Donetsk	60.90	36.70	100.00	10.60	13.80	9.70	43.10	-29.90
Zhytomyr	16.10	-8.10	85.20	-4.20	2.40	-1.70	60.00	-13.00
Zakarpattya	14.50	-9.70	85.60	-3.80	1.00	-3.10	80.00	7.00
Zaporizhya	55.00	30.80	90.90	1.50	1.40	-2.70	63.90	-9.10
Ivano-Frankivsk	6.10	-18.10	82.30	-7.10	0.40	-3.70	73.20	0.20
Kyiv	61.00	36.80	100.00	10.60	9.10	5.00	98.00	25.00
Kirovohrad	21.70	-2.50	73.80	-15.60	0.80	-3.30	74.30	1.30
Luhansk	29.00	4.80	89.40	0.00	2.00	-2.10	100.00	27.00
Lviv	0.00	-24.20	96.90	7.50	0.00	-4.10	93.10	20.10
Mykolayiv	57.00	32.80	100.00	10.60	3.00	-1.10	100.00	27.00
Odesa	35.40	11.20	95.30	5.90	19.00	14.90	85.01	12.01
Poltava	33.84	9.64	82.17	-7.23	7.00	2.90	65.90	-7.10
Rivne	14.40	-9.80	98.10	8.70	2.90	-1.20	77.80	4.80
Sumy	34.40	10.20	80.00	-9.40	7.40	3.30	69.00	-4.00
Ternopil	0.00	-24.20	100.00	10.60	0.00	-4.10	100.00	27.00
Kharkiv	33.00	8.80	71.00	-18.40	6.00	1.90	41.00	-32.00
Kherson	85.00	60.80	100.00	10.60	1.00	-3.10	100.00	27.00
Khmelnytskiy	0.00	-24.20	78.00	-11.40	0.00	-4.10	75.00	2.00
Cherkasy	26.90	2.70	100.00	10.60	0.00	-4.10	55.00	-18.00
Chernivtsi	3.70	-20.50	77.80	-11.60	0.00	-4.10	71.50	-1.50
Chernihiv	6.72	-17.48	78.00	-11.40	0.70	-3.40	93.80	20.80
City of Kyiv	-	-	100.00	10.60	-	-	98.90	25.90

Goal	Goal 6. Clean Water and Sanitation									
Target	6.3 Reduce the discharge of untreated wastewater, primarily through innovative technologies of water purification at the national and individual levels				6.4 Increase the efficiency of water use				6.5 Implement integrated water resources management	
Indicator	6.3.1. Volume of discharge of polluted (polluted without treatment or insufficiently treated) waste-water into water bodies, millions of cubic meters		6.3.2. Share of discharge of polluted (polluted without treatment or insufficiently treated) waste-water into water bodies in total discharges, %		6.4.1. Water content of GRP, cubic meters of water used per UAH 1.000 of GRP (actual prices)		6.4.2. Current water content of GRP to 2015 level, %		6.5.1. Number of river basins with approved river basin management plans, units	
	2015	>1/<1	2015	+/-	2015	>1/<1	2015	+/-	2015	>1/<1
Ukraine (2015)	**875.00**		**16.38**		**4.88**		**100.0**		**0.0**	
Oblasts										
Vinnytsya	1.00	0.00	1.56	-14.82	2.00	0.41	100.0	-	0.0	-
Volyn	0.00	0.00	0.00	-	2.30	0.47	100.0	-	0.0	-
Dnipropetrovsk	267.00	0.31	39.09	37.53	5.10	1.05	100.0	-	0.0	-
Donetsk	264.00	0.30	31.27	31.27	13.46	2.76	100.0	-	0.0	-
Zhytomyr	3.00	0.00	4.41	-34.68	2.91	0.60	100.0	-	0.0	-
Zakarpattya	2.00	0.00	6.45	-24.82	1.24	0.25	100.0	-	0.0	-
Zaporizhya	70.00	0.08	7.51	3.10	13.26	2.72	100.0	-	0.0	-
Ivano-Frankivsk	1.00	0.00	1.72	-4.73	1.98	0.41	100.0	-	0.0	-
Kyiv	4.00	0.00	0.60	-6.91	6.94	1.42	100.0	-	0.0	-
Kirovohrad	0.00	0.00	0.00	-1.72	5.49	1.13	100.0	-	0.0	-
Luhansk	72.00	0.08	87.81	н/п	5.58	1.14	100.0	-	0.0	-
Lviv	45.00	0.05	21.64	21.64	1.92	0.39	100.0	-	0.0	-
Mykolayiv	0.00	0.00	0.00	-87.81	4.83	0.99	100.0	-	0.0	-
Odesa	44.00	0.05	25.00	3.36	7.62	1.56	100.0	-	0.0	-
Poltava	0.00	0.00	0.00	0.00	1.26	0.26	100.0	-	0.0	-
Rivne	6.00	0.01	10.17	-14.83	3.74	0.77	100.0	-	0.0	-
Sumy	22.00	0.03	47.83	47.83	2.24	0.46	100.0	-	0.0	-
Ternopil	2.00	0.00	6.67	-3.50	1.88	0.38	100.0	-	0.0	-
Kharkiv	10.00	0.01	3.47	-44.36	2.33	0.48	100.0	-	0.0	-
Kherson	0.00	0.00	0.00	-6.67	45.51	н/п	100.0	-	0.0	-
Khmelnytskiy	1.00	0.00	2.50	-0.97	2.48	0.51	100.0	-	0.0	-
Cherkasy	5.00	0.01	4.72	4.72	3.42	0.70	100.0	-	0.0	-
Chernivtsi	2.00	0.00	5.13	2.63	3.19	0.65	100.0	-	0.0	-
Chernihiv	0.00	0.00	0.00	-4.72	3.22	0.66	100.0	-	0.0	-
City of Kyiv	0.00	0.00	0.00	-5.13	1.31	0.27	100.0	-	0.0	-

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 6.3.1, 6.3.2, 6.4.1, 6.4.2 - de-stimulator, given the converse readings in colors

generally critical, as none of the oblasts can boast with over 20% of drain system coverage. Thus, the situation seems to be the best in Odesa oblast having 19%, as well as Dnipropetrovsk (16.5%) and Donetsk (13.8%) oblasts. Inhabitants of the villages of the western region, namely Lviv, Ternopil, Khmelnytskyi and Chernivtsi oblasts and of the central part like Cherkasy and Vinnitsa oblasts, mostly have no access to the centralized drain system.

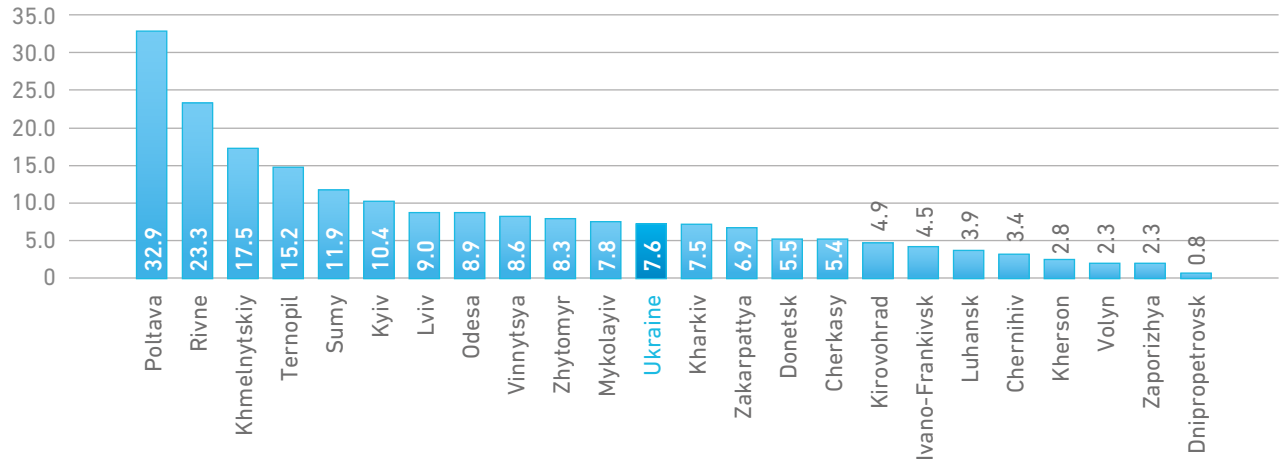
Discharge of industrial polluted (polluted without treatment or insufficiently treated) wastewater into water bodies by commercial companies is extremely dangerous. Such discharge largest share in the total volume of discharges and their total largest volume are registered in industrial regions of the country like Luhansk oblast (87.8% and 72 million m^3 respectively), Sumy (47.8% and 22 million m^3 respectively), Dnipropetrovsk (39.1% and 267 million m^3 respectively), Donetsk (31.3% and 264 million m^3 respectively). However, in many oblasts polluted water discharges are either absent or insignificant, namely in Volyn, Kirovohrad, Mykolaiv, Poltava, Kherson, Chernihiv oblasts and the city of Kyiv.

The analysis of availability of clean drinking water, its further drain and treatment was performed together with a study of volume used for drinking and sanitary needs in m3 per person and the efficiency of water use in production processes, in other words water intensity of GRP, cubic meters of water used per UAH 1,000 of GRP. Once again the values indicate a significant unevenness in water use by region and the efficiency of its use. The city of Kyiv uses biggest volume of water (62.8) and is followed by eastern Ukraine - Dnipropetrovsk (54.8), Kharkiv (45.6) and Zaporizhzhia (40) oblasts, while the western region represented by Ivano-Frankivsk (11.4) Zakarpattia (11.5), Rivne (15.8) and Ternopil (16.4) oblasts use the smallest volume of water. Kherson oblast (45.5) spends a relatively large volume of water, likely due to the need to irrigate agricultural land. Also, this indicator is relatively high in industrial regions represented by Donetsk (13.5) and Zaporizhzhia (13.3) oblasts. Further analysis will be based on comparison of existing water intensity with water intensity values in baseline 2015.

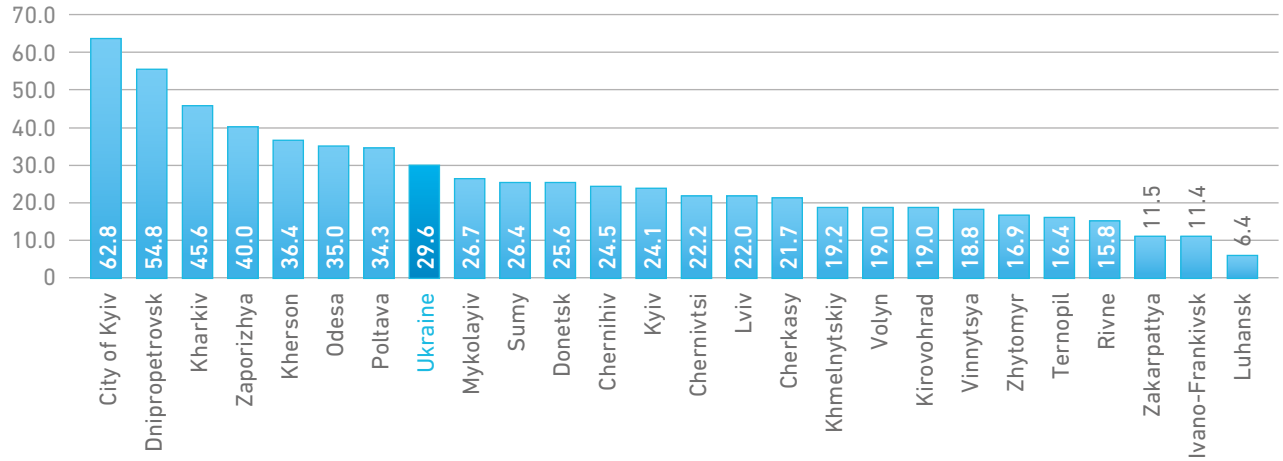
Thus, the elimination of drinking water shortage depends on water accessibility, purity, amount and the efficiency of its use. Almost each region has problems with certain indicators and should focus its attention on the issues inherent therein. Everyone must have access to clean drinking water and use it as efficiently as possible in everyday life and at work. The achievement of certain indicators and gap reduction is quite possible and necessary in the achievement of the sustainable development goals. There is a need in immediate actions of regional authorities assisted by the central authorities.

Baseline indicators of goal in 2015:

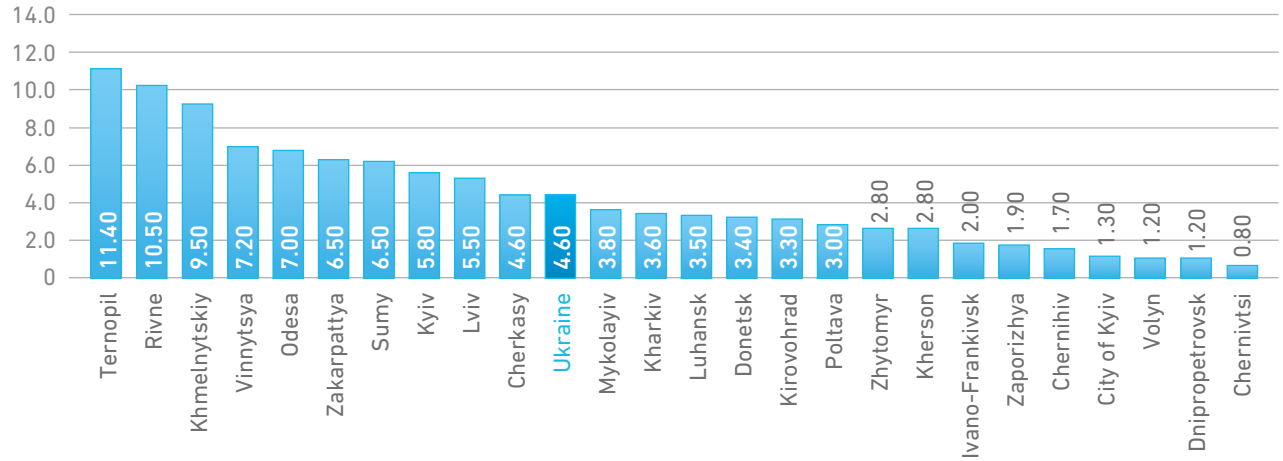
6.1.1. (a) Rate of rural drinking water sources compliance with health and safety regulations, %



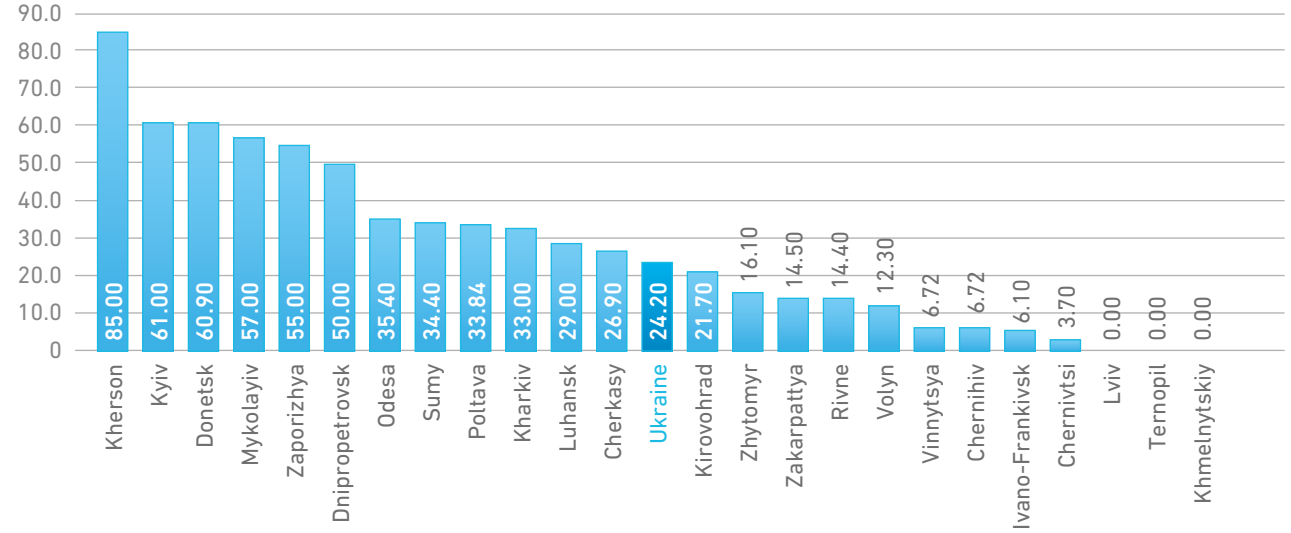
6.1.2. (a) Use of fresh water for drinking and health and sanitary purposes, m^3 per person



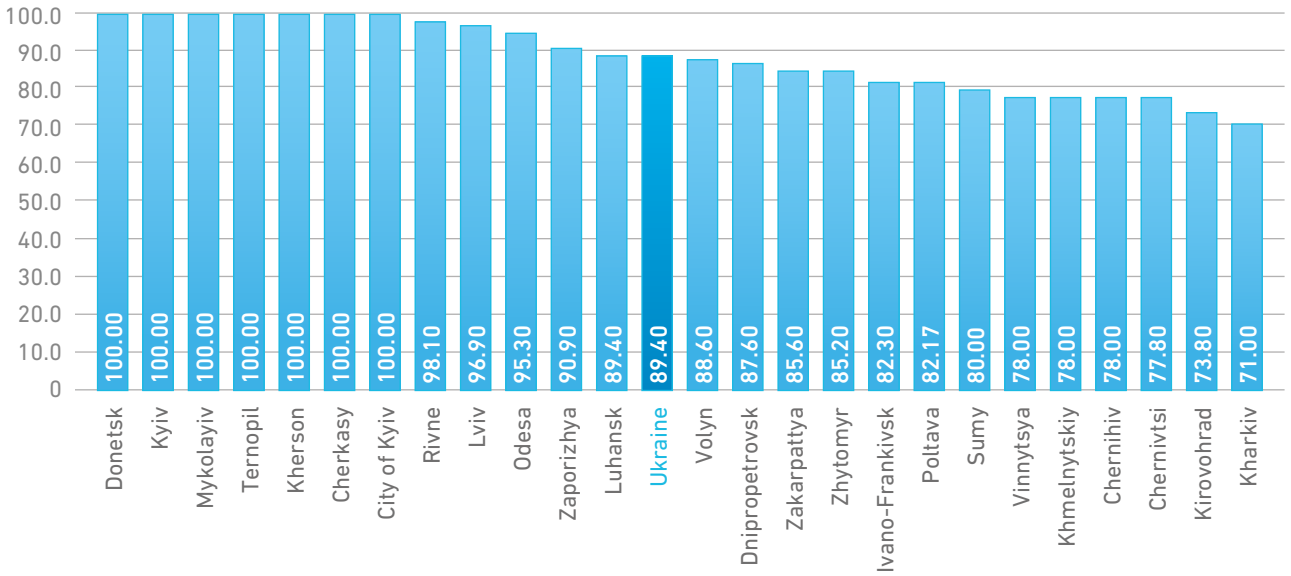
6.1.3. (a) Rate of communal drinking water sources compliance with health and safety regulations, %



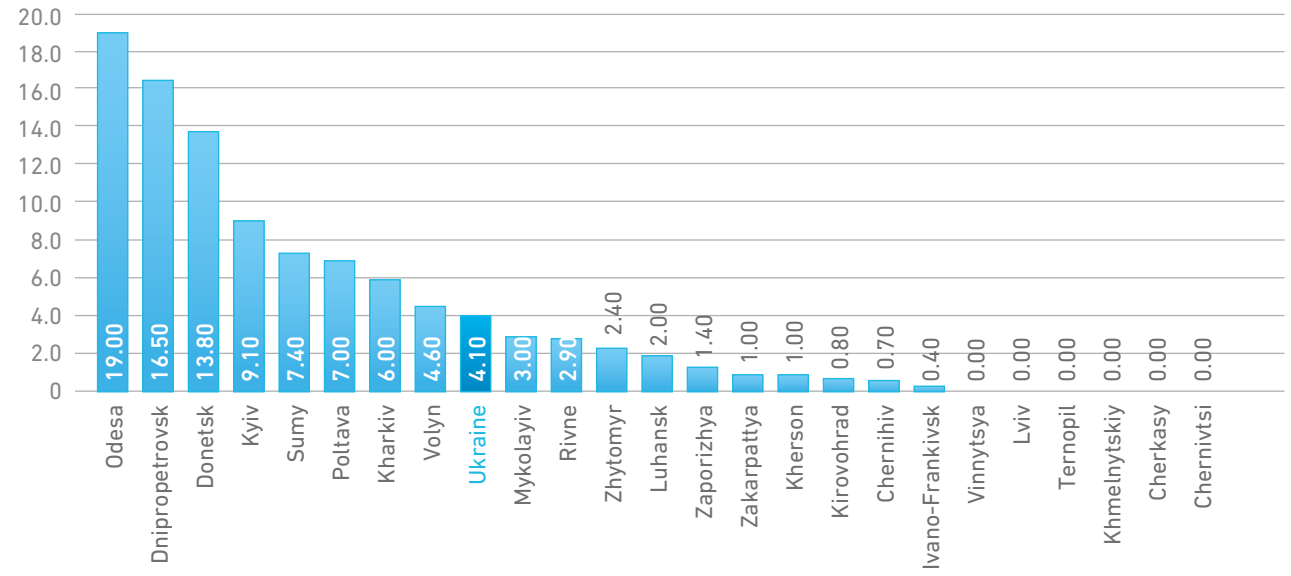
6.1.5. Share of the rural population with access to centralized water supply utilities, %



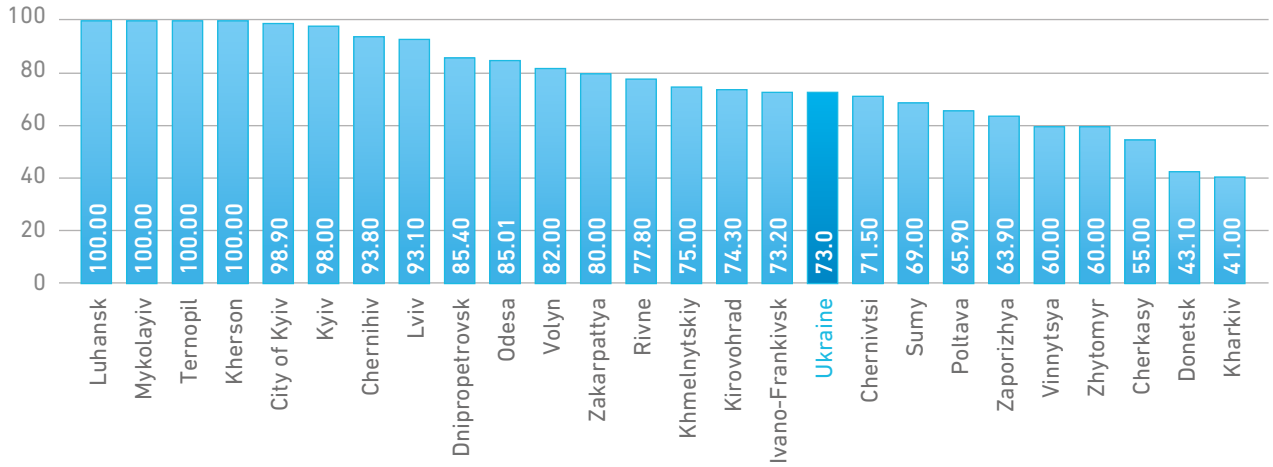
6.1.6. Share of the urban population with access to centralized water supply utilities, %



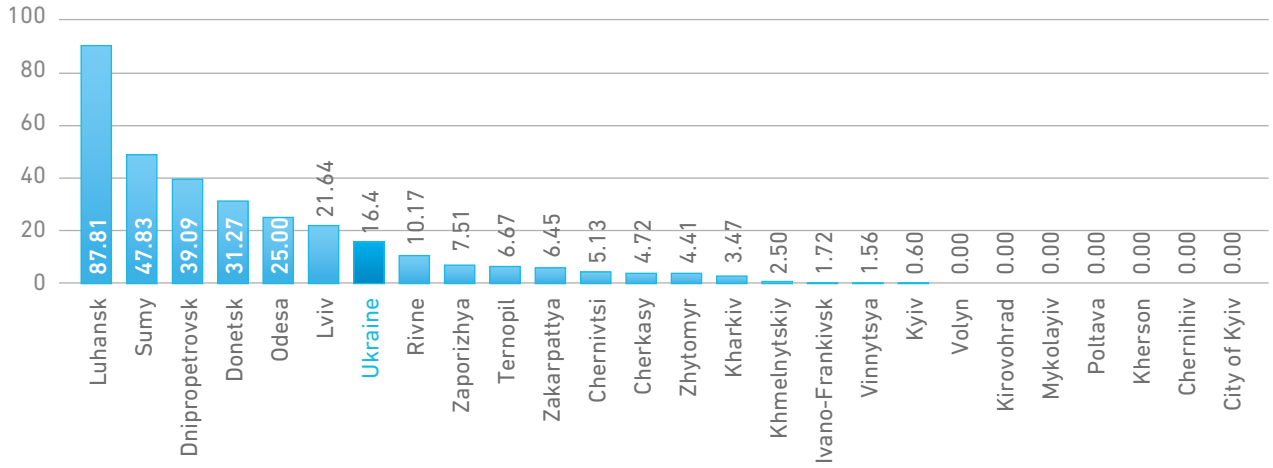
6.2.1. (a) Share of the rural population with access to centralized water drain, %



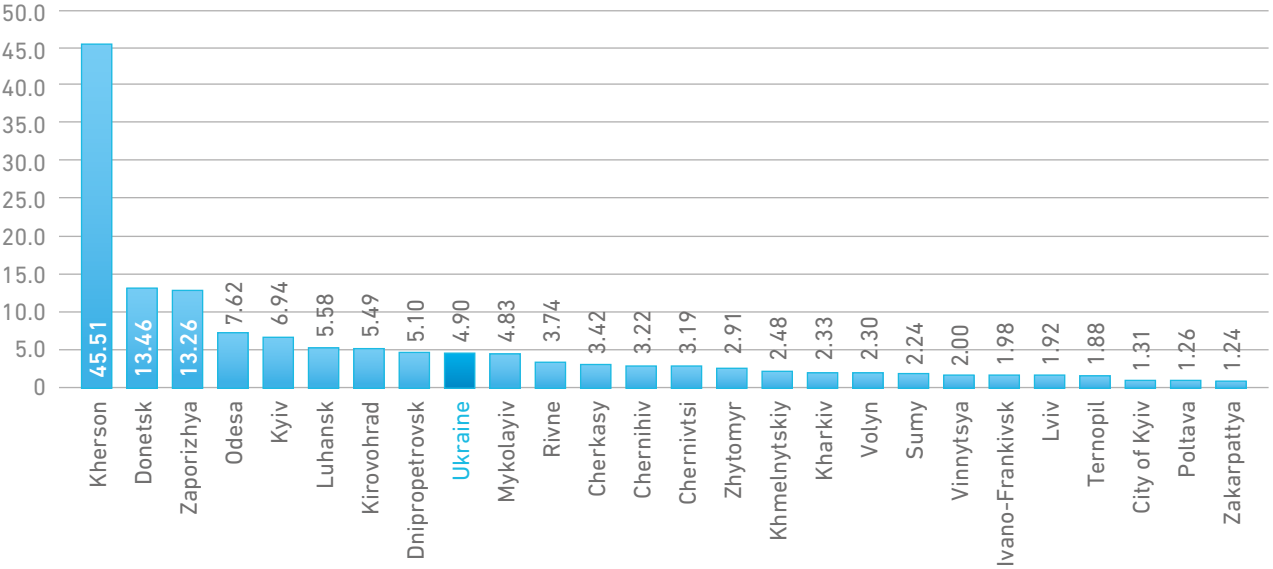
6.2.2. Share of the urban population with access to centralized water drain, %



6.3.2. Share of discharge of polluted (polluted without treatment or insufficiently treated) wastewater into water bodies in total discharges, %



6.4.1. Water content of GRP, cubic meters of water used per UAH 1.000 of GRP (actual prices)



Goal 7. Affordable and Clean Energy

Energy is the economic engine and one of the factors of the quality of life of the population. Free and continuous access to energy supply sources is no less important than access to drinking water. On the other hand, Ukraine's energy resources are limited, so it is crucial to take care of energy efficiency, make efforts to increase the share of renewable energy, reduce the energy consumption of manufacturing industries, minimize losses in networks while transmitting power to consumers, and ensure energy saving.

The regional differentiation of power sector indicators is quite essential. This speaks for different economic specialization of the regions, and then again on the attention of regional authorities to the issues of energy saving and energy efficiency. A significant share of power generation facilities and transmission infrastructure are outdated and require significant investment into their modernization. In addition, there is a range of challenges associated with the monopoly of power producers. Throughout the years, energy efficiency and energy saving received insufficient attention.

The vast majority of issues related to the production of energy and its transfer is out of regional authorities' responsibility, but creation of favorable environment for changing the structure of production, transition to renewable energy, promotion of solar and wind power plants construction and energy saving measures fall within their competence.

Also, regional authorities possess wide range of both financial and institutional tools to improve the situation around power production and energy saving. In terms of consumption, these tools embrace the introduction of programs aimed at promoting energy saving, in particular via the so-called 'warm loans', an active raising awareness campaign on power and heat saving, providing population with assistance in installing power metering equipment, insulation of dwellings and communal facilities, introduction of energy-saving lighting systems. In terms of offerings, it is possible to use such tools as rendering assistance to entrepreneurs in the building new, alternative power production facilities, in particular solar and wind plants construction, provision of land for construction sites, providing assistance in existing infrastructure modernization in order to minimize power and heat losses in the network, etc.

A comparison of the regional indicators baseline for achieving Goal 7 has demonstrated a significant level of their differentiation.

Generation of electricity in millions of kW/h is an important indicator of Goal 7 in terms of offer. Generation of electricity is concentrated mostly in Zaporizhzhia (47,706), Donetsk (21,749), Rivne (19,060), Mykolaiv (16,527) and Khmelnytskyi (13,552) oblasts. These five oblasts generate almost 73% of total electricity in Ukraine.

A share of renewable energy in total energy consumed varies widely from region to region; this share is essential only in oblasts with low level of electricity generation, like Chernivtsi (100%), Kirovohrad (95.6%), Kherson (89.9%) and Odesa (89.9%) oblasts. At the same time, some oblasts report no data on renewable energy generation. Among them are Volyn, Kyiv, and Chernihiv oblasts, as well as the regions with a share of renewable energy sources not exceeding 2%, namely Khmelnytskyi (0.3%), Lviv (0.7%) and Kharkiv (1.4%) oblasts.

As for the process losses of electricity in distribution networks, regional discrepancy is also great. The lowest losses are reported in Dnipropetrovsk oblast (4.7%), the city of Kyiv (7.5%), and Poltava (8.4%) and Zaporizhzhia (8.5%) oblasts, while the highest losses are found in western oblasts, namely Chernivtsi (17.7%), Zakarpattia (17.7%), Ternopil (16.6%) and Kyiv (16.9%) oblasts.

Heat losses in heat networks also vary significantly between regions. Not all regions have relevant data on them; still those regions with available data demonstrate the following values. The lowest losses, in contrast to electricity losses, are registered in western regions: Zakarpattia (0%), Ternopil (11.5%), Khmelnytskyi (12%), Lviv (12.9%), Chernivtsi (13%), Rivne (13%), Volyn (13.1%) and Vinnytsia (13%) oblasts. The highest losses are observed in Cherkasy (37.9%), Ivano-Frankivsk (25%), Zhytomyr (23.2%) and Chernihiv (22.1%) oblasts.

The energy intensity of the gross regional product, tons of fuel equivalent per UAH 1 million GRP is the indicator of energy efficiency; its reading constitutes 55.2, which is quite high for Ukraine in general. The situation in the regional context is as follows: the best indicators are registered in Kherson (26.9), Kirovohrad (30.6), Zakarpattia (33.6), Mykolayiv (33.8), Volyn (34.5) and Zhytomyr (34.7) oblasts. The eastern industrial regions show the highest energy intensity: Donetsk (187.7), Luhansk (140), Zaporizhzhia (106.1) and Ivano-Frankivsk (119.6) oblasts.

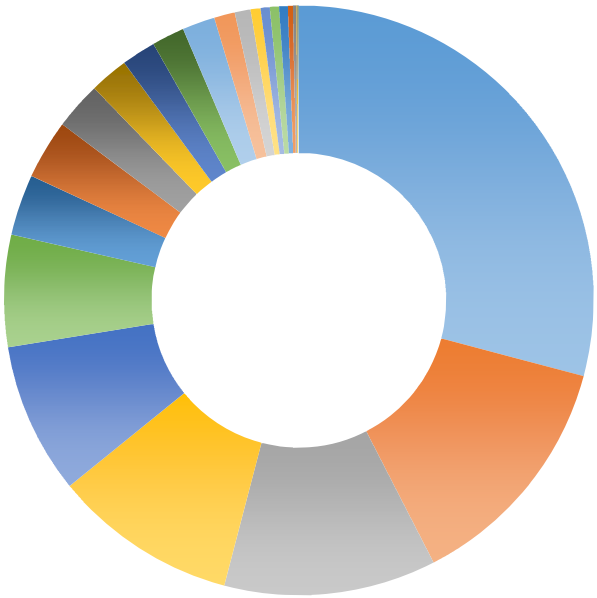
Goal	Goal 7. Affordable and Clean Energy									
Target	7.1 Expand the infrastructure and modernize networks for reliable and sustainable energy supply through the introduction of innovative technologies						7.3 Increase the share of renewable energy in the national energy balance, in particular through the introduction of additional capacities at facilities that produce energy from renewable sources		7.4 Increase the energy efficiency of the economy	
Indicator	7.1.1. Generation of electricity, millions of KWh		7.1.2. Electric power distribution losses, %		7.1.3. Heat losses in heat networks, %		7.3.1. Share of energy produced from renewable sources in total final energy consumption, %		7.4.1. (a) Energy intensity of GRP (losses of energy-yielding materials and petro-chemical products) tones of oil equivalent per UAH million by GRP	
	2015	-	2015	+/-	2015	+/-	2015	+/-	2015	>1/<1
Ukraine (2015)	**163682.00**		**11.74**		**18.82**		**3.00**		**55.23**	
Oblasts										
Vinnytsya	5471.00	-	13.78	2.04	13.00	-5.82	3.56	0.56	62.20	1.13
Volyn	54.00	-	12.54	0.80	13.10	-5.72	0.00	-3.00	34.48	0.62
Dnipropetrovsk	5304.00	-	4.67	-7.07	20.00	1.18	4.90	1.90	89.70	1.62
Donetsk	21749.00	-	15.14	3.40	2.50	-16.32	2.30	-0.70	187.72	3.40
Zhytomyr	19.00	-	13.82	2.08	23.20	4.38	31.05	28.05	34.69	0.63
Zakarpattya	132.00	-	17.69	5.95	0.00	-18.82	24.77	21.77	33.60	0.61
Zaporizhya	47706.00	-	8.52	-3.22	17.50	-1.32	4.77	1.77	106.15	1.92
Ivano-Frankivsk	10039.00	-	12.25	0.51	25.00	6.18	24.77	21.77	119.57	2.16
Kyiv	4263.00	-	16.92	5.18	14.67	-4.15	0.00	-3.00	39.41	0.71
Kirovohrad	761.00	-	12.23	0.49	16.91	-1.91	95.64	92.64	30.60	0.55
Luhansk	3099.00	-	15.75	4.01	14.67	-4.15	-	-	139.99	2.53
Lviv	2929.00	-	13.34	1.60	12.88	-5.94	0.69	-2.31	44.07	0.80
Mykolayiv	16527.00	-	13.56	1.82	14.47	-4.35	2.36	-0.64	33.80	0.61
Odesa	464.00	-	13.81	2.07	-	-	84.90	81.90	36.10	0.65
Poltava	849.00	-	8.35	-3.39	-	-	11.02	8.02	70.09	1.27
Rivne	19060.00	-	13.91	2.17	13.00	-5.82	8.90	5.90	46.66	0.84
Sumy	276.00	-	10.53	-1.21	18.00	-0.82	5.00	2.00	38.04	0.69
Ternopil	42.00	-	16.63	4.89	11.50	-7.32	32.65	29.65	37.28	0.67
Kharkiv	2925.00	-	12.15	0.41	15.20	-3.62	1.44	-1.56	40.82	0.74
Kherson	880.00	-	15.84	4.10	19.38	0.56	89.93	86.93	26.89	0.49
Khmelnytskiy	13552.00	-	15.32	3.58	12.00	-6.82	0.27	-2.73	41.14	0.74
Cherkasy	1433.00	-	12.39	0.65	37.90	19.08	55.60	52.60	63.42	1.15
Chernivtsi	1856.00	-	17.67	5.93	13.00	-5.82	100.00	97.00	38.93	0.70
Chernihiv	820.00	-	13.18	1.44	22.10	3.28	0.00	-3.00	44.53	0.81
City of Kyiv	3473.00	-	7.48		-				10.36	0.19

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 7.3.1 - data on Vinnytsia and Khmelnytskyi oblasts as of 2017; on Zaporizhzhia oblast no account is made of DneproGES Zaporizhzhia hydroelectric power plant; data on Kirovohrad oblast as of 2016.
7.1.2, 7.1.3, 7.4.1 (a) - de-stimulator, given the converse readings in colors.

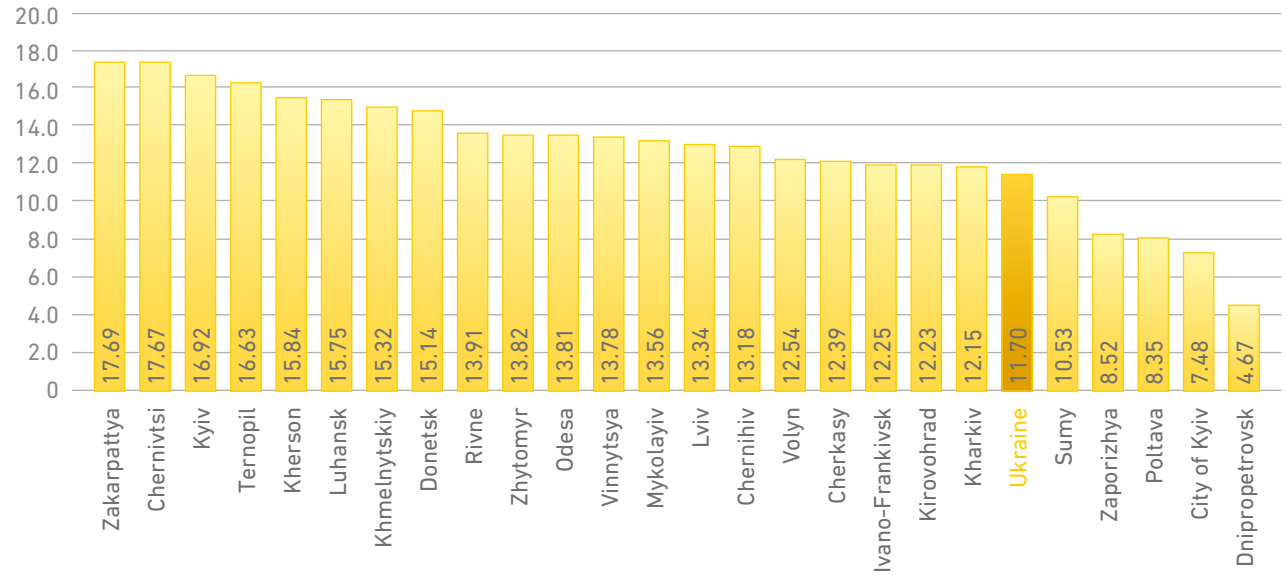
Baseline indicators of goal in 2015:

7.1.1. Generation of electricity, millions of KWh

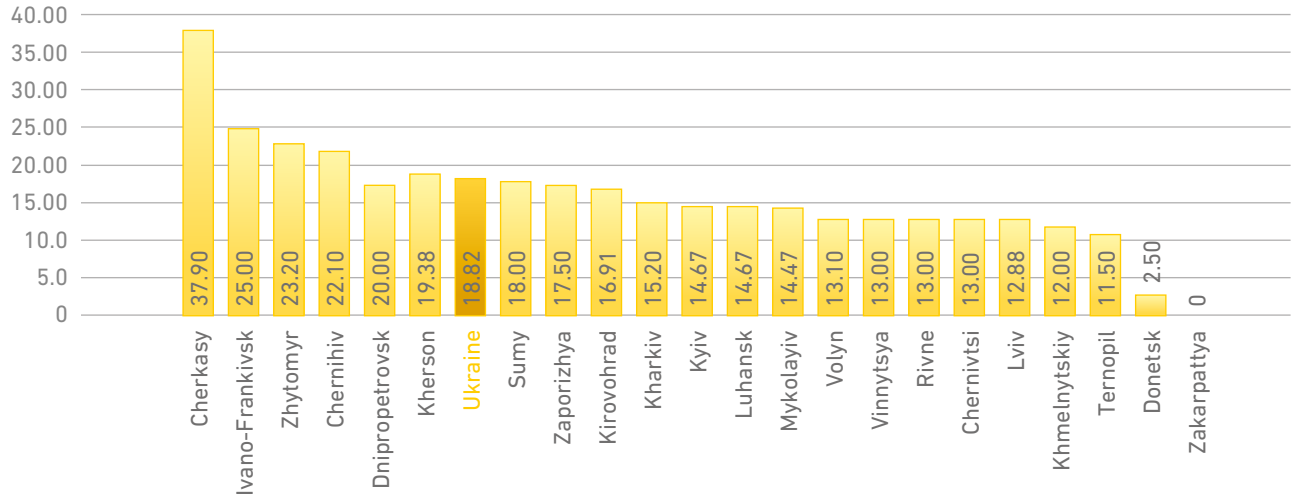


Zaporizhya	47706.0	Kharkiv	2925.0
Donetsk	21749.0	Chernivtsi	1856.0
Rivne	19060.0	Cherkasy	1433.0
Mykolayiv	16527.0	Kherson	880.0
Khmelnytskiy	13552.0	Poltava	849.0
Ivano-Frankivsk	10039.0	Chernihiv	820.0
Vinnytsya	5471.0	Kirovohrad	761.0
Dnipropetrovsk	5304.0	Odesa	464.0
Kyiv	4263.0	Sumy	276.0
City of Kyiv	3473.0	Zakarpattya	132.0
Luhansk	3099.0	Volyn	54.0
Lviv	2929.0	Ternopil	42.0
		Zhytomyr	19.0

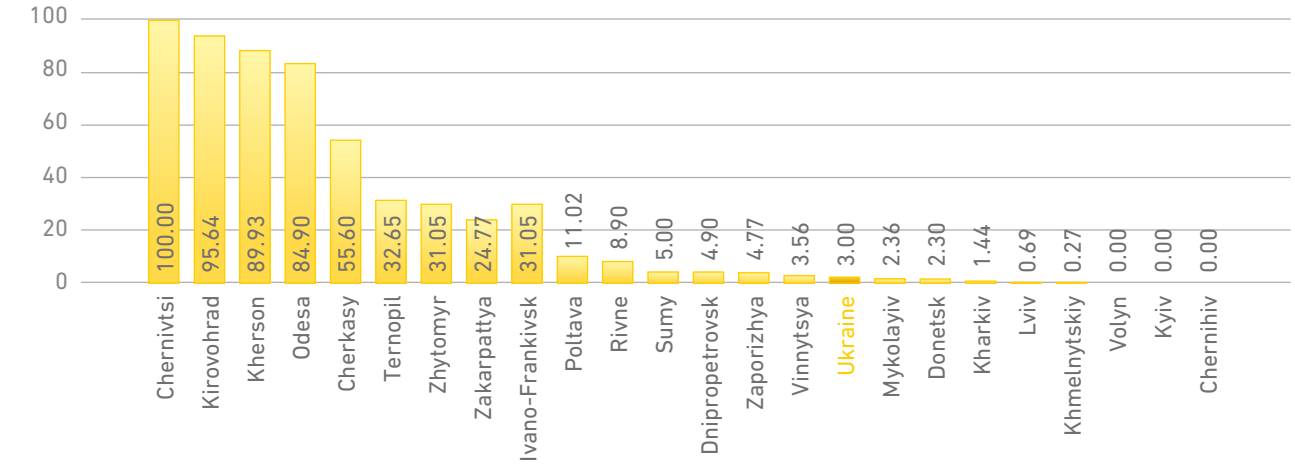
7.1.2. Electric power distribution losses, %



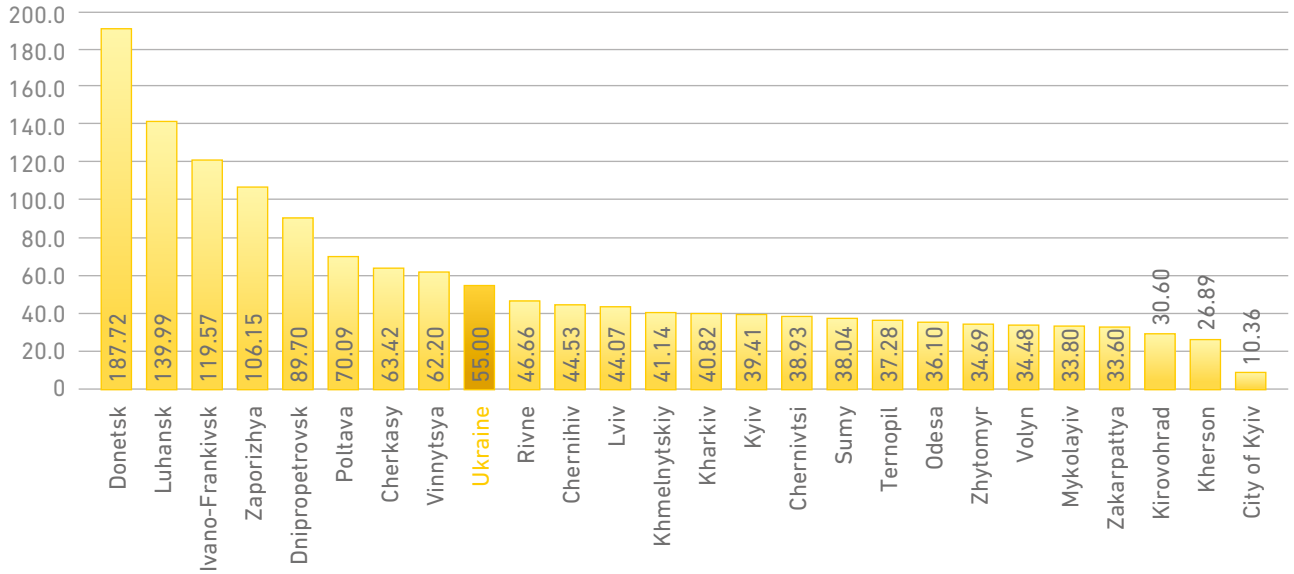
7.1.3. Heat losses in heat networks, %



7.3.1. Share of energy produced from renewable sources in total final energy consumption, %



7.4.1. (a) Energy intensity of GRP (losses of energy-yielding materials and petro-chemical products), tones of oil equivalent per UAH million by GRP



Goal 8. Decent Work and Economic Growth

This goal is one of the cornerstones in achieving rest of all goals, as no significant progress in other areas is achievable in the absence of economic growth generating sufficient resources. To achieve global goals, GDP per capita in developing countries is supposed to grow at least by 7% a year. In Ukraine, the National baseline report 'SDGs' also provides for a 7% annual increase in GDP by 2030. However, it should be borne in mind that in baseline 2015, Ukraine's GDP fell by almost 10% (90.2%). Consequently, the planned growth by 4% in 2020 and 6% in 2025 means a much lower pace, as the drop of previous years must be duly compensated. Yet overall economic growth results from merging of the success of separate oblasts of the country. National economy as a whole will grow with each and any oblast's contribution into general economic growth. Development disparities are considered to be the main problem of regional economic development. These disparities are caused by many factors in past and present years. Some of such factors are as follows: the location of productive forces corresponds to economic realities of former historic period of national economy development, the availability of mineral products and soil fertility, the proximity or remoteness of goods and service markets, the availability of qualified workers. Most of them were weighty in past. Today other drivers take the floor, such as investment attractiveness of regions, ability to modernize production capacity based on current economic development trends, improvement of the quality of human capital, production innovation. Undoubtedly, the armed conflict in Donbass and the annexation of Crimea by the Russian Federation have had a dramatic effect on regional economic development. In 2015 Donetsk and Luhansk oblasts according to the indicator 8.1.1. 'GRP actual volume index' demonstrated the most significant decline of the regional economy, which decisively cut the overall indicator for the country.

Insufficient attention to economic growth as a driver of creating decent jobs for population has eventually led to mass labor emigration of Ukrainian citizens to neighboring and far-abroad countries, which greatly undermines the economic potential of regions. Reaching the targets of Goal 8 aims at addressing these complex issues both at national and regional levels.

Regional authorities' contribution into region's economic growth and improvement of employment rate is restricted with actual lack of powers in tax policy and with dependence on governmental decision-making on issues of budget and resources handling. In addition, until 2019 the oblast councils were not entitled to make governmentborrowings, therefore public investment opportunities were significantly restricted, especially infrastructure ones.

At the same time, the powers of regional and local authorities on local taxes and fees, licensing, small and medium-sized businesses, and the implementation of local government borrowing have been expanding significantly in the process of decentralization over the past years. Implementation of investment projects financed by the EU and other donors opens new horizon. However, weak strategic planning ability, poor institutional background and insufficient capacity of local staff to develop and perform investment projects remains to be an obstacle here.

Limitations imposed by the central government affect the region's economic development capacity to apply economic incentives for territorial development and to set special investment regimes for foreign direct investment attraction, especially in depressed and stagnant areas. Such impacts impede the development of public-private partnership, industrial parks and special economic zones establishment, as well as other forms of attracting investment into economic development. The Regional Development Fund, established within the state budget and designed to align the economic capacities of the regions, serves mostly for the implementation of small unstructured and random social projects, implementation of which aggravate existing problems of budget underfinancing of newly created social infrastructure.

Targets identified at both national and regional levels for the purpose of achieving Goal 8 aim at activating drivers of economic growth and decent jobs creation for local population. However, existing regional peculiarities and economic specialization of oblasts greatly differentiate the opportunities to end general national targets and reach the indicators of their implementation.

A share of capital investment to GRP is one of the important indicators describing the economic growth capacity. Its value in baseline year 2015 reflects a significant investment drop in industrial developed regions. This share is below average across Ukraine, especially in Donetsk and Luhansk oblasts, which suffered not only from inflation,

Goal	Goal 8. Decent Work and Economic Growth									
Target	8.1 Ensure a steady GDP growth by modernizing production, developing innovation, increasing export potential and exporting products with high value added								8.2 Increase the efficiency of production based on sustainable development and the development of competitive high-tech industries	
Indicator	8.1.1. GRP actual volume index, %		8.1.2. Share of capital investment to GRP, %		8.1.3. Share of exports of goods whose production uses technologies of high and medium high level in total exports of goods, %		8.1.4. (a) Share on innovation costs in GRP, %		8.2.1. (a) Share of investment into machinery, equipment and inventory in the structure of asset investment, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**90.20**		**13.73**		**19.20**		**0.69**		**33.10**	
Oblasts										
Vinnytsya	97.10	6.90	12.31	-1.42	4.98	-14.22	0.96	0.27	43.43	10.33
Volyn	95.30	5.10	19.46	5.73	48.30	29.10	0.21	-0.49	48.83	15.73
Dnipropetrovsk	90.30	0.10	12.04	-1.69	19.20	0.00	3.52	2.82	37.93	4.83
Donetsk	61.30	н/п	7.22	-6.51	5.16	-14.04	0.72	0.02	44.22	11.12
Zhytomyr	98.10	7.90	10.52	-3.21	22.06	2.86	0.08	-0.61	35.14	2.04
Zakarpattya	93.50	3.30	13.05	-0.69	64.20	45.00	0.08	-0.62	20.40	-12.70
Zaporizhya	94.70	4.50	8.75	-4.98	30.73	11.53	0.36	-0.33	50.77	17.67
Ivano-Frankivsk	92.00	1.80	20.96	7.22	31.05	11.85	0.20	-0.49	22.69	-10.41
Kyiv	94.00	3.80	23.42	9.68	16.45	-2.75	0.14	-0.56	26.11	-6.99
Kirovohrad	91.70	1.50	10.55	-3.18	20.18	0.98	0.33	-0.36	52.34	19.24
Luhansk	47.70	н/п	8.64	-5.10	12.49	-6.71	0.10	-0.59	38.67	5.57
Lviv	95.20	5.00	14.14	0.40	30.33	11.13	0.29	-0.40	25.42	-7.68
Mykolayiv	95.30	5.10	12.43	-1.31	36.97	17.77	0.61	-0.09	32.42	-0.68
Odesa	95.80	5.60	10.01	-3.73	33.00	13.80	0.05	-0.64	34.76	1.66
Poltava	93.80	3.60	8.70	-5.04	-	-	0.13	-0.56	36.84	3.74
Rivne	93.40	3.20	12.29	-1.44	29.23	10.03	0.02	-0.68	22.77	-10.33
Sumy	96.70	6.50	8.81	-4.92	40.90	21.70	0.39	-0.30	43.51	10.41
Ternopil	93.70	3.50	14.36	0.63	50.49	31.29	0.05	-0.64	27.47	-5.63
Kharkiv	90.90	0.70	9.01	-4.73	37.93	18.73	0.53	-0.16	39.25	6.15
Kherson	98.70	8.50	9.64	-4.09	11.54	-7.66	0.22	-0.48	45.65	12.55
Khmelnytskiy	92.20	2.00	16.57	2.84	21.93	2.73	0.16	-0.53	26.72	-6.38
Cherkasy	95.00	4.80	8.82	-4.91	14.18	-5.02	0.11	-0.59	41.99	8.89
Chernivtsi	94.70	4.50	15.07	1.34	12.31	-6.89	0.10	-0.59	13.23	-19.87
Chernihiv	93.40	3.20	9.60	-4.13	4.38	-14.82	0.09	-0.60	41.49	8.39
City of Kyiv	93.30	3.10	19.51	5.78		-19.20	0.48	-0.21		-33.10

Goal	Goal 8. Decent Work and Economic Growth									
Target	8.2 Increase the efficiency of production based on sustainable development and the development of competitive high-tech industries				8.3 Increase employment		8.4 Reduce the share of youth not in employment, education or professional training		8.5 Promote a safe and secure working environment for all workers, including through the application of innovative technologies in terms of health and safety	
Indicator	8.2.2. (a) GRP per one employed person, UAH thousand		8.2.3. (a) Share of intermediate consumption in sold region's product, %		8.3.1. (a) Employment rate among those aged 15-70, %		8.4.1. Share of youth not in employment, education or professional training in the total number of population aged 15–24, %		8.5.1. (a) Number of victims of accidents at work per 100.000 of employed population aged 15-70	
	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-	2015	>1/<1
Ukraine (2015)	**120.96**		**43.73**		**56.70**		**12.80**		**25.91**	
Oblasts										
Vinnytsya	88.05	0.73	74.25	30.52	57.70	1.00	21.30	8.50	26.23	1.01
Volyn	79.22	0.65	42.00	-1.73	53.10	-3.60	27.40	14.60	44.80	1.73
Dnipropetrovsk	145.41	1.20	50.35	6.62	60.90	4.20	17.00	4.20	41.09	1.59
Donetsk	151.33	1.25	56.95	13.22	50.30	-6.40	18.80	6.00	112.65	4.35
Zhytomyr	75.34	0.62	79.25	35.52	55.50	-1.20	-	-	20.13	0.78
Zakarpattya	55.68	0.46	60.43	16.70	56.20	-0.50	26.93	14.13	7.12	0.28
Zaporizhya	118.75	0.98	70.25	26.52	56.40	-0.30	31.50	18.70	38.25	1.48
Ivano-Frankivsk	81.88	0.68	89.24	45.51	54.80	-1.90	12.52	-0.28	16.12	0.62
Kyiv	140.58	1.16	41.18	-2.55	58.10	1.40	-	-	22.57	0.87
Kirovohrad	98.58	0.82	62.85	19.12	54.00	-2.70	17.68	4.88	81.44	3.14
Luhansk	76.93	0.64	82.74	39.01	54.60	-2.10	-	-	16.65	0.64
Lviv	91.05	0.75	52.24	8.51	55.50	-1.20	12.87	0.07	10.36	0.40
Mykolayiv	94.50	0.78	57.18	13.45	58.40	1.70	7.70	-5.10	44.03	1.70
Odesa	98.19	0.81	51.07	7.34	57.30	0.60	3.07	-9.73	6.49	0.25
Poltava	165.29	1.37	57.38	13.65	54.20	-2.50	-	-	21.42	0.83
Rivne	72.24	0.60	88.46	44.73	58.55	1.85	20.15	7.35	42.24	1.63
Sumy	88.25	0.73	71.31	27.58	55.60	-1.10	15.99	3.19	19.13	0.74
Ternopil	65.66	0.54	40.32	-3.41	51.60	-5.10	23.57	10.77	28.80	1.11
Kharkiv	101.42	0.84	58.61	14.88	59.30	2.60	5.05	-7.75	4.79	0.19
Kherson	72.23	0.60	72.21	28.48	56.10	-0.60	46.60	33.80	32.08	1.24
Khmelnytskiy	82.18	0.68	78.03	34.30	52.60	-4.10	12.75	-0.05	14.59	0.56
Cherkasy	97.03	0.80	62.03	18.29	56.50	-0.20	33.33	20.53	19.10	0.74
Chernivtsi	50.43	0.42	76.61	32.88	54.90	-1.80	12.79	-0.01	31.59	1.22
Chernihiv	85.57	0.71	62.42	18.69	56.20	-0.50	21.07	8.27	6.94	0.27
City of Kyiv	332.62	2.75	26.44	-17.29	62.00	5.30		-12.80	8.91	0.34

Goal	Goal 8. Decent Work and Economic Growth									
Target	8.5 Promote a safe and secure working environment for all workers, including through the application of innovative technologies in terms of health and safety				8.6 Create institutional and financial capacities for the self-realization of the potential of the economically active population and the development of the creative economy					
Indicator	8.5.2. Number of workers killed in accidents at work, % of 2015 level		8.5.3. Share of workers employed in jobs with hazardous working conditions in the total full-time payroll, %		8.6.1. (a) Share of persons employed by SMEs in total employed population aged 15-70, %		8.6.2. (a) Share of sold products (goods. services) of SMEs, % of total volume of sold products		8.6.3. (a) Share of loaned money in capital investment structure upon sources of funding, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**100.00**		**12.68**		**25.42**		**60.20**		**7.60**	
Oblasts										
Vinnytsya	100.00	0.00	9.92	-2.77	18.99	-6.43	71.73	11.53	6.60	-1.00
Volyn	100.00	0.00	8.98	-3.70	25.17	-0.25	46.90	-13.30	1.50	-6.10
Dnipropetrovsk	100.00	0.00	21.04	8.36	24.09	-1.33	59.00	-1.20	1.10	-6.50
Donetsk	100.00	0.00	28.95	16.27	26.44	1.02	31.60	n/a	1.50	-6.10
Zhytomyr	100.00	0.00	9.59	-3.09	20.53	-4.89	78.57	18.37	3.80	-3.80
Zakarpattya	100.00	0.00	7.87	-4.81	14.23	-11.19	91.57	31.37	1.40	-6.20
Zaporizhya	100.00	0.00	20.17	7.49	25.12	-0.31	47.69	-12.51	2.60	-5.00
Ivano-Frankivsk	100.00	0.00	8.91	-3.77	13.78	-11.64	85.99	25.79	2.90	-4.70
Kyiv	100.00	0.00	11.90	-0.79	32.44	7.02	65.12	4.91	3.20	-4.40
Kirovohrad	100.00	0.00	10.37	-2.31	23.27	-2.15	88.12	27.91	3.10	-4.50
Luhansk	100.00	0.00	17.92	5.24	19.59	-5.83	56.98	-3.22	2.10	-5.50
Lviv	100.00	0.00	10.42	-2.26	23.01	-2.42	66.72	6.52	6.40	-1.20
Mykolayiv	100.00	0.00	10.29	-2.39	18.15	-7.27	66.20	6.00	23.40	15.80
Odesa	100.00	0.00	8.97	-3.72	23.11	-2.31	75.98	15.78	12.30	4.70
Poltava	100.00	0.00	16.93	4.25	27.42	2.00	55.33	-4.88	4.10	-3.50
Rivne	100.00	0.00	12.78	0.10	15.78	-9.64	80.77	20.57	2.70	-4.90
Sumy	100.00	0.00	13.66	0.98	19.26	-6.16	53.15	-7.05	8.20	0.60
Ternopil	100.00	0.00	8.52	-4.16	-	-	26.84	н/п	3.50	-4.10
Kharkiv	100.00	0.00	10.92	-1.76	32.50	7.08	80.38	20.18	4.60	-3.00
Kherson	100.00	0.00	4.85	-7.84	17.50	-7.92	87.65	27.45	4.90	-2.70
Khmelnytskiy	100.00	0.00	11.73	-0.95	19.44	-5.98	78.72	18.52	3.20	-4.40
Cherkasy	100.00	0.00	15.40	2.72	21.39	-4.03	73.74	13.53	3.10	-4.50
Chernivtsi	100.00	0.00	7.28	-5.41	13.30	-12.12	100.00	39.80	1.10	-6.50
Chernihiv	100.00	0.00	8.99	-3.69	20.59	-4.83	75.45	15.25	4.00	-3.60
City of Kyiv	100.00	0.00	5.65	-7.03	0.00				14.20	6.60

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 8.3.1- data on Kyiv oblast as of 2016; 8.5.1 - data on Luhansk oblast as of 2014; 8.6.4 - data on oblasts as of 2017
8.2.3 (a), 8.4.1, 8.5.1 (a), 8.5.2, 8.5.3 - de-stimulator, given the converse readings in colors

national currency devaluation and the breakdown of cooperative ties, but also from physical demolition of capital assets. Meanwhile, western regions manage to keep their investment potential, inter alia owing to the EU proximity, the latter being a new major economic partner since severance of economic ties with Russian Federation. The city of Kyiv and Kyiv oblast have improved their capacity due to emerged concentration of capital from eastern regions and to a slack period in traditional industrial regions.

Since economic growth in modern world is closely linked to innovation, an indicator of share of innovation costs in GRP is an important indicator of the target 8.1. 'Ensure a steady GDP growth by modernizing production, developing innovation, increasing export potential and exporting products with high value added'. Here Dnipropetrovsk oblast keeps leading position, owing to its science-based industry, capable of producing innovative products. Still, in general, innovation trends concentrate in areas supplied with existing production, scientific and engineering facilities necessary to unleash innovation.

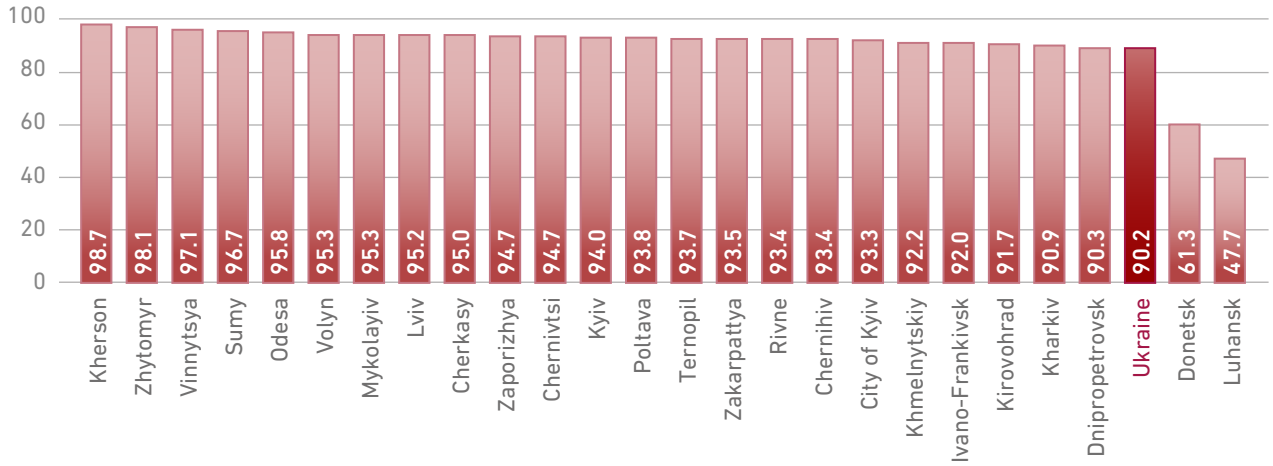
Indicator 8.2.2. 'GRP per one employed person, UAH thousand' is a key indicator of target 8.2. 'Increase the efficiency of production based on sustainable development and the development of competitive high-tech industries'. Its reading in baseline year is above average in Kyiv city, Poltava, Dnipropetrovsk, Donetsk and Kyiv oblasts, and reflects the structure of production and the share of high value-added products. Exactly this direction should be taken while changing the structure of production in other oblasts.

This target has another key indicator, namely 8.3. 'Increase the population employment rate'. Generally, in Ukraine in baseline year this indicator amounted to 56.3% and should rise up to 70% by 2030. This indicator directly depends on economic development trends. Thus, in 2015 it is higher in the group of industrially developed regions (with Kharkiv, Dnipropetrovsk, and Zaporizhzhia oblasts on top) and is smaller in less industrially developed oblasts (like Khmelnytskyi and Ternopil) and in oblasts with damaged traditional industrial infrastructure (like Donetsk, Kirovohrad). To increase employment means to create jobs in industries with high added value and respectively high wages. Otherwise, Ukraine needs to address a new challenge of massive labor emigration from all over the country, which has become a new phenomenon, compared to emigration of dwellers of cross-border region in the course of previous years. According to European experts, there are about 5 million of migrant Ukrainian workers as of the end of 2018. Particular attention should be paid to employing young people, according target 8.4. 'Reduce the share of youth not in employment, education or professional training'. In baseline year across Ukraine an average reading of this indicator (8.4.1. Share of youth not in employment, education or professional training in the total population aged 15–24) constituted 12.8%. Fifteen oblasts reported over the average readings. Kherson, Cherkassy, Zaporizhzhia and a number of western oblasts report on especially critical situation. This problem might be addressed via the restoration of traditional production in regions neglected as a result of macroeconomic instability and breakdown of trade ties and via the promotion of small and medium-sized businesses, which fall under the competence of local authorities.

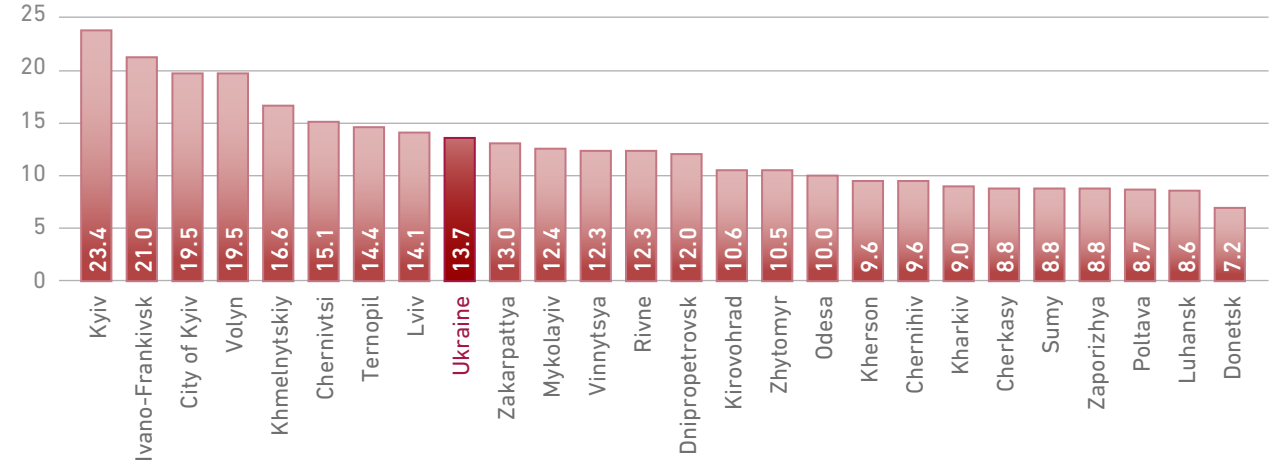
In this regard, target 8.6. 'Create institutional and financial capacities for the self-realization of the potential of the economically active population and the development of the creative economy' is important. Indicator 8.6.1. 'Share of persons employed by SMEs in total employed population aged 15-70' is one of the key ones her. These are the companies with up to 50 mln UAH turnover. As of 2015, this share was moderate. The highest indicator is registered in Kharkiv oblast (32.5%), the lowest is demonstrated by Chernivtsi oblast (28.3%). The development of such enterprises is directly tied with business climate in the country and respective region, as well as with financial resources accessibility, first of all, availability of loans to such business, which in many countries represent a separate category of lending. The indicator of this target 8.6.3. 'Share of bank lending in capital investment structure upon sources of funding' have been introduced. Mykolaiv, Odesa, Sumy oblasts and the city of Kyiv demonstrate levels above the national average. Although it does not fully reflect lending to small and medium-sized businesses, in general, those oblasts which will simultaneously improve the business climate and ensure accessibility of financial funding could reach success in this area.

Baseline indicators of goal in 2015:

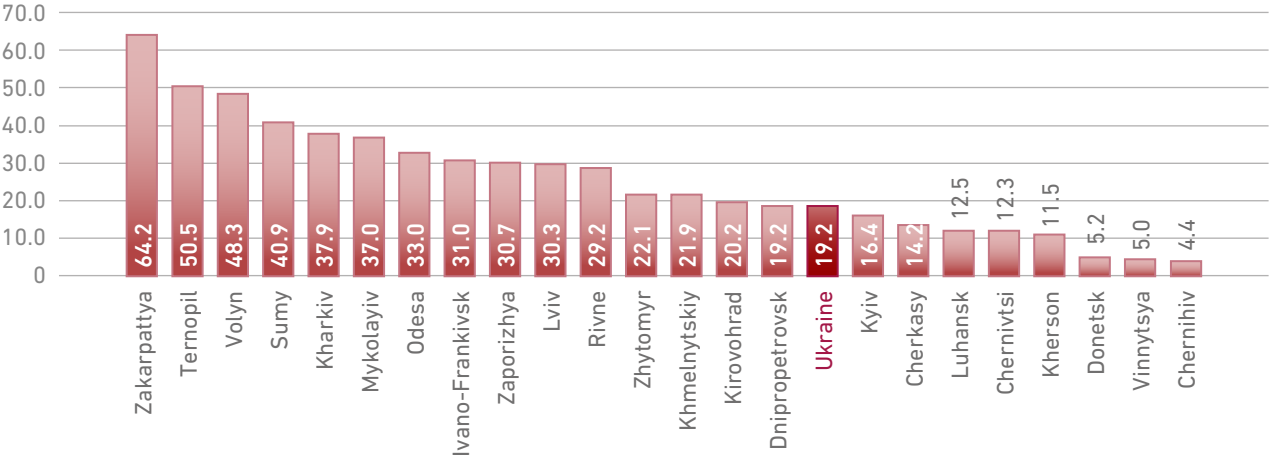
8.1.1. GRP actual volume index, %



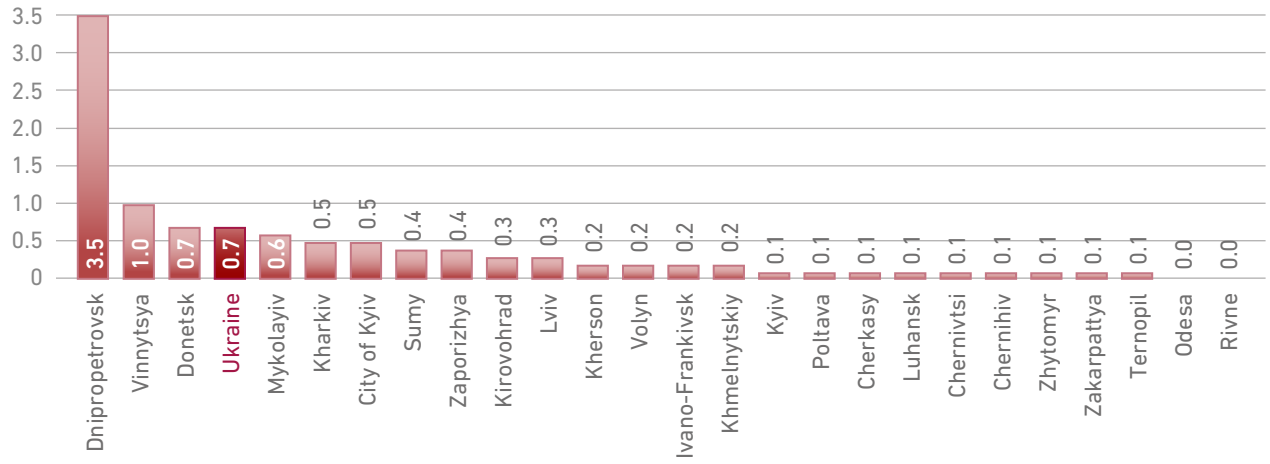
8.1.2. Share of capital investment to GRP, %



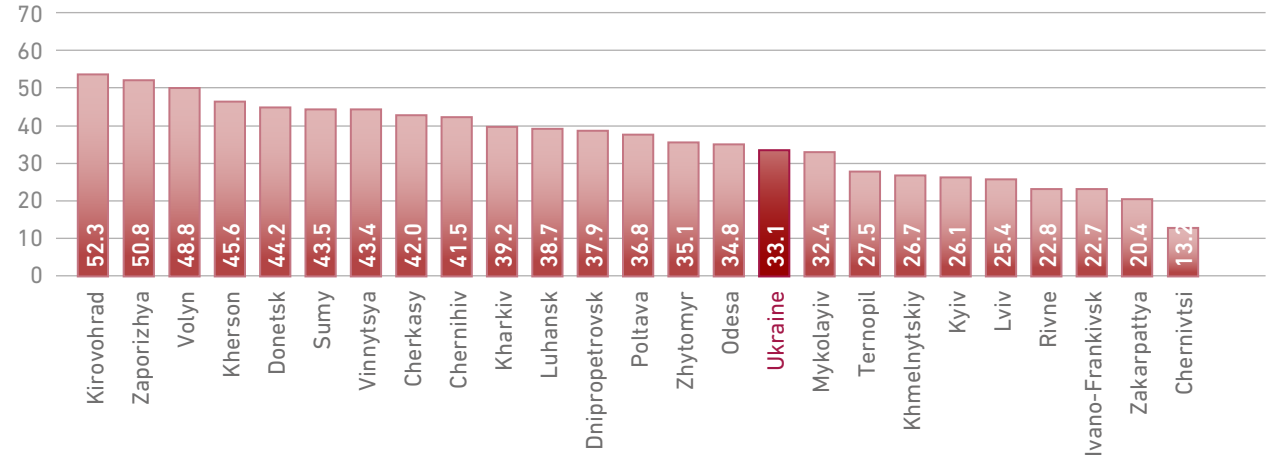
8.1.3. Share of exports of goods whose production uses technologies of high and medium high level in total exports of goods, %



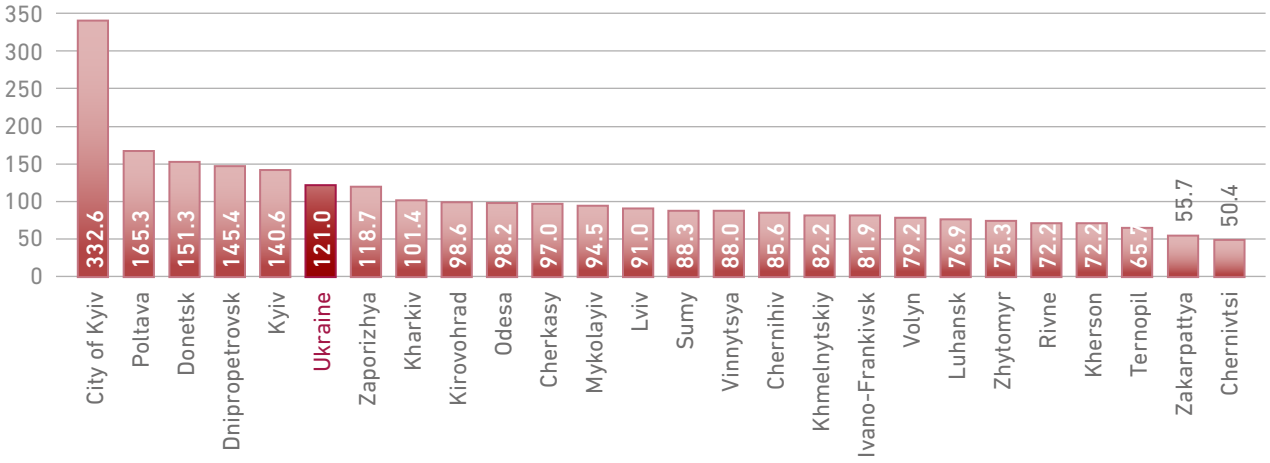
8.1.4. (a) Share on innovation costs in GRP, %



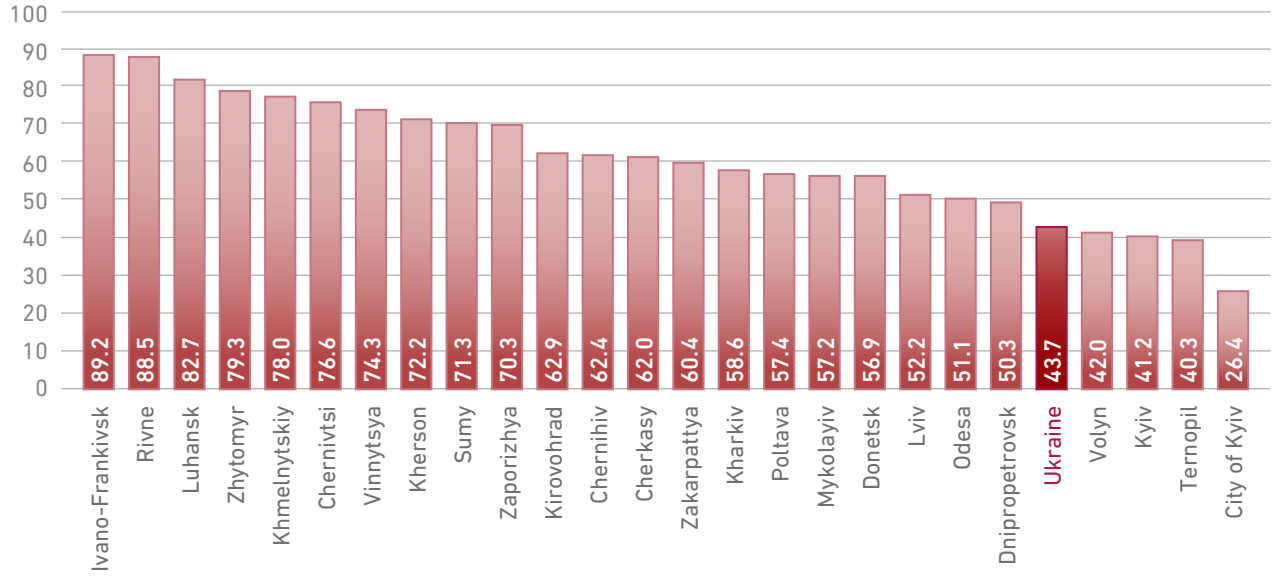
8.2.1. (a) Share of investment into machinery. equipment and inventory in the structure of asset investment, %



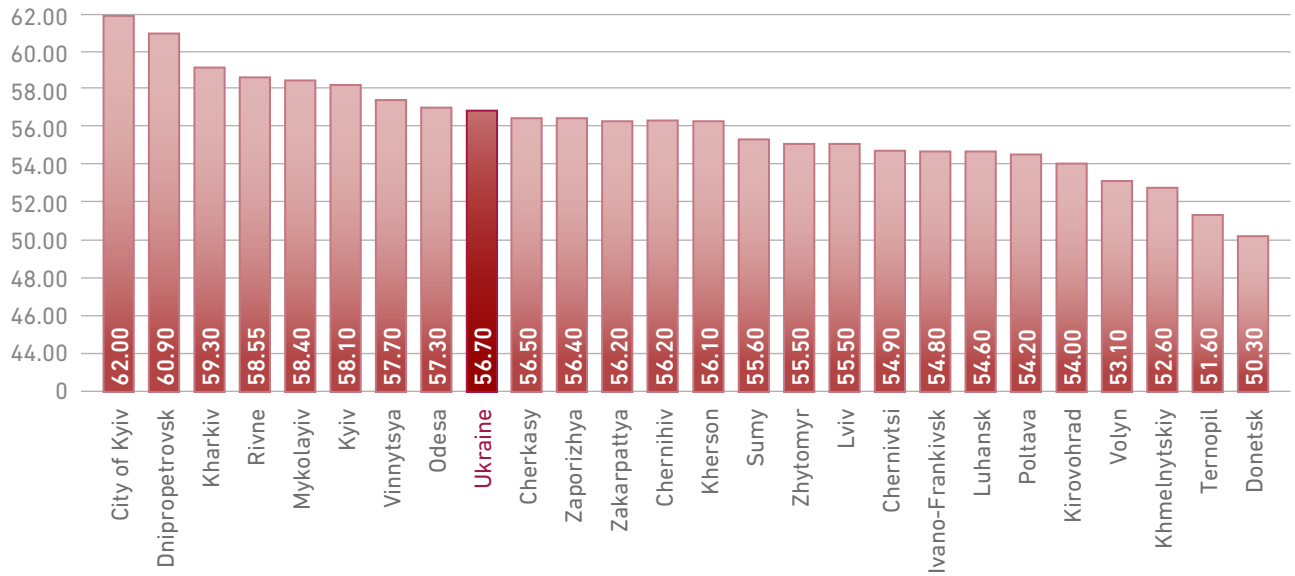
8.2.2. (a) GRP per one employed person, UAH thousand



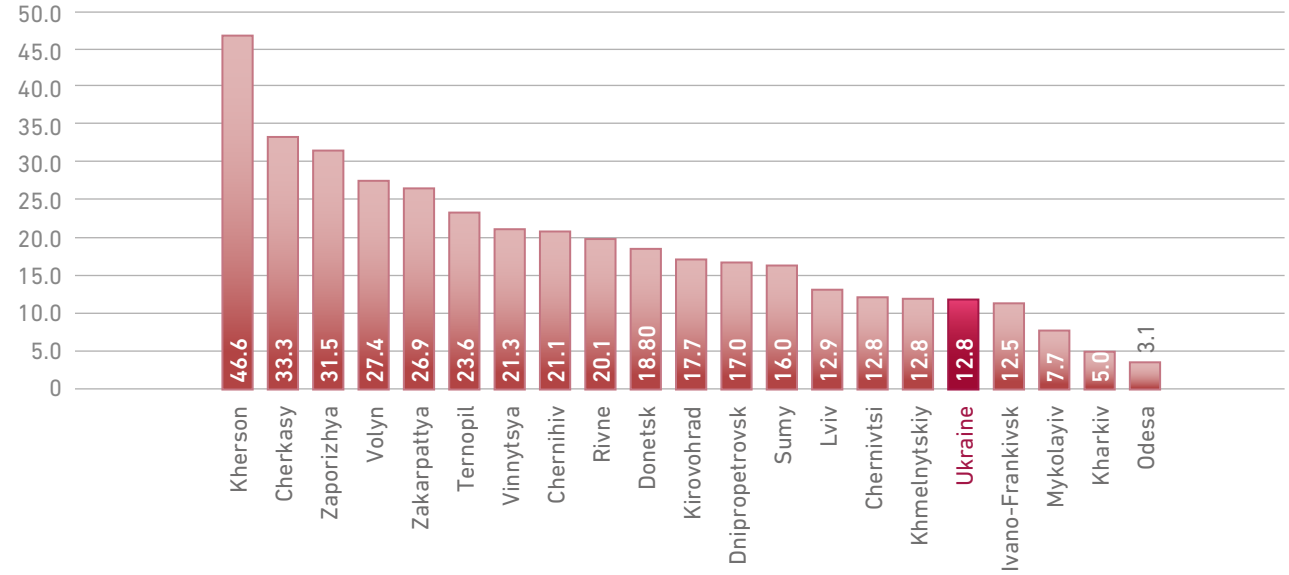
8.2.3. (a) Share of intermediate consumption in sold region's product, %



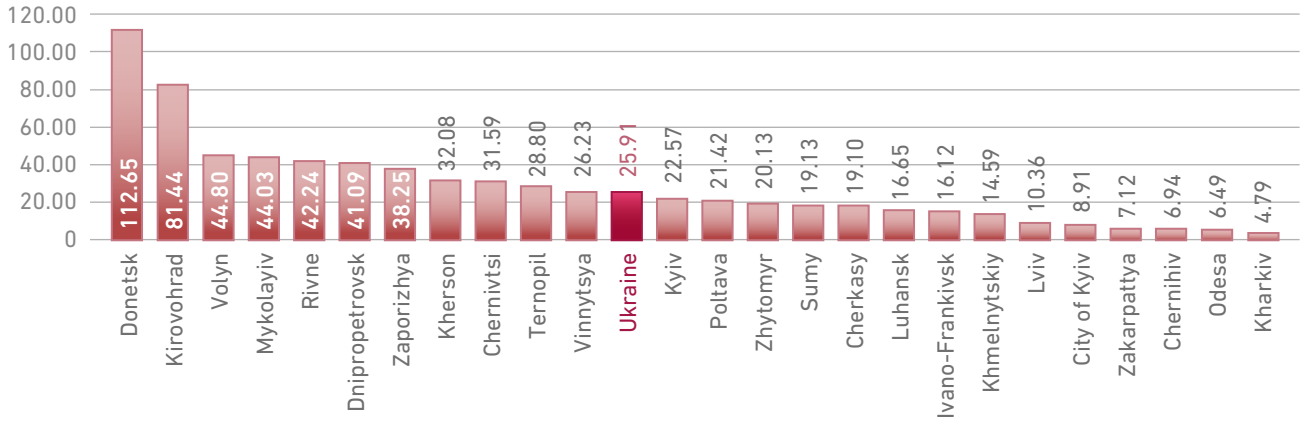
8.3.1. (a) Employment rate among those aged 15-70, %



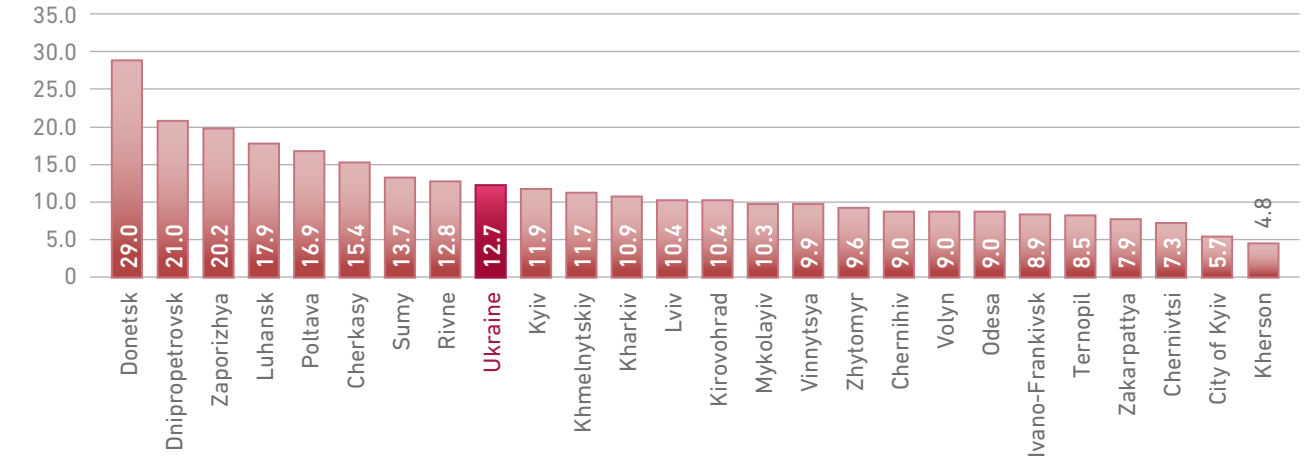
8.4.1. Share of youth not in employment. education or professional training in the total number of population aged 15–24, %



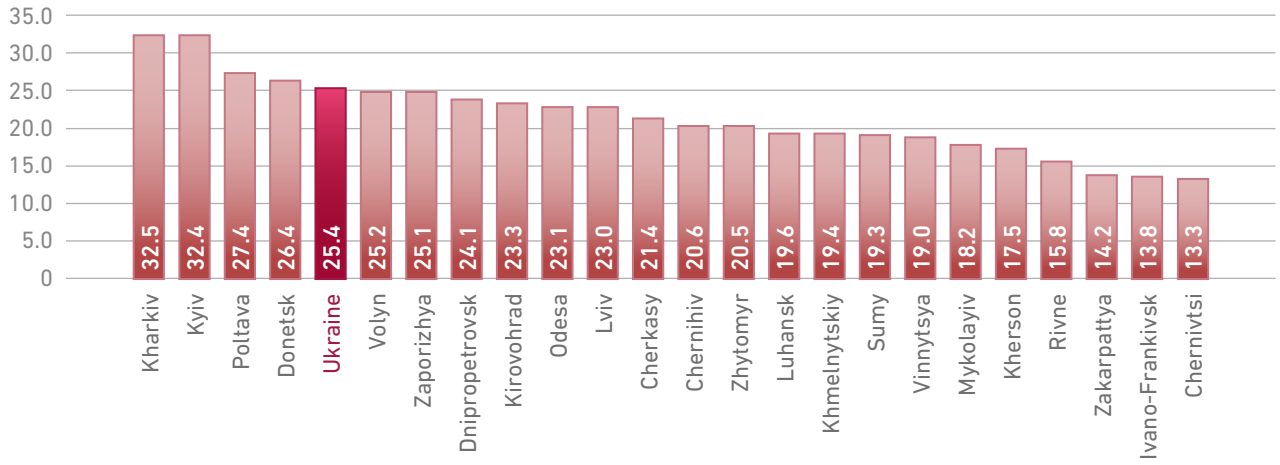
8.5.1. (a) Number of victims of accidents at work per 100.000 of employed population aged 15-70



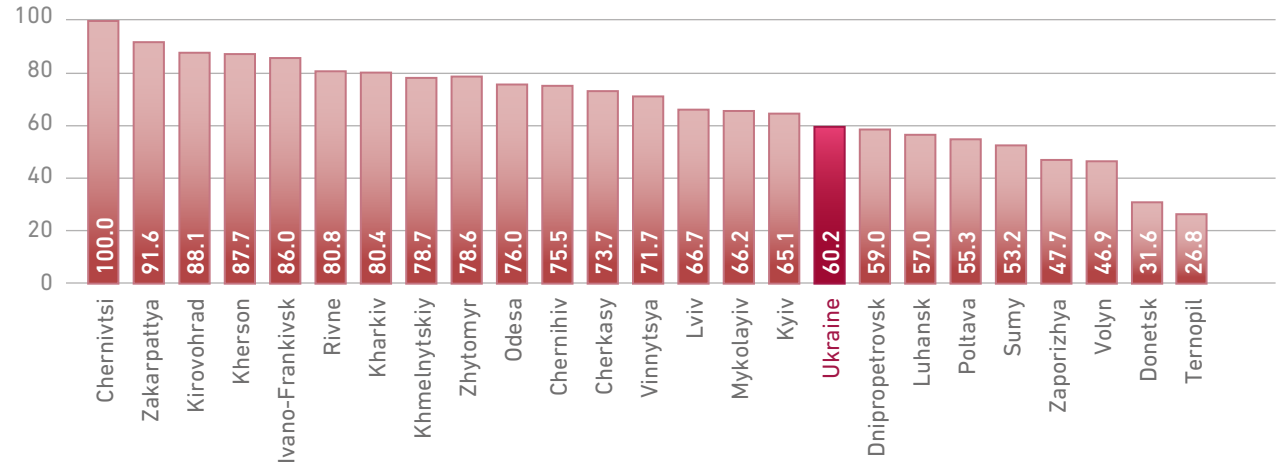
8.5.3. Share of workers employed in jobs with hazardous working conditions in the total full-time payroll, %



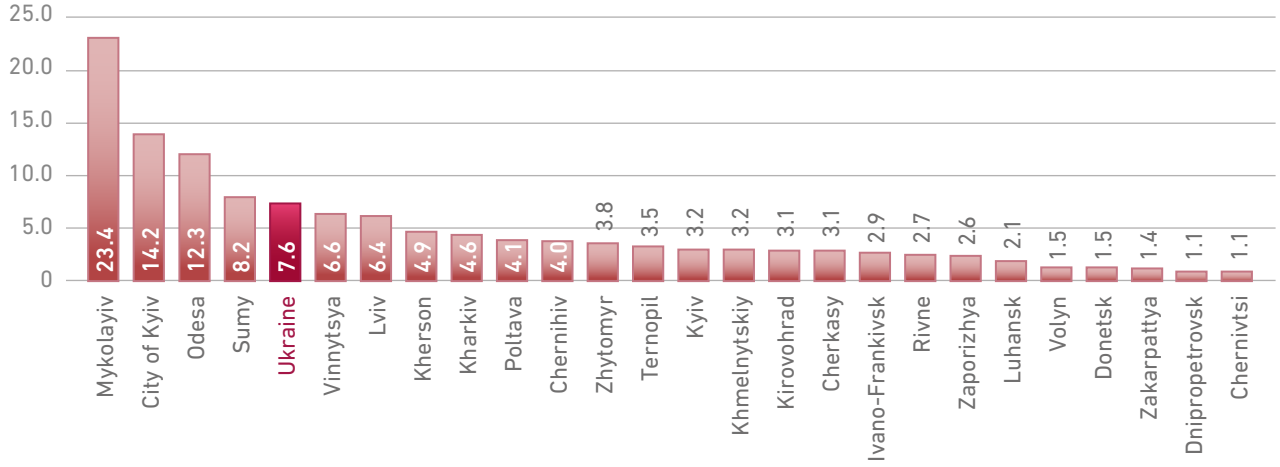
8.6.1. (a) Share of persons employed by SMEs in total employed population aged 15-70, %



8.6.2. (a) Share of sold products (goods. services) of SMEs, % of total volume of sold products



8.6.3. (a) Share of loaned money in capital investment structure upon sources of funding, %



CHAPTER 3.9

Goal 9. Industry, Innovation and Infrastructure

Similar to Goal 8, Goal 9 is a system-building one in relation to the whole set of Sustainable Development Goals for Ukraine. Achieving this goal creates necessary conditions for the progress in many other goals, as it allows industry modernization, creating new jobs and updating of relevant infrastructure for the development of both economy and social infrastructure in regions. In the earliest days of its independence, Ukraine possessed of the most developed regional infrastructure, then-high-tech industry, almost the whole spectrum of industrial branches, a diversified science with research in a wide range of areas from new materials creation to aircraft and spacecraft constructing. Accordingly, infrastructure was supported with regional clusters, like power engineering, metallurgy, shipbuilding, aircraft building, etc. Since then the collapse of cooperative ties, a series of financial and economic crises, privatization failure and the absence of a coherent state policy of industrial and scientific and technological development led to the process of de-industrialization and exhaustion of the existing infrastructure, depression of scientific research and brain drain. Due to the loss of entire branches of high-tech industry, the overall structure of industrial production was transformed into raw material and low technological industries. This led to a significant GDP drop in 1990s, and another GDP drop in the aftermath of the economic crises of 2008-2009 and 2014-2015.

As a result, the country lost its capability to produce composite and high-tech machinery, in particular, its own engine, tractor, combine harvester, car, and has almost ceased producing its own aircraft. Interruption of large enterprises, especially city-forming ones, leads to aggravation of not only employment problems, but also of maintenance of deteriorating infrastructure, heat and water supply systems. At this point, attempts are made to restore the industrial potential of the regions through the creation of appropriate environment for domestic and foreign investors. Lost opportunity to produce the final product is replaced by embedding in global value-added chains. For example, in western region, a car cluster is being developed, which produces components for global automobile companies. Such approach is important for further attraction of investments and technologies for establishment of high-tech production.

The opportunities and powers of the regional authorities to actively influence the development of industry in the region are limited in the absence of national industrial policy and due to the fact that most industrial enterprises are privately owned. These opportunities are basically implemented through licensing procedures, allocation of land for construction and all kinds of approvals provided by local authorities to investors. Each region builds up based on existing industrial capacity inherited from past and on opportunities for attracting private investment in modernization and creation of new production facilities. At the same time, regional and local authorities can be actively engaged in the development of infrastructure and, in particular, in the construction and maintenance of a local road network, the development of electric transport, and since lately the infrastructure of data transmission. Lack of funds and absence of coordinated state policy on industrial development and infrastructure in the regions remain to be major problems here. While industrial and scientific development is not a priority for public funding and donation, the construction and modernization of infrastructure is among the priorities and might attract significant investment. In addition, significant funds are provided by foreign partners of Ukraine to restore infrastructure destroyed in the course of armed conflict in Donetsk and Luhansk oblasts.

Industrial and infrastructure development is crucial for the regional and local authorities from the social point of view. The resumption of enterprises and establishment of new ones give a chance to reduce unemployment and increase the income of the region's population, ensure a prospect of staying in the corresponding territory, and eventually reduce labor emigration from regions. Infrastructure development, especially transport network is an important element in the process of decentralization. Reforms in school education, medicine, administrative amalgamation of territorial hromadas cannot be successful without high-quality roads, broadband Internet and other necessary infrastructure. Therefore, achieving this goal is an important factor in boosting the achievement of many other region-level SDGs.

The first target 9.1. to achieve this goal is to 'Develop quality, reliable, sustainable and accessible infrastructure based on the use of innovation technologies, including environmentally sound transport'. Indicator 9.1.1. 'Share of the rural population living further than 3 km from paved roads'iis extremely uneven in context of regions and depends on the size of oblast, the density and proportion of the rural population, the road

Goal	Goal 9. Industry, Innovation and Infrastructure											
Target	9.1 Develop quality, reliable, sustainable and accessible infrastructure based on the use of innovation technologies, including ecologically clean means of transport						9.2 Ensure increased use of electric transport and related network infrastructure		9.3 Ensure access to road infrastructure based on the use of innovative technologies, in particular by expanding state participation in various infrastructureprojects			
Indicator	9.1.1. Share of the rural population living further than 3 km from paved roads, %		9.1.2. Volume of transported goods, millions of tones		9.1.3. (a) Number of transported passengers per 100 persons of region's population		9.2.1. (a) Share of passengers transported by urban electric transport in total number of transported passengers via all types of transport, %		9.3.1. Share of public transport adapted for the needs of people with disabilities, %		9.3.2. (a) Share of public roads with a hard surface, %	
	2015	+/-	2015	>1/<1	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**10.74**		**1474.00**		**1.41**		**35.25**				**97.79**	
Oblasts												
Vinnytsya	8.80	-1.94	20.44	0.01	7.34	5.22	54.99	19.74	-	-	94.74	-3.05
Volyn	4.80	-5.94	11.60	0.01	1.12	0.80	24.83	-10.42	-	-	93.55	-4.24
Dnipropetrovsk	0.87	-9.87	103.74	0.07	1.28	0.91	50.05	14.79	-	-	100.00	2.21
Donetsk	19.36	8.61	146.73	0.10	0.69	0.49	48.83	13.58	-	-	98.77	0.97
Zhytomyr	55.40	44.66	68.19	0.05	4.56	3.25	36.00	0.75	-	-	97.65	-0.14
Zakarpattya	18.30	7.56	10.80	0.01	0.40	0.29	-	-	-	-	100.00	2.21
Zaporizhya	5.62	-5.12	18.05	0.01	0.83	0.59	42.09	6.83	-	-	97.14	-0.65
Ivano-Frankivsk	4.76	-5.99	11.37	0.01	0.72	0.51	14.31	-20.94	-	-	100.00	2.21
Kyiv	29.07	18.33	52.10	0.04	0.80	0.57	6.19	-29.06	-	-	100.00	2.21
Kirovohrad	10.96	0.21	10.66	0.01	0.59	0.42	15.08	-20.17	-	-	98.41	0.62
Luhansk	18.75	8.01	27.30	0.02	0.87	0.62	61.74	26.49	-	-	98.31	0.51
Lviv	13.91	3.16	24.40	0.02	1.11	0.79	32.67	-2.58	-	-	97.62	-0.17
Mykolayiv	1.70	-9.04	25.24	0.02	1.20	0.85	37.95	2.70	-	-	100.00	2.21
Odesa	-	-	53.99	0.04	6.52	4.64	51.81	16.56	-	-	97.59	-0.20
Poltava	-	-	21.90	0.01	0.76	0.54	89.56	54.31	-	-	100.00	2.21
Rivne	52.00	41.26	10.87	0.01	1.19	0.85	24.22	-11.03	-	-	100.00	2.21
Sumy	5.38	-5.36	15.20	0.01	0.95	0.68	27.07	-8.19	-	-	93.06	-4.74
Ternopil	8.63	-2.12	7.57	0.01	0.89	0.63	26.89	-8.37	-	-	100.00	2.21
Kharkiv	25.21	14.47	40.90	0.03	2.38	1.69	39.25	4.00	-	-	97.92	0.13
Kherson	29.95	19.20	9.00	0.01	0.82	0.59	23.03	-12.22	-	-	100.00	2.21
Khmelnytskiy	-	-	7.80	0.01	0.86	0.62	30.76	-4.49	-	-	98.61	0.82
Cherkasy	3.98	-6.76	31.08	0.02	1.34	0.95	64.87	29.62	-	-	96.72	-1.07
Chernivtsi	13.41	2.67	4.70	0.00	0.76	0.54	-	-	-	-	100.00	2.21
Chernihiv	12.46		1.09	0.00	0.83	0.59	44.47	9.22	-	-	93.51	-4.28
City of Kyiv					0.00				-	-	100.00	2.21

Goal	Goal 9. Industry, Innovation and Infrastructure							
Target	9.3 Ensure access to road infrastructure based on the use of innovative technologies. in particular by expanding state participation in various infrastructureprojects		9.4 Promote accelerated development of high- and mediumtechnological sectors and manufacturing industries which are formed based on the use of 'education–science–production' chains and a cluster approach by areas: development of an innovation ecosystem; development of ICT; use of ICT in agriculture, energy, transport and industry; high-technology mechanical engineering; creation of new materials; development of pharmaceutical and bioengineering industry					
Indicator	9.3.3. Share of facilities of public and civil use, improvement, transport infrastructure and road service equipped to the needs of people with disabilities, %		9.4.1. (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %		9.4.2 (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %		9.4.3. Share of workers employed by enterprises that belong to the high- and medium high-tech sectors of processing industry (including production of pharmaceutical products and preparations; chemicals; mechanical engineering; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total number of workers employed in industry, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**15.00**		**2.42**		**9.99**		**21.03**	
Oblasts								
Vinnytsya	-	-	0.36	-2.06	2.19	-7.80	10.79	-10.24
Volyn	-	-	2.14	-0.28	35.87	25.88	26.75	5.72
Dnipropetrovsk	-	-	7.40	4.98	18.37	8.37	11.69	-9.34
Donetsk	-	-	0.20	-2.22	5.13	-4.86	14.44	-6.59
Zhytomyr	-	-	0.26	-2.16	7.57	-2.42	11.72	-9.31
Zakarpattya	-	-	3.44	1.02	13.64	3.65	39.05	18.02
Zaporizhya	-	-	0.91	-1.51	3.48	-6.51	30.11	9.08
Ivano-Frankivsk	-	-	0.10	-2.32	9.36	-0.63	12.93	-8.10
Kyiv	-	-	2.32	-0.10	9.23	-0.76	12.10	-8.93
Kirovohrad	-	-	0.12	-2.30	11.49	1.50	15.96	-5.07
Luhansk	-	-	-	-	-	-	20.34	-0.69
Lviv	-	-	-	-	2.76	-7.24	20.41	-0.62
Mykolayiv	-	-	0.28	-2.14	14.00	4.01	30.99	9.96
Odesa	-	-	1.81	-0.61	26.46	16.47	18.07	-2.96
Poltava	-	-	0.17	-2.25	3.43	-6.56	27.33	6.30
Rivne	-	-	0.03	-2.39	18.31	8.32	13.29	-7.74
Sumy	-	-	0.62	-1.80	9.00	-0.99	47.93	26.90
Ternopil	-	-	1.72	-0.70	13.80	3.81	25.84	4.81
Kharkiv	-	-	1.21	-1.21	6.23	-3.76	35.78	14.75
Kherson	-	-	0.11	-2.31	2.82	-7.18	20.44	-0.59
Khmelnytskiy	-	-	0.98	-1.44	3.30	-6.69	19.57	-1.46
Cherkasy	-	-	5.43	3.01	7.51	-2.48	25.75	4.72
Chernivtsi	-	-	1.24	-1.18	1.54	-8.45	9.55	-11.48
Chernihiv	-	-	0.73	-1.69	5.63		11.32	-9.71
City of Kyiv	-	-						

Goal	Goal 9. Industry, Innovation and Infrastructure							
Target	9.5 Create financial and institutional systems (innovative infrastructure) that will ensure the development of scientific research and scientific and technical (experimental) development				9.6 Ensure access to theInternet, especially inrural areas		9.7 Ensure increased youthparticipation in research	
Indicator	9.5.1. Share of expenditure on scientific and technical work in GRP, %		9.5.2. Share of sales of innovative products which is new for the market in industrial scope, %		9.6.1. Population coverage with Internet services, subscribers per 100 persons		9.7.1. (a) Share of persons under 40 among scientific workers and university professors with advanced degrees, %	
	2015	+/-	2015	+/-	2015	>1/<1	2015	+/-
Ukraine (2015)	**0.61**		**0.40**		**39.03**		**37.40**	
Oblasts								
Vinnytsya	0.04	-0.57	0.10	-0.30	35.26	0.90	42.40	5.00
Volyn	0.56	-0.05	0.10	-0.30	32.43	0.83	57.50	20.10
Dnipropetrovsk	0.63	0.02	0.10	-0.30	31.10	0.80	45.40	8.00
Donetsk	0.14	-0.47	0.30	-0.10	26.73	0.68	44.60	7.20
Zhytomyr	0.04	-0.57	3.50	3.10	36.77	0.94	38.20	0.80
Zakarpattya	0.17	-0.45	–	-	23.54	0.60	35.60	-1.80
Zaporizhya	0.56	-0.05	0.50	0.10	34.60	0.89	37.60	0.20
Ivano-Frankivsk	0.04	-0.58	0.10	-0.30	23.44	0.60	47.00	9.60
Kyiv	0.21	-0.40	0.30	-0.10	41.79	1.07	39.90	2.50
Kirovohrad	0.15	-0.46	0.30	-0.10	22.75	0.58	55.10	17.70
Luhansk	0.11	-0.50	1.60	1.20	20.86	0.53	41.90	4.50
Lviv	0.29	-0.33	0.20	-0.20	43.14	1.11	34.30	-3.10
Mykolayiv	0.62	0.00	0.00	-0.40	43.63	1.12	32.90	-4.50
Odesa	0.20	-0.41	0.40	0.00	94.75	2.43	33.90	-3.50
Poltava	0.04	-0.57	0.20	-0.20	26.99	0.69	46.30	8.90
Rivne	0.03	-0.58	0.10	-0.30	28.09	0.72	47.50	10.10
Sumy	0.26	-0.36	3.40	3.00	25.23	0.65	44.40	7.00
Ternopil	0.04	-0.57	0.60	0.20	24.33	0.62	44.30	6.90
Kharkiv	1.54	0.92	1.90	1.50	34.99	0.90	33.80	-3.60
Kherson	0.11	-0.50	0.10	-0.30	26.62	0.68	41.40	4.00
Khmelnytskiy	0.04	-0.58	0.00	-0.40	27.07	0.69	50.00	12.60
Cherkasy	0.30	-0.32	0.10	-0.30	38.27	0.98	37.10	-0.30
Chernivtsi	0.25	-0.37	–	-	22.53	0.58	46.80	9.40
Chernihiv	0.14	-0.47	0.10	-0.30	41.75	1.07	34.70	-2.70
City of Kyiv			0.30	-0.10	92.99	2.38	34.90	-2.50

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions:
9.1.1. - data on Vinnytsia, Zhytomyr, Ivano-Frankivsk, Kirovohrad, Luhansk and Ternopil oblasts as of 2013;
9.1.1. - data on Chernivtsi oblast as of 2013;
9.5.1. - data on Kyiv oblast as of 2016;
9.1.2., 9.1.3 (a). 9.2.1 (a) - data on Poltava oblast as of January-November 2015; 9.3.1 - data on Chernihiv oblast as of 01.11.2018.
9.1.1 - de-stimulator, given the converse readings in colors.

infrastructure historical extensiveness, as well as the financial capacity of local authorities to conduct road construction. With an average reading of 10.7% across Ukraine, this indicator is 15% higher in Kherson, Odessa, Zhytomyr, and Zakarpattia oblasts. At the same time, the best situation is registered in Dnipropetrovsk, Zaporizhzhia, Mykolaiv, Cherkasy, and Poltava oblasts. According to the National SDGs, by 2030 this problem should be eliminated, and relevant share must not exceed 0.5% in general across Ukraine. Almost all rural settlements should have paved roads, which will significantly improve their transport accessibility.

As for the urban population, the development of environmentally friendly means of transport comes to the fore. In particular, the indicator 9.2.1. 'Share of passengers transported by urban electric transport in total number of transported passengers via all types of transport' is offered as a tool to end target 9.2.'Ensure increased use of electric transport and related network infrastructure'. As of 2015, this indicator constituted 35% in Ukraine in general, being much lower in some oblasts, in particular, in Ivano-Frankivsk, Kirovohrad, and Kherson oblasts. The highest readings were registered in Poltava (89%), Cherkasy (64.8%), and Vinnytsia (54%) oblasts. This target will be of pressing importance for all oblasts in the coming years, and its implementation will be connected, first of all, with the development of electric vehicles due to the fact that national indicator supposes the increase of the share of electric transport in internal communication up to 75% by 2030.

To sum up the infrastructure part of this goal, it is necessary to focus on such important indicator as 9.3.2. 'Share of public paved roads'. Although it exceeds 97% in Ukraine in general and 100% in 11 oblasts, road quality itself is far from good and requires joint contribution on behalf of both central and regional authorities for their improvement until 2030.

As for the industrial development, it has been previously mentioned that the role and powers of local and regional authorities are not decisive. At the same time, their role in promoting initiatives of central government and private sector is highly important and should be reflected in regional and local development strategies and individual strategic documents.

The first target in this context is 9.4. 'Promote accelerated development of high- and medium-technological sectors and manufacturing industries which are formed based on the use of 'education–science–production' chains and a cluster approach by areas: development of an innovation ecosystem; development of ICT; use of ICT in agriculture, energy, transport and industry; high-technology mechanical engineering; creation of new materials; development of pharmaceutical and bioengineering industry'. Among the three indicators of this target, let's highlight 9.4.3. 'Share of workers employed by enterprises that belong to the high- and medium high-tech sectors of processing industry (including production of pharmaceutical products and preparations; chemicals; mechanical engineering; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total number of workers employed in industry', as the one most fully reflecting the results of this target. An average share across Ukraine constitutes 21% and should reach 29% by 2030. Separate oblasts such as Sumy, Kharkiv, Mykolaiv, Zaporizhzhia, and Zakarpattia now have this indicator higher than the target one, and such regions as Poltava, Volyn, Ternopil, and Cherkasy report it to be higher than the average across Ukraine. Since this indicator is relative, it depends on the overall size of the industrial sector of the region, as well as on the size of its high-tech share. While high rates of Sumy, Kharkiv, Zaporizhzhya, Mykolayiv or Poltava oblasts are to some extent reasonable due to the traditionally developed industrial sector and a significant share of existing machine building sector, getting such western oblasts as Zakarpattia, Volyn and Ternopil to the top of rating became possible owing to the recent policy pursued by the regional authorities. In particular, owing to FEZ, Zakarpattia oblast has got a car cluster established for the production of passenger vehicles. In Volyn and Ternopil oblasts at the expense of attracted foreign investment the production of components for automotive equipment, as well as assembly of cars and buses has been established. Thus, traditionally non-industrial regions can pursue a correct and coherent investment policy and start creating enterprises, producing high-tech goods or getting into the global chains of high-tech goods.

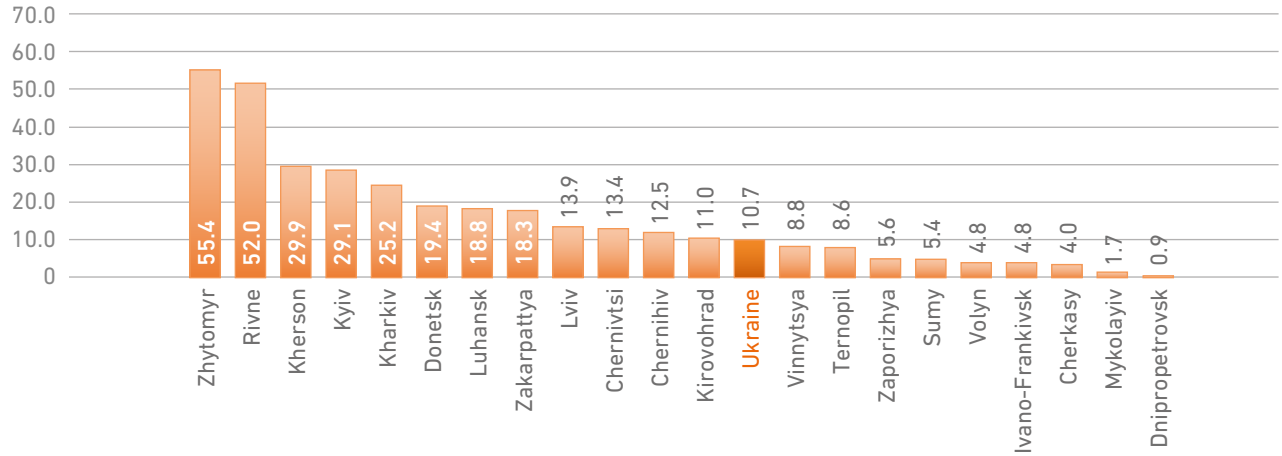
Target 9.5. 'Create financial and institutional systems (innovative infrastructure) that will ensure the development of scientific research and scientific and technical (experimental) development' falls under national jurisdiction and is subject to national policy; the role of regions here is to ensure the promotion of this activity in relevant area for the purpose of its economic and social development. For example, indicator 9.5.2. 'Share of sales of innovative products which is new for the market in industrial scope' describes region's adjustment to the challenges of the fourth industrial revolution, where innovation will play a key role for competitors. Today the country's overall reading is very low and constitutes only 1.4%. According to the National

SDGs, this indicator reading should increase up to 15% by 2030. This target is extremely ambitious, since most oblasts report less than 1% achieved so far.

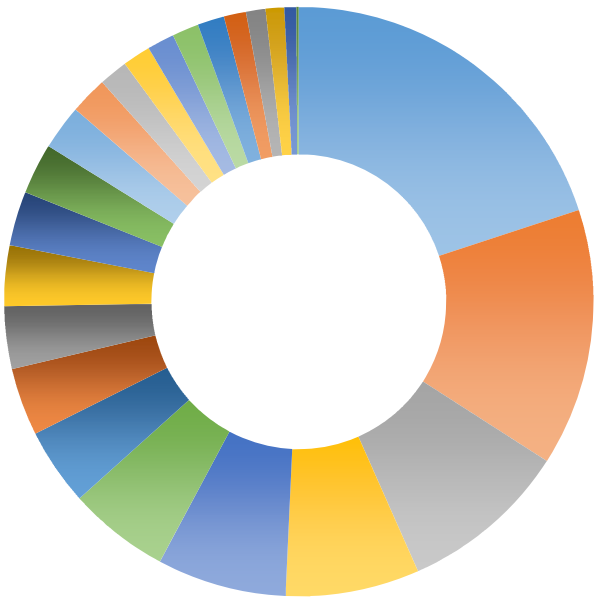
Next target 9.6. 'Ensure access to the Internet, especially in rural areas' relates more closely to the powers and capacities of local authorities. As of baseline year, coverage of population with Internet services (subscribers per 100 persons) embraced 39 subscribers, and by 2030 this figure should pe reported as 100, that is, must increase by 2.5 times. Its dynamic growth from year to year is quite promising. The best Internet services coverage is found in highly-populated regions; 18 oblasts demonstrate this rate lower than the average, therefore more effort is requested on behalf of local authorities, so that electronic governance could be properly and fully implemented in Ukraine (which is impossible without reliable and high-speed Internet connection).

Baseline indicators of goal in 2015:

9.1.1. Share of the rural population living further than 3 km from paved roads, %

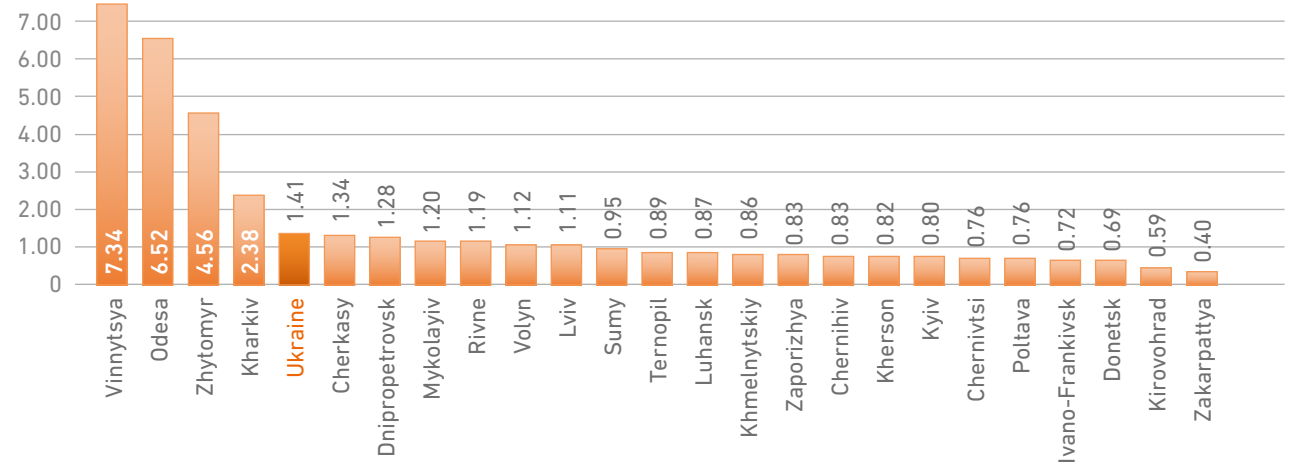


9.1.2. Volume of transported goods, millions of tones

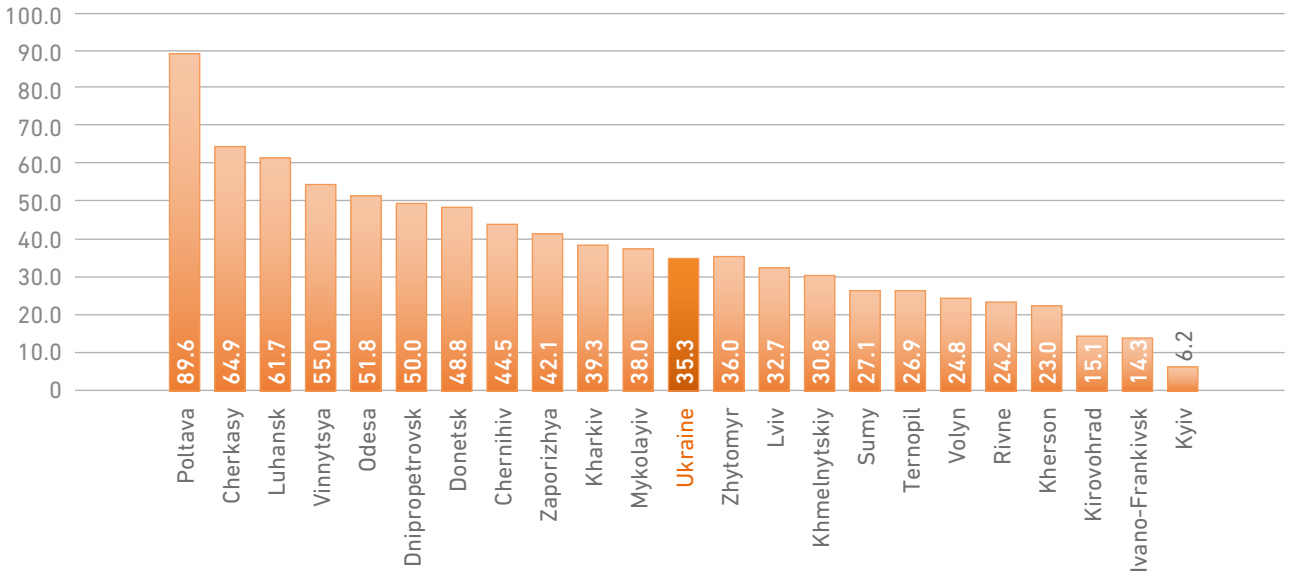


Donetsk	146.7	Zaporizhya	18.0
Dnipropetrovsk	103.7	Sumy	15.2
Zhytomyr	68.2	Volyn	11.6
Odesa	54.0	Ivano-Frankivsk	11.4
Kyiv	52.1	Rivne	10.9
Kharkiv	40.9	Zakarpattya	10.8
Cherkasy	31.1	Kirovohrad	10.7
Luhansk	27.3	Kherson	9.0
Mykolayiv	25.2	Khmelnytskiy	7.8
Lviv	24.4	Ternopil	7.6
Poltava	21.9	Chernivtsi	4.7
Vinnytsya	20.4	Chernihiv	1.1

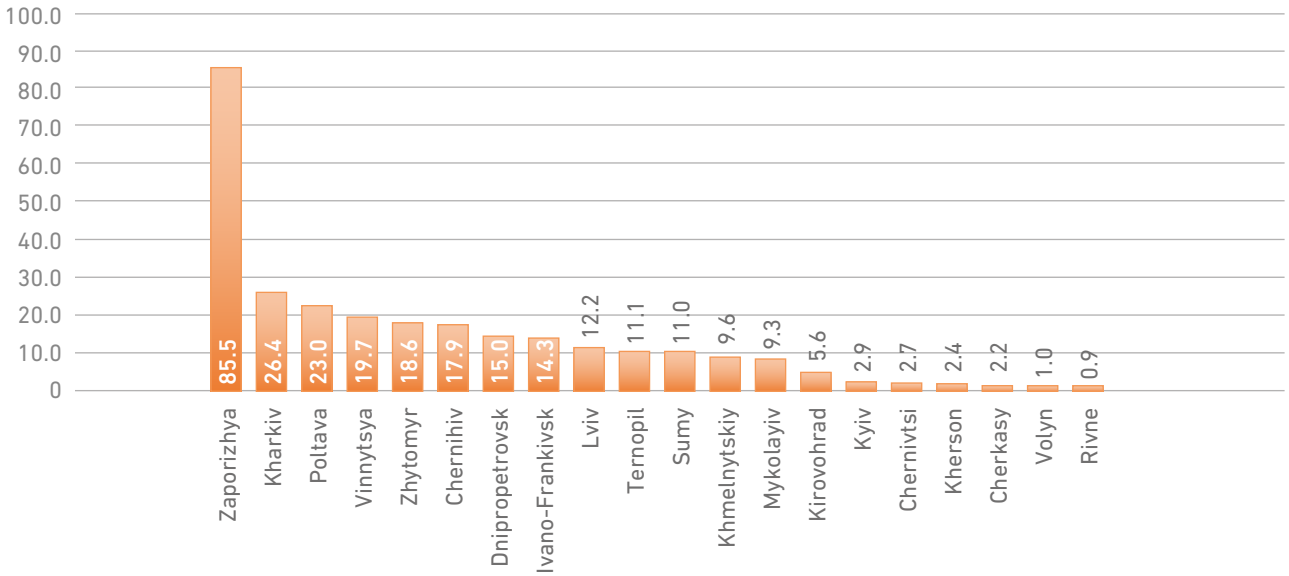
9.1.3. (a) Number of transported passengers per 100 persons of region's population



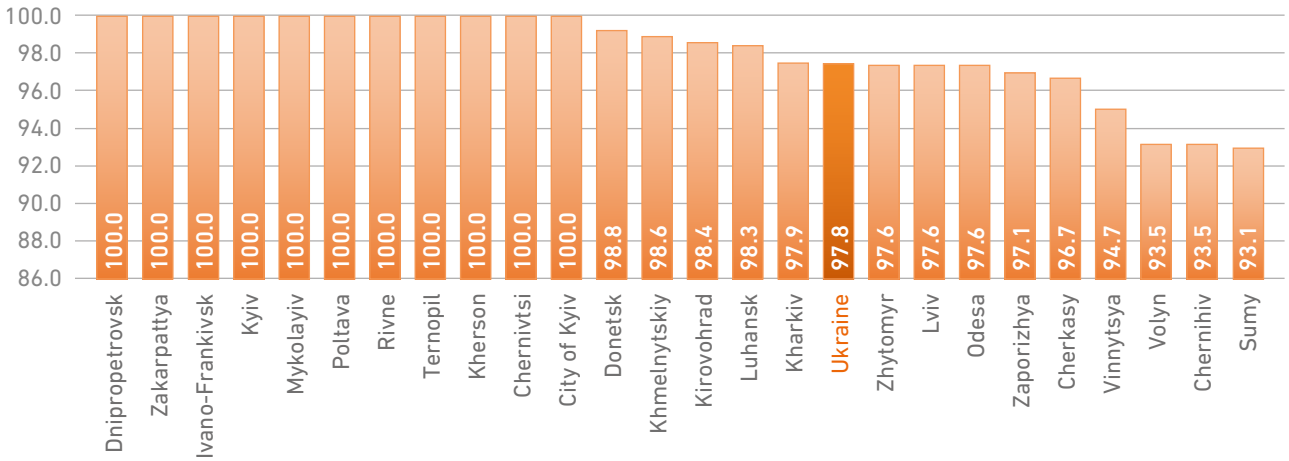
9.2.1. (a) Share of passengers transported by urban electric transport in total number of transported passengers via all types of transport, %



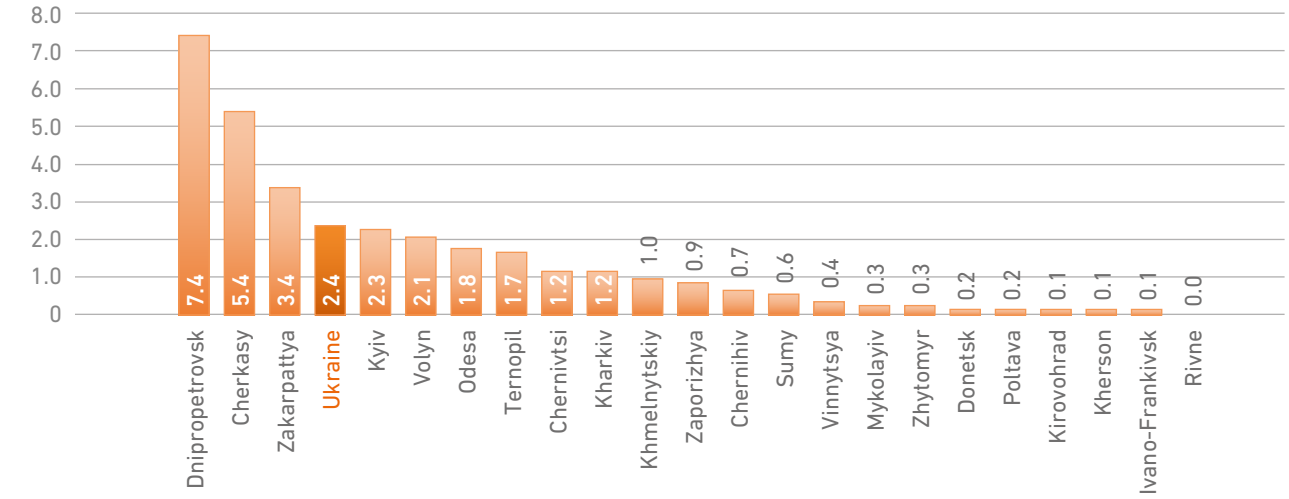
9.3.1. Share of public transport adapted for the needs of people with disabilities, %



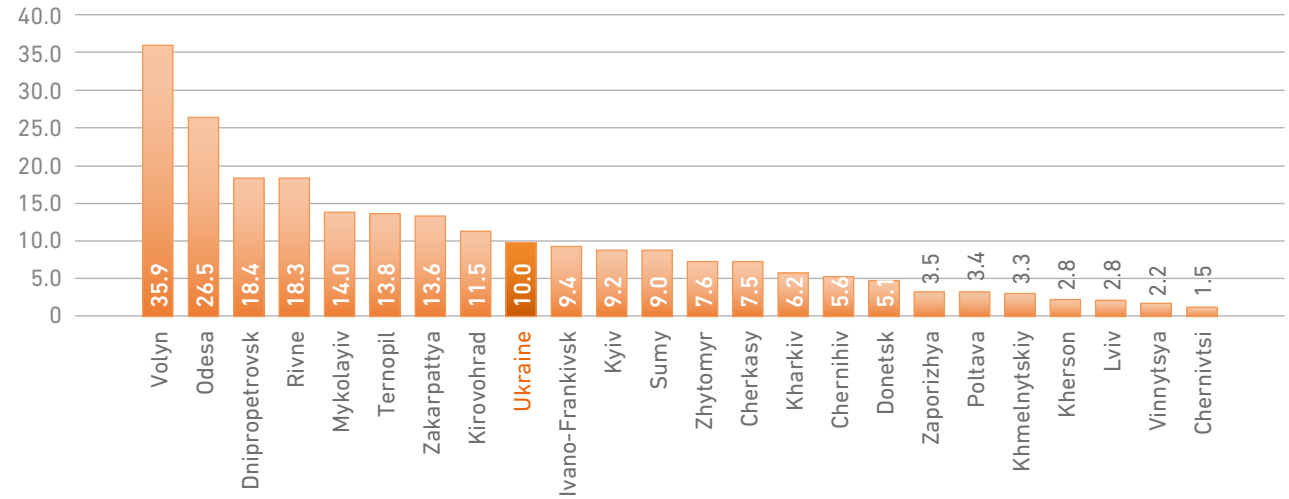
9.3.2. (a) Share of public roads with a hard surface, %



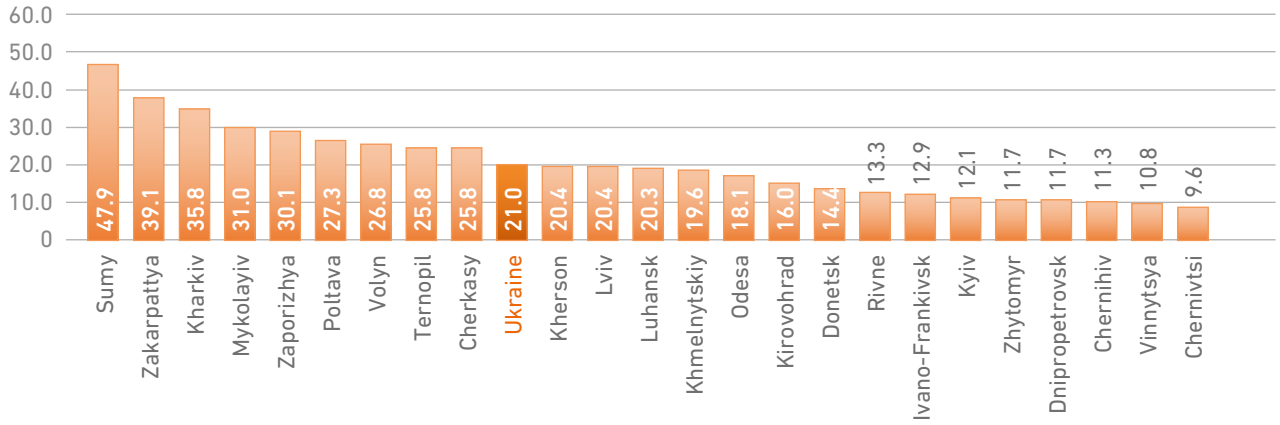
9.4.1. (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %



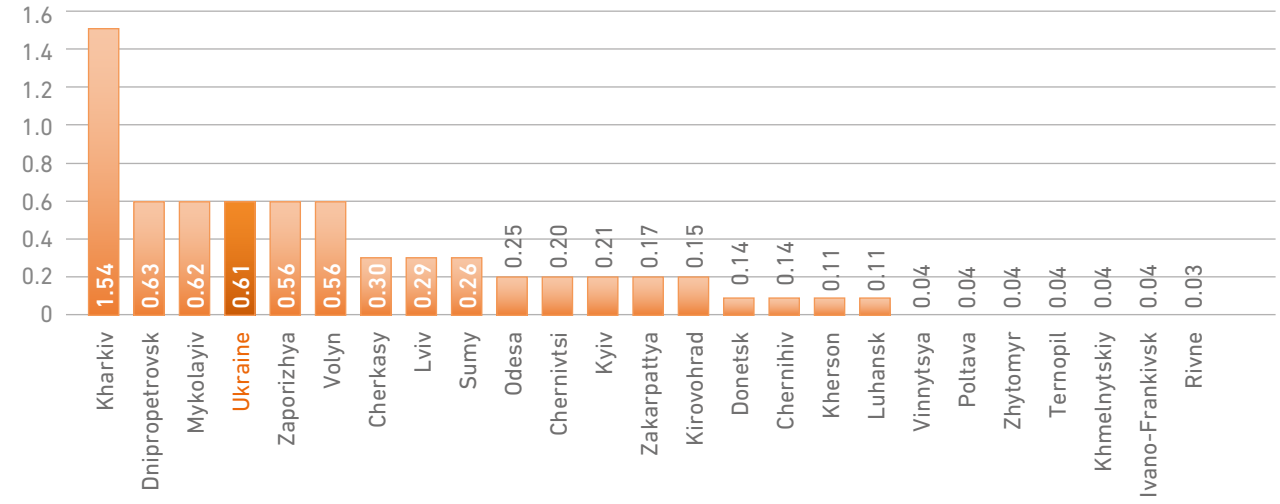
9.4.2 (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %



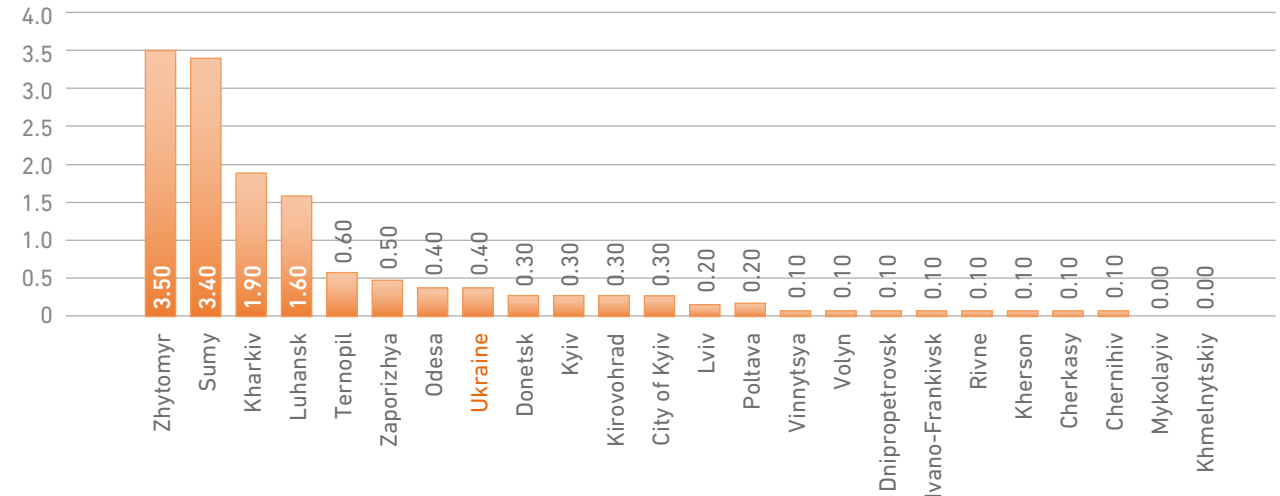
9.4.3. Share of workers employed by enterprises that belong to the high- and medium high-tech sectors of processing industry (including production of pharmaceutical products and preparations; chemicals; mechanical engineering; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total number of workers employed in industry, %



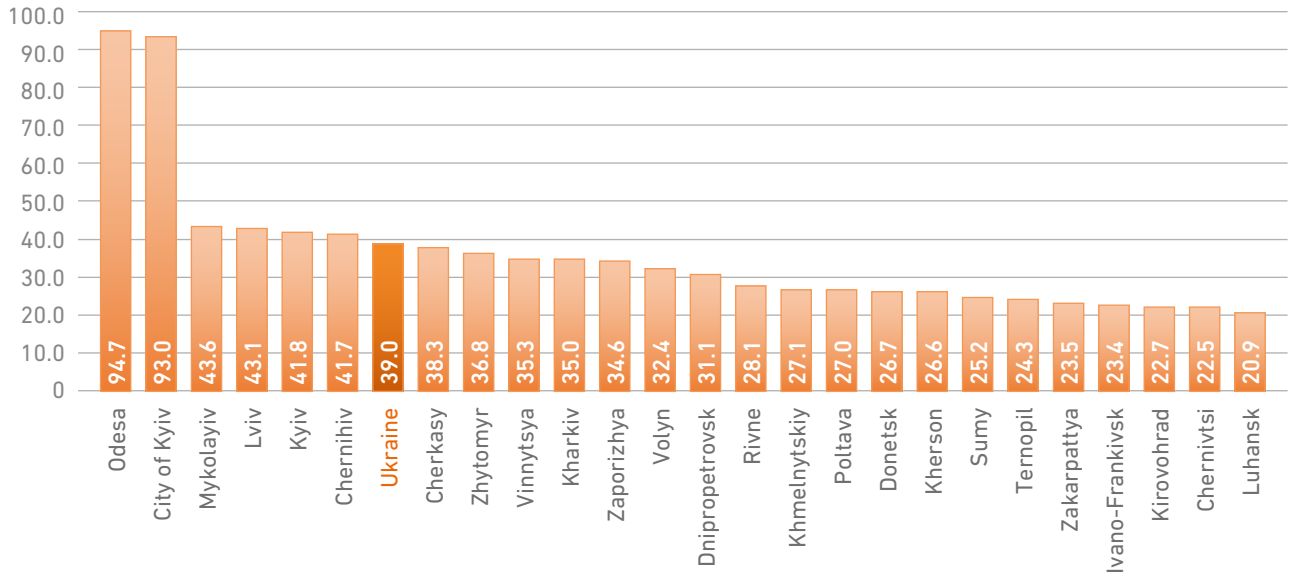
9.5.1. Share of expenditure on scientific and technical work in GRP, %



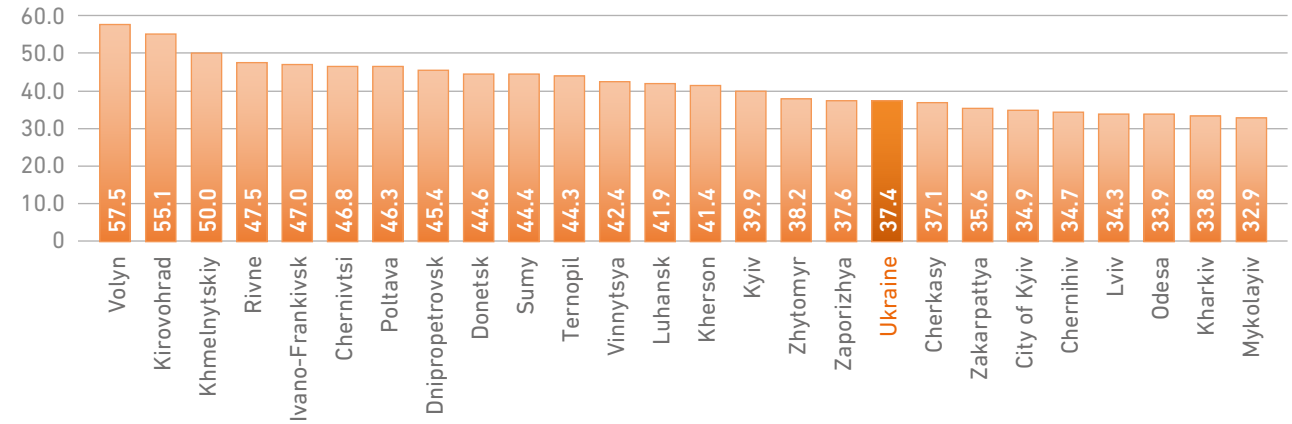
9.5.2. Share of sales of innovative products which is new for the market in industrial scope, %



9.6.1. Population coverage with Internet services, subscribers per 100 persons



9.7.1. (a) Share of persons under 40 among scientific workers and university professors with advanced degrees, %



CHAPTER 3.10

Goal 10. Reduced Inequalities

Social inequality is a very dangerous phenomenon. It triggers poverty, distrust in reform, corruption. Inequality is caused by the discrimination of certain groups of the population on certain grounds, first of all, economic ones. Inequality brings to a disbelief in legally achievable well-being and to an attempt to even disparities by means of criminal offence or through social protest. Therefore, reducing inequality, which has reached large scale in Ukraine, is a key to successful reforms in the country and to engagement of large population in this process.

Regional differentiation of indicators of inequality is quite significant. This is primarily generated by the different age structure of the region's population, different share of pensioners, level of economic development of the regions and, accordingly, population income rate. In addition, inequality is aggravated by an outdated road infrastructure, especially in rural areas and mountainous regions, areas near the zone of war conflict in the East, which restricts people from getting necessary services. Eventually inequality gives birth to even greater inequality. For example, it is hard to hire doctors in the countryside (and improve access to quality health care), since rural living conditions for doctors themselves are considerably worse in terms of public services accessibility compared to urban areas.

Overcoming inequality in society falls within ultimate competence of the central government, which is responsible for tax policy, determination of minimum wages rates, subsistence minimum rates and payment of pensions. At the same time, regional and local authorities have broad powers in terms of job creation, administering targeted assistance to socially vulnerable groups of the population. Also, the task of improving infrastructure, constructing local roads, transport, medical and educational facilities can be solved at regional and local levels. Regional authorities have a wide range of both financial and institutional tools to improve the situation in terms of ensuring equal access to public services. Such instruments include the implementation of programs aimed at improving infrastructure, financing road construction, organizing concessions, launching public-private partnerships, attracting transport companies for ensuring continuous interconnection of rural settlements with district centers and with each other.

A comparison of the regional dimension of selected indicators of the baseline for achieving Goal 10 has demonstrated a significant level of their differentiation.

To monitor the implementation of Goal 10, it is proposed to choose indicators that reflect the income ratio of different groups of population. In particular, it is the income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income. According to this indicator, the greatest inequality is observed in Zakarpattia (5.5), Vinnytsia (5.1), Donetsk (4.6) and Zhytomyr (4.6) oblasts. The situation in Ivano-Frankivsk (2.5), Kyiv (2.6) and Zaporizhzhia (2.6) oblasts is slightly better, which can only speak of a general low income in latter oblasts.

A similar, but somewhat different indicator is the ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population. Registered differentiation by this indicator is much lower. Almost all oblasts rank the same level between indicators 2 and 3. The situation is worse in Volyn (4.1), Odessa (3.4) and Luhansk (3.4) oblasts. Once again the best picture is observed in Ivano-Frankivsk (2) oblast.

Ratio of average pension to average wage allows to estimate the difference between the incomes of employed and unemployed persons and the equity of the pension system. According to this indicator, regional differentiation is moderate and in most areas this ratio is about 40%. Luhansk (51.13%) and Kherson (48.64%) oblasts are far from the average upwards, and Dnipropetrovsk (31%) and Kyiv (34.8%) oblast - downwards.

Next indicator relates to the accessible health care system. This is a share of rural communities deprived of access to health care institutions and mobile medical aid in total number of settlements in region. The worst situation is found in eastern oblasts, such as Luhansk (41.3%), Zaporizhzhia (40.92%), and Chernihiv (48.84%). The same issues are addressed much better in Zakarpattia (0.03%), Cherkasy (4.21%) and Ivano-Frankivsk (9.28%) oblasts.

Indicator of transport accessibility closes a list of indicators for this goal, namely a share of rural communities located in 3 km area of proximity to nearest stop of public transport in total number of rural communities. Statistically the largest share of such settlements is located in Zakarpattia (96.37%), Volyn (79.31%), Zaporizhzhia (28.45%) and Sumy (24.42%) oblasts. More difficult situation with transport connections is reported in Kyiv (2.21%), Chernivtsi (4.27%), Rivne (4.7%), and Kherson (5.78%) oblasts.

Goal	Goal 10. Reduced Inequalities							
Target	10.1 Ensure accelerate dgrowth of income of the least well-off 40 percent of the population				10.2 Prevent manifestations of discrimination in society		10.3 Ensure access to social services	
Indicator	10.1.1. (a) Income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income		10.1.2. Income ratio of least well off 40 percent and more affluent 60 percent, %		10.2.1. Share of people who reported that in the last 12 months they had personally faced discrimination or harassment based on discrimination in total population, %		10.3.1. (a) Share of rural communities who suffered from deprivation due to lack of access to ambulance services and mobile medical care in the settlement in total number of communities, %	
	2015	+/-	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**4.50**		**15.00**		**9.00**		**27.00**	
Oblasts								
Vinnytsya	5.10	0.60	-	-	-	-	18.40	-8.60
Volyn	4.10	-0.40	-	-	-	-	18.03	-8.97
Dnipropetrovsk	4.40	-0.10	-	-	-	-	26.30	-0.70
Donetsk	4.60	0.10	-	-	-	-	17.57	-9.43
Zhytomyr	4.60	0.10	-	-	-	-	16.70	-10.30
Zakarpattya	5.50	1.00	-	-	-	-	0.03	-26.97
Zaporizhya	2.60	-1.90	-	-	-	-	40.92	13.92
Ivano-Frankivsk	2.50	-2.00	-	-	-	-	9.28	-17.72
Kyiv	2.60	-1.90	-	-	-	-	14.64	-12.36
Kirovohrad	4.00	-0.50	-	-	-	-	25.00	-2.00
Luhansk	4.30	-0.20	-	-	-	-	41.30	14.30
Lviv	3.90	-0.60	-	-	-	-	33.46	6.46
Mykolayiv	4.40	-0.10	-	-	-	-	33.45	6.45
Odesa	3.40	-1.10	-	-	-	-	-	-
Poltava	3.90	-0.60	-	-	-	-	-	-
Rivne	3.70	-0.80	-	-	-	-	28.73	1.73
Sumy	3.00	-1.50	-	-	-	-	25.99	-1.01
Ternopil	3.50	-1.00	-	-	-	-	11.34	-15.66
Kharkiv	4.00	-0.50	-	-	-	-	36.43	9.43
Kherson	3.30	-1.20	-	-	-	-	25.08	-1.92
Khmelnytskiy	3.40	-1.10	-	-	-	-	20.51	-6.49
Cherkasy	3.80	-0.70	-	-	-	-	4.21	-22.79
Chernivtsi	4.10	-0.40	-	-	-	-	11.56	-15.44
Chernihiv	3.30	-1.20	-	-	-	-	48.84	21.84
City of Kyiv					-	-		

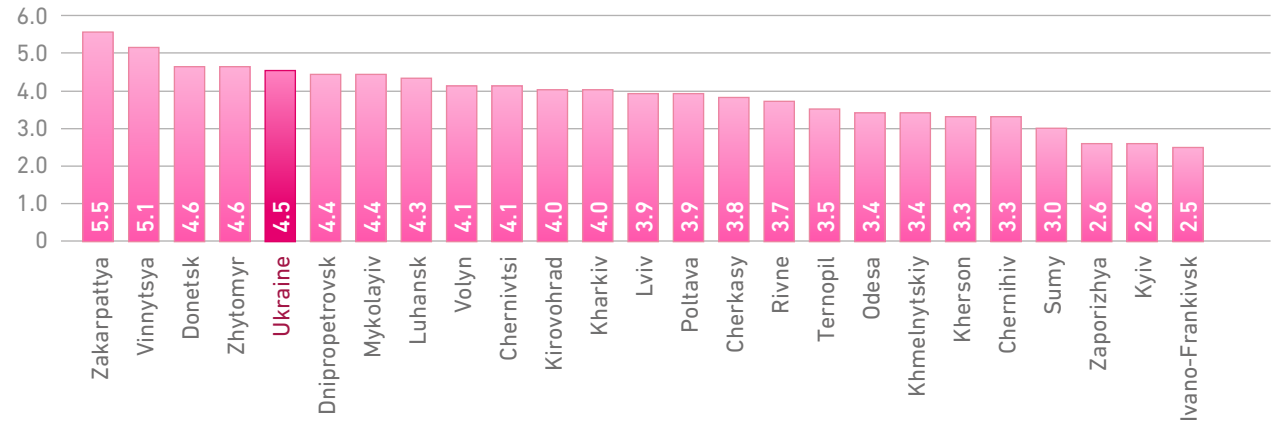
Goal	Goal 10. Reduced Inequalities							
Target	10.3 Ensure access to social services				10.4 Pursue remuneration policy based on equality and fairness		10.5 Reform pension insurance based on fairness and transparency	
Indicator	10.3.2. (a) Share of rural communities deprived of health care institutions in 3 km area in total number of rural communities where health care institutions exist in 3 km area around them, %		10.3.3. (a) Share of rural communities located in 3 km area of proximity to nearest stop of public transport in total number of rural communities, %		10.4.1. Ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population, times		10.5.1. Ratio of average pension to average wage, %	
	2015	+/-	2015	+/-	2015	>1/<1	2015	+/-
Ukraine (2015)	**8.34**		**11.23**		**2.70**		**37.70**	
Oblasts								
Vinnytsya	5.60	-2.74	10.90	-0.33	2.50	0.93	40.92	3.22
Volyn	18.03	9.68	79.32	68.09	4.10	1.52	41.10	3.40
Dnipropetrovsk	7.94	-0.40	14.36	3.13	2.80	1.04	31.00	-6.70
Donetsk	77.57	69.23	15.96	4.73	2.80	1.04	37.44	-0.26
Zhytomyr	8.50	0.16	12.20	0.97	2.80	1.04	43.90	6.20
Zakarpattya	3.63	-4.72	96.37	85.14	3.00	1.11	43.24	5.54
Zaporizhya	27.02	18.68	28.45	17.22	2.60	0.96	42.09	4.39
Ivano-Frankivsk	3.66	-4.68	8.76	-2.47	2.00	0.74	41.66	3.96
Kyiv	0.97	-7.38	2.21	-9.02	2.60	0.96	34.80	-2.90
Kirovohrad	6.30	-2.04	12.92	1.69	2.40	0.89	43.60	5.90
Luhansk	15.34	7.00	11.69	0.46	3.30	1.22	51.13	13.43
Lviv	-	-	13.08	1.85	2.30	0.85	40.05	2.35
Mykolayiv	9.27	0.92	10.28	-0.95	2.50	0.93	37.71	0.01
Odesa	-	-	-	-	3.40	1.26	39.23	1.53
Poltava	-	-	-	-	2.70	1.00	40.70	3.00
Rivne	8.51	0.17	4.70	-6.53	2.40	0.89	39.49	1.79
Sumy	14.54	6.20	24.42	13.19	2.50	0.93	42.21	4.51
Ternopil	6.26	-2.09	9.58	-1.65	2.20	0.81	43.55	5.85
Kharkiv	4.95	-3.39	10.02	-1.21	2.60	0.96	43.69	5.99
Kherson	4.86	-3.48	5.78	-5.46	2.40	0.89	48.64	10.94
Khmelnytskiy	4.38	-3.96	-	-	2.60	0.96	41.26	3.56
Cherkasy	4.21	-4.13	6.69	-4.54	2.60	0.96	35.36	-2.34
Chernivtsi	3.27	-5.08	4.27	-6.96	2.70	1.00	47.97	10.27
Chernihiv	3.55	-4.80	11.80	0.57	2.40	0.89	44.04	6.34
City of Kyiv								

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

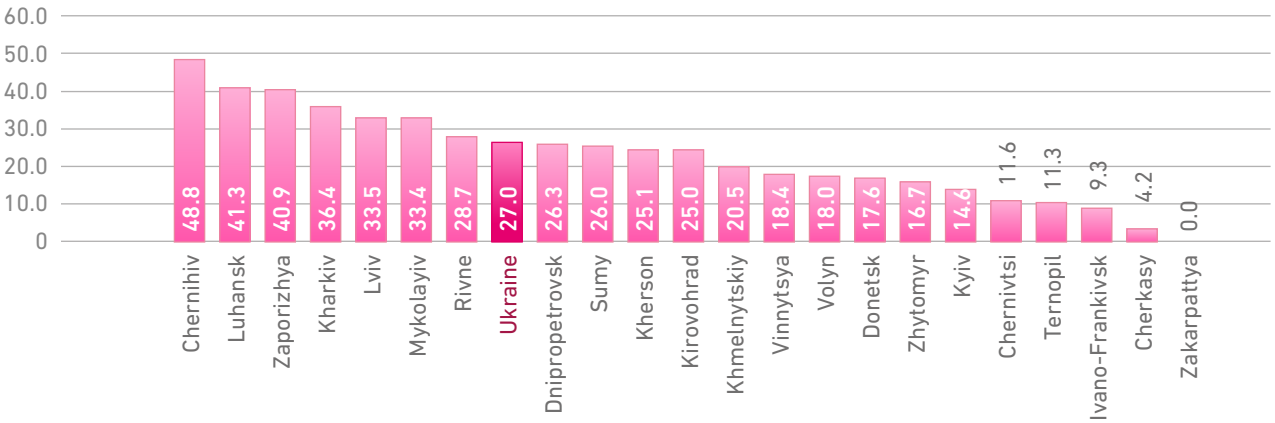
Exceptions: 10.3.1 (a), 10.3.2 (a), 10.3.3 (a) - data on Vinnytsia, Zhytomyr, Chernivtsi oblasts as of 2013, on Donetsk, Kirovohrad, Luhansk, Rivno oblasts as of 2014; on Kyiv oblast as of 2016.
10.1.1 (a)-10.4.1 - de-stimulator, given the converse readings in colors.

Baseline indicators of goal in 2015:

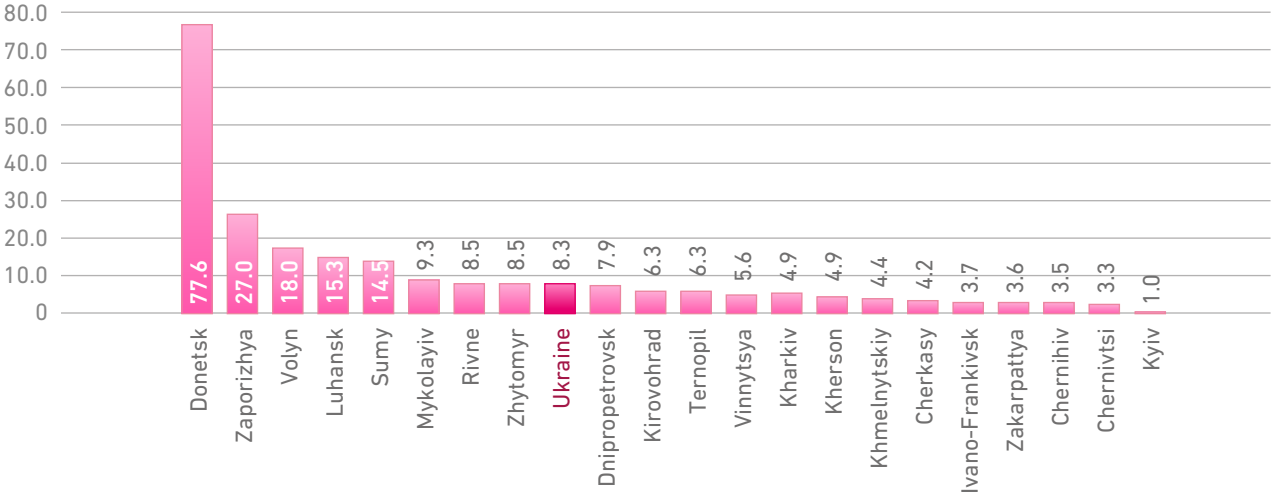
10.1.1. (a) Income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income



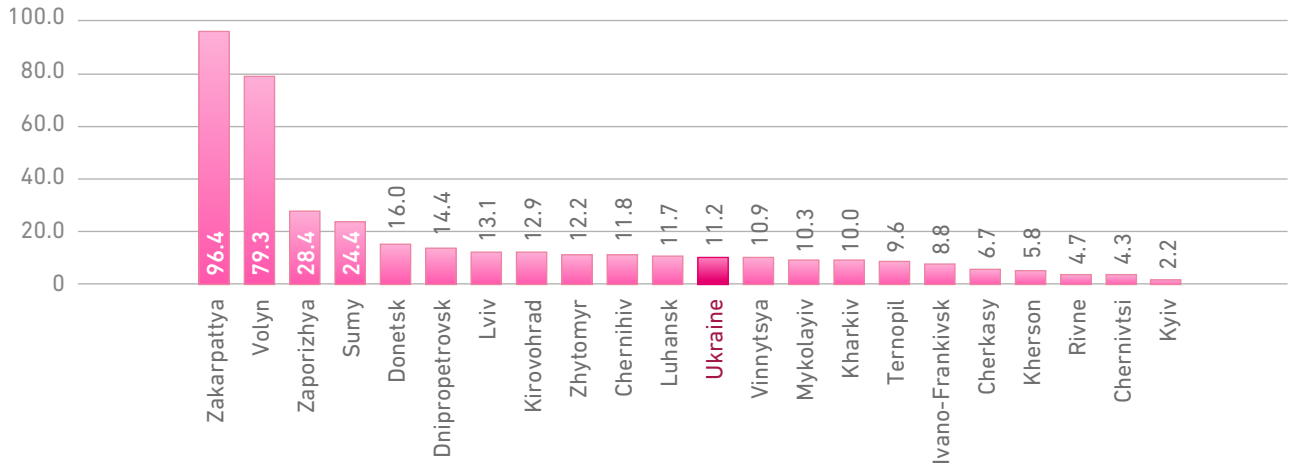
10.3.1. (a) Share of rural communities who suffered from deprivation due to lack of access to ambulance services and mobile medical care in the settlement in total number of communities, %



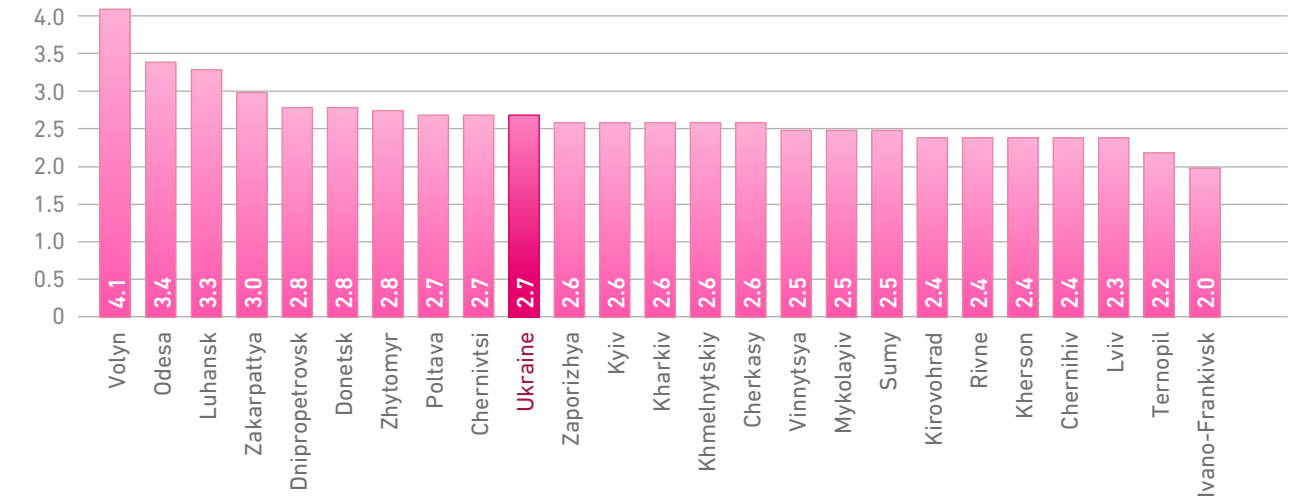
10.3.2. (a) Share of rural communities deprived of health care institutions in 3 km area in total number of rural communities where health care institutions exist in 3 km area around them, %



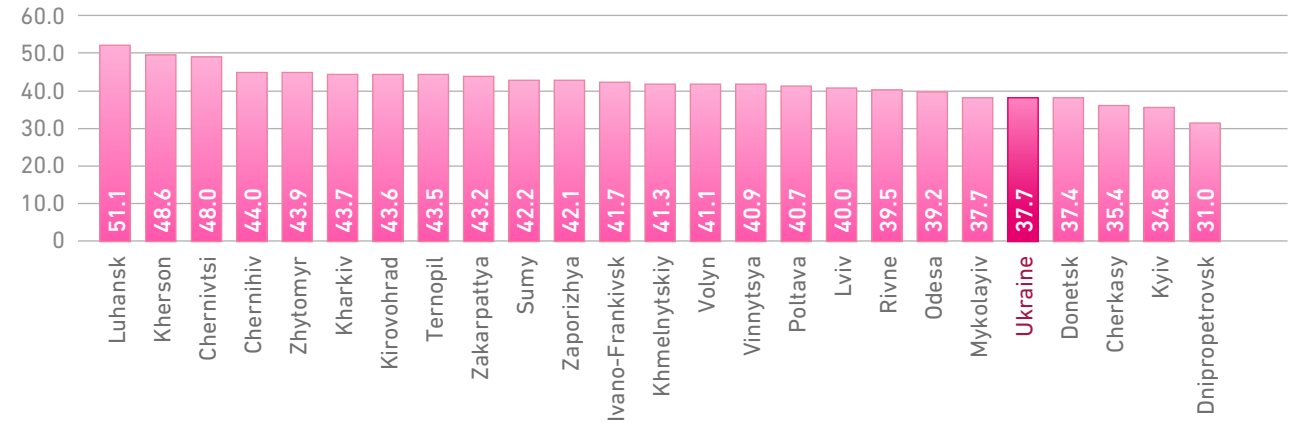
10.3.3. (a) Share of rural communities located in 3 km area of proximity to nearest stop of public transport in total number of rural communities, %



10.4.1. Ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population, times



10.5.1. Ratio of average pension to average wage, %



CHAPTER 3.11

Goal 11. Sustainable Cities and Communities

Sustainable development is a multidimensional phenomenon that combines economic, environmental, social and socio-cultural features of development. Sustainable development components are being formed virtually in full on the territory of region and depend on the characteristics of regional development and trends. In particular, they are as follows: state of the region's economy, technologically defined volumes of environmental pollution, quality of living conditions (in particular, availability of housing), availability of material basis for regional cohesion in the form of sites of cultural and natural heritage, and the quality of territorial resource management.

Unresolved housing problems hamper the mobility of labor within the country, resulting in the formation of labor-intensive and labor-deficit regions. It brings to inequality of access to employment opportunities. Significant stratification of the population by quality of life under criterion of ensuring proper housing constitutes an important negative factor, which weakens the inclusiveness of development.

The unfavorable outward habitat can be exacerbated by the inconsistent development of the settlements. Mentioned problem is of primary importance for urban settlements, still rural areas are sensitive to it too. Random development can be caused both by the absence of modern general development plans, and (mostly) financial funds deficit. In this event residential and office construction and construction within investment projects take place, while communal, social transport and road, trade, and utilities infrastructure is significantly lagging behind the changing demand. Last but not least, the lack of systemic solutions of communities' problems derives from non-transparent decision-making process. Public is often deprived of the opportunity to participate in arrangement of their living space. In Ukraine strengthening of inclusiveness of local development strategy was initiated in 2015 simultaneously with the deployment of large-scale decentralization reform and amalgamation of territorial hromadas. However, no comparison and assessment of the decentralization progress can be done as far as 2015 is a baseline year.

The quality of life of the region's population also greatly depends on the quality of the environment. The uneven distribution of production facilities across the country, multiple cases of excessive concentration of harmful industries lead to environmental overload of separate regions. Meanwhile, there are no effective instruments that could provide local authorities with necessary funds to improve the environmental situation in the region. In 2017 and 2018 the amalgamated territorial hromadas received additional funds into their budgets derived from excise tax payable by gasoline buyers at gas stations. However, no information on direct use of mentioned hromada's money for the purposes of environmental protection is available.

Consequently, local authorities have enough powers to significantly strengthen the capacity of community to develop sustainably. It concerns primarily the establishment of efficient strategic management of such development, enabling most efficient use of available resources, and most importantly enabling to coordinate public and private resources allocation. Such coordination approach facilitates the provision of housing for the population and improvement of the living environment.

The immediate challenges faced by hromadas include the formation of regional identity and strengthening community cohesion based on appropriate educational and information policies, cultural development, etc. The strategic approach of local authorities to the preservation of cultural and natural heritage creates opportunities for their commercial use as one of the sources of economic growth and job creation in region.

In Ukraine average housing per capita in the regional context does not show essential dissimilarities. Kyiv oblast exclusive, where the average indicator (36.1 m^2) is one and a half times as much as average Ukrainian indicator; the difference in the housing space per person in leading oblast (Vinnitsa oblast - 29.3 m^2) and lagging one (Rivne oblast - 22.0 m^2) constitutes only 7.3 m^2, which is less than one third. These dissimilarities are affected neither by the nature (rural/urbanized) nor by the territorial location of oblast.

The ability of citizens to improve their own housing conditions is determined, among others, by their ability to get mortgage loans for the purposes of construction, reconstruction or purchase of real estate property. Significant differentiation in this area is caused by uneven financial solvency of citizens and the propensity to get long-term loans (which, in its turn, indirectly demonstrates the confidence in their financial stability). On the other hand, mortgage loans are often bound with excessively confined housing conditions, therefore an increase in the share of these loans in total lending might result from lower total loans provided because of inflexible structure

Goal	Goal 11. Sustainable Cities and Communities									
Target	11.1 Ensure access to housing				11.2 Ensure development of settlement sand		11.3 Ensure protection and safeguarding of the cultural and natural heritage, with involvement of the private sector			
Indicator	11.1.1. (a) Solvency ratio of the borrowing household (except for National Bank of Ukraine loans) in the context of regions according to loan purpose (real estate purchase, construction and modernization) in total volume of loans as of the end of December 2015, %		11.1.2. (a) Housing per capita/ per household, sq.m		11.2.1. Share of cities and communities that have approved and implemented regional development strategies and action plans for their implementation developed with public participation, %		11.3.1. Number of cultural and natural heritage sites included in the UNESCO World Heritage List, located at the territory of region, units		11.3.2. (a) Number of monuments of national importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area	
	2015	+/-	2015	>1/<1	2015	+/-	2015	н/п	2015	>1/<1
Ukraine (2015)	**37.8**		**22.9**				**6.0**		**1.4**	
Oblasts										
Vinnytsya	39.93	2.09	29.30	1.28	-	-	-	-	1.06	0.78
Volyn	37.59	-0.25	22.50	0.98	-	-	-	-	1.09	0.80
Dnipropetrovsk	41.25	3.41	24.30	1.06	-	-	-	-	0.75	0.55
Donetsk	33.29	-4.55	23.60	1.03	-	-	-	-	0.53	0.39
Zhytomyr	36.85	-0.99	27.00	1.18	-	-	-	-	0.54	0.39
Zakarpattya	46.24	8.40	24.20	1.06	-	-	2.00	-	1.18	0.86
Zaporizhya	39.29	1.45	23.40	1.02	-	-	-	-	0.44	0.32
Ivano-Frankivsk	30.91	-6.93	25.70	1.12	-	-	-	-	2.23	1.64
Kyiv	35.27	-2.57	36.10	1.58	-	-	-	-	1.35	0.99
Kirovohrad	23.56	-14.28	25.70	1.12	-	-	-	-	0.24	0.18
Luhansk	28.64	-9.19	24.10	1.05	-	-	-	-	0.71	0.52
Lviv	33.02	-4.82	22.80	1.00	-	-	1.00	-	1.79	1.31
Mykolayiv	35.45	-2.39	22.30	0.97	-	-	-	-	1.22	0.90
Odesa	57.25	19.41	22.50	0.98	-	-	-	-	0.78	0.57
Poltava	28.14	-9.70	25.40	1.11	-	-	-	-	1.11	0.82
Rivne	37.29	-0.55	22.00	0.96	-	-	-	-	0.85	0.62
Sumy	33.18	-4.66	28.20	1.23	-	-	-	-	1.55	1.14
Ternopil	33.82	-4.02	25.50	1.11	-	-	-	-	0.36	0.27
Kharkiv	37.57	-0.27	24.10	1.05	-	-	-	-	1.08	0.80
Kherson	36.62	-1.22	24.00	1.05	-	-	-	-	1.19	0.88
Khmelnytskiy	30.30	-7.54	26.30	1.15	-	-	1.00	-	1.07	0.78
Cherkasy	31.52	-6.32	22.70	0.99	-	-	-	-	1.91	1.41
Chernivtsi	32.75	-5.09	24.40	1.07	-	-	1.00	-	2.22	1.63
Chernihiv	27.86	-9.98	28.80	1.26	-	-	-	-	2.54	1.87
City of Kyiv	-				-	-	1.00	-	216.51	n/a

Goal	Goal 11. Sustainable Cities and Communities							
Target	11.3 Ensure protection and safeguarding of the cultural and natural heritage, with involvement of the private sector				11.5 Reduce the adverse impact of pollutants, including on the urban environment in particular, through innovative technologies			
Indicator	11.3.2.-1. Number of monuments of local importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area		11.3.3. Area of the nature reserve fund of national importance, % of the region's area		11.5.1. Ratio of air pollution emissions to 2015 level, %		11.5.2. (a) Total volume of air emissions of pollutants from stationary sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level	
	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**12.6**		**2.9**		**100.0**		**100.0**	
Oblasts								
Vinnytsya	1.77	0.14	0.80	-2.10	100.00	0.00	100.00	0.00
Volyn	0.99	0.08	6.20	3.30	100.00	0.00	100.00	0.00
Dnipropetrovsk	59.52	4.74	0.10	-2.80	100.00	0.00	100.00	0.00
Donetsk	2.83	0.23	2.40	-0.50	100.00	0.00	100.00	0.00
Zhytomyr	1.78	0.14	1.70	-1.20	100.00	0.00	100.00	0.00
Zakarpattya	3.37	0.27	11.40	8.50	100.00	0.00	100.00	0.00
Zaporizhya	14.79	1.18	3.50	0.60	100.00	0.00	100.00	0.00
Ivano-Frankivsk	2.37	0.19	9.00	6.10	100.00	0.00	100.00	0.00
Kyiv	7.01	0.56	0.60	-2.30	100.00	0.00	100.00	0.00
Kirovohrad	2.24	0.18	–		100.00	0.00	100.00	0.00
Luhansk	17.91	1.43	0.50	-2.40	100.00	0.00	100.00	0.00
Lviv	2.98	0.24	2.80	-0.10	100.00	0.00	100.00	0.00
Mykolayiv	0.12	0.01	1.90	-1.00	100.00	0.00	100.00	0.00
Odesa	30.68	2.44	3.00	0.10	100.00	0.00	100.00	0.00
Poltava	5.91	0.47	0.80	-2.10	100.00	0.00	100.00	0.00
Rivne	0.40	0.03	2.60	-0.30	100.00	0.00	100.00	0.00
Sumy	7.93	0.63	1.70	-1.20	100.00	0.00	100.00	0.00
Ternopil	17.07	1.36	2.00	-0.90	100.00	0.00	100.00	0.00
Kharkiv	29.82	2.37	0.70	-2.20	100.00	0.00	100.00	0.00
Kherson	0.56	0.04	10.20	7.30	100.00	0.00	100.00	0.00
Khmelnytskiy	8.24	0.66	13.10	10.20	100.00	0.00	100.00	0.00
Cherkasy	2.49	0.20	1.00	-1.90	100.00	0.00	100.00	0.00
Chernivtsi	4.94	0.39	3.40	0.50	100.00	0.00	100.00	0.00
Chernihiv	14.36	1.14	1.30	-1.60	100.00	0.00	100.00	0.00
City of Kyiv	1096.89	н/п	13.20	н/п	100.00	0.00	100.00	0.00

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 11.1.2 (a) - data on Luhansk oblast as of 2013.
11.5.1-11.5.4-1 - de-stimulator, given the converse readings in colors.

Goal	Goal 11. Sustainable Cities and Communities							
Target	11.5 Reduce the adverse impact of pollutants. including on the urban environment in particular, through innovative technologies						11.6 Ensure the development and implementation of local development strategies aimed at economic growth, job creation, tourism, recreation and development of the local culture, and production of local products	
Indicator	11.5.3. (a) Total volume of air emissions of pollutants from mobile sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level		11.5.4. (a) Air emissions of pollutants from stationary and mobile sources of contamination calculated in tones per sq. km		11.5.4-1. Volume of air emissions of pollutants from stationary and mobile sources of contamination, thousand tones		11.6.1. (a) Number of jobs in the tourism industry (average payroll of collective means of accommodation and subjects of touristic activity), persons per 10.000 employed persons aged 15-70	
	2015	+/-	2015	>1/<1	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**100.0**		**7.8**		**4521.3**		**4.92**	
Oblasts								
Vinnytsya	100.00	0.00	7.30	0.94	194.60	0.04	1.23	0.25
Volyn	100.00	0.00	2.10	0.27	42.80	0.01	1.23	0.25
Dnipropetrovsk	100.00	0.00	27.50	3.53	876.50	0.19	2.21	0.45
Donetsk	100.00	0.00	36.80	4.72	974.70	0.22	0.30	0.06
Zhytomyr	100.00	0.00	2.30	0.29	69.7	0.02	0.87	0.18
Zakarpattya	100.00	0.00	4.20	0.54	54.2	0.01	1.23	0.25
Zaporizhya	100.00	0.00	9.90	1.27	270.4	0.06	2.46	0.50
Ivano-Frankivsk	100.00	0.00	19.20	2.46	266.4	0.06	8.69	1.77
Kyiv	100.00	0.00	7.20	0.92	203.6	0.05	1.24	0.25
Kirovohrad	100.00	0.00	2.50	0.32	61.7	0.01	0.70	0.14
Luhansk	100.00	0.00	5.00	0.64	133	0.03	0.39	0.08
Lviv	100.00	0.00	9.30	1.19	203.1	0.04	5.63	1.15
Mykolayiv	100.00	0.00	2.60	0.33	63.5	0.01	1.16	0.24
Odesa	100.00	0.00	3.90	0.50	129.7	0.03	5.84	1.19
Poltava	100.00	0.00	4.90	0.63	141	0.03	0.67	0.14
Rivne	100.00	0.00	2.60	0.33	52.1	0.01	1.07	0.22
Sumy	100.00	0.00	2.40	0.31	57.9	0.01	1.06	0.22
Ternopil	100.00	0.00	3.40	0.44	46.4	0.01	1.08	0.22
Kharkiv	100.00	0.00	4.70	0.60	148.7	0.03	2.36	0.48
Kherson	100.00	0.00	2.00	0.26	57.1	0.01	0.81	0.16
Khmelnytskiy	100.00	0.00	3.70	0.47	75.5	0.02	1.70	0.35
Cherkasy	100.00	0.00	5.80	0.74	120.3	0.03	1.18	0.24
Chernivtsi	100.00	0.00	4.20	0.54	34.1	0.01	3.70	0.75
Chernihiv	100.00	0.00	2.30	0.29	73.3	0.02	0.99	0.20
City of Kyiv	100.00	0.00	213.80	н/п	171	0.04	34.03	н/п

of some mortgages. A combination of this factors results in a largest share of mortgage loans in Odesa, Zakarpattia, Dnipropetrovsk, Vinnytsia, Zaporizhzhia oblasts, and in smallest share in Kirovohrad, Chernihiv, Poltava, and Luhansk oblasts.

There is an inherent inequality in territorial location of cultural and natural heritage sites. For example, 181 of 821 sites of national significance are located directly in the city of Kyiv, 81 - in Chernihiv oblast. 1900 of 7586 sites of local importance are located in Dnipropetrovsk, 1022 - in Odesa oblasts, and 917 - in the city of Kyiv. The highest concentration of sites of national significance (per area unit) is registered in Chernihiv, Ivano-Frankivsk, Chernivtsi, Cherkasy, and Lviv oblasts, while highest concentration of sites of local importance is found in Dnipropetrovsk, Odesa, Kharkiv, Luhansk, and Ternopil oblasts. The number of officially registered sites depends primarily on their distinction rather than on their physical presence.

As for the national sites, such distinction and promotion result from national cultural policy; the identification of the similar sites of local significance testifies the efforts of regional and local communities in this field, and also indirectly speaks for their regional identity rate. In this context, it is necessary to focus on the extremely small representation of national sites in Kirovohrad, Ternopil, Zaporizhzhia, Donetsk, and Zhytomyr oblasts, which excludes them from the national cultural space to certain extent. Weak representation of local sites in Mykolaiv, Rivne, Kherson and Volyn oblasts should encourage local communities to pro-actively search for the components of their regional identity.

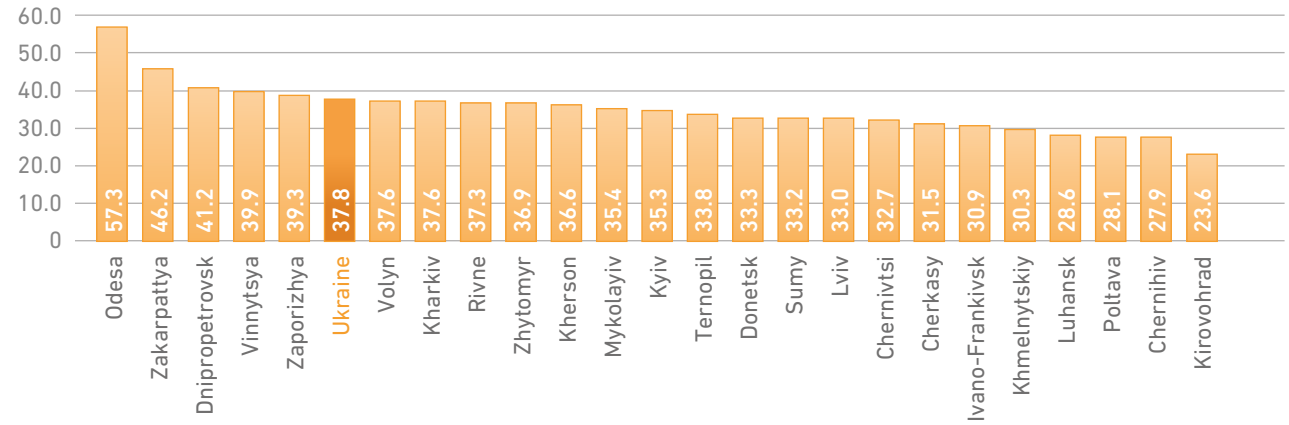
Location of nature reserves and national parks depends mostly on the availability of appropriate natural conditions, though such conditions can be purposefully created (like, for example, Askania-Nova reserve in Kherson oblast). Currently, nature reserves and national parks cover more than 10% of the territory of Khmelnytskyi, Zakarpattia and Kherson oblasts. In seven oblasts this share does not exceed 1% (0.1% in Dnipropetrovsk, 0.5% in Luhansk, 0.6% in Kyiv oblasts, etc.).

Along with their important role in establishing regional identity, cultural sites also contribute to the development of touristic business, which might appear to be an important source of income for respective territories. The largest number of full-time employees of subjects of touristic activity per 10,000 employed population involved into economic activity (Kyiv city exclusive) is registered in Ivano-Frankivsk, Odesa, Lviv, and Chernivtsi oblasts. Chernihiv, Cherkasy, Ternopil, Khmelnytskyi, Zakarpattia, and Kherson oblasts still either fail to make profits of the sites located within their territory or leave this process spontaneous and unaccounted. It should be noted that such traditional resort and recreational regions as Zakarpattia, Mykolaiv, and Kherson oblasts do not demonstrate a significant level of employment in touristic sector - this is to confirm high level of this business shadowing. The latter creates obstacles to the promoting effect of the tourist flows growth (which occurred with the loss of Crimean resorts).

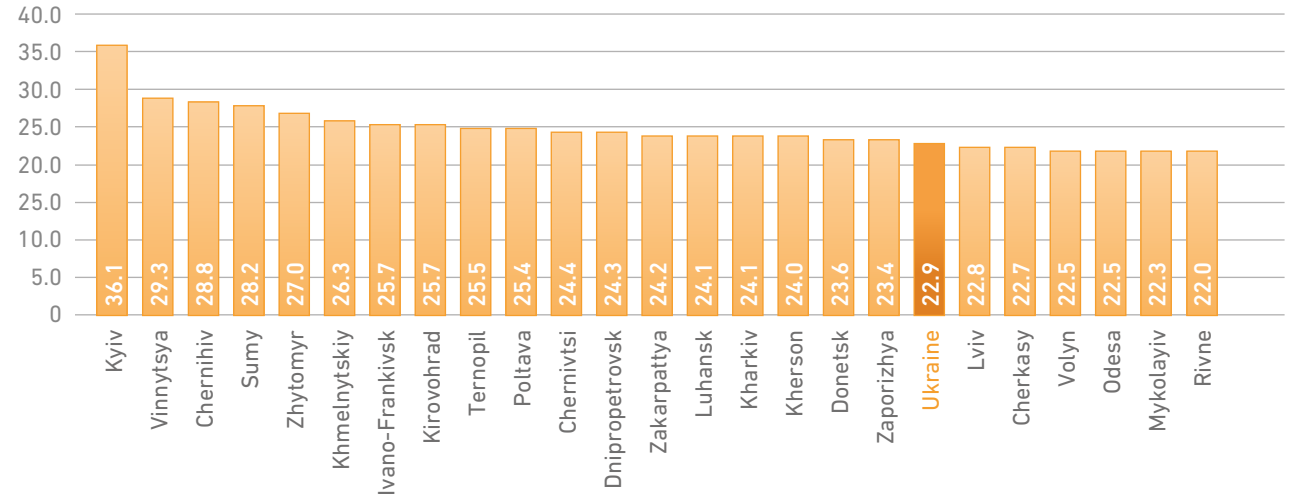
Sources of atmospheric air pollution in Ukraine are precisely localized. Almost half of the 4521.3 thousand tons of emissions (2255 thousand tons) have been registered in four industrial regions - Donetsk, Dnipropetrovsk, Zaporizhzhia and Luhansk oblasts. Accordingly, this significantly worsens the quality of life in these regions, public health indicators, and the touristic attractiveness of these oblasts. However, Ivano-Frankivsk (19.2 tons), Lviv (9.3 tons), Vinnytsia (7.3 tons), and Kyiv (7.2 tons) oblasts demonstrate considerably higher values per 1 m^2. Obviously, local authorities in these oblasts (except for the influence of Kalush pollution in Ivano-Frankivsk oblast) have a capacity to reduce emissions from stationary and mobile sources. Positive trends in atmospheric emissions are registered in northern part of the country (in Volyn, Zhytomyr, Chernigov, Sumy, Rivne oblasts) and traditionally resort Kherson and Mykolaiv oblasts, which might create competitive advantages for the development of tourism.

Baseline indicators of goal in 2015:

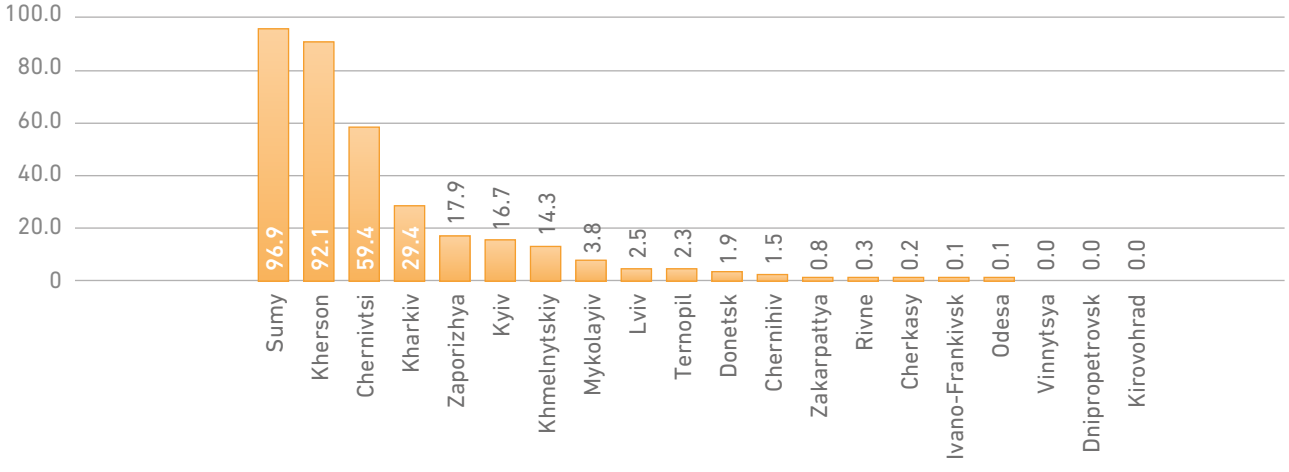
11.1.1. (a) Solvency ratio of the borrowing household (except for National Bank of Ukraine loans) in the context of regions according to loan purpose (real estate purchase. construction and modernization) in total volume of loans as of the end of December 2015, %



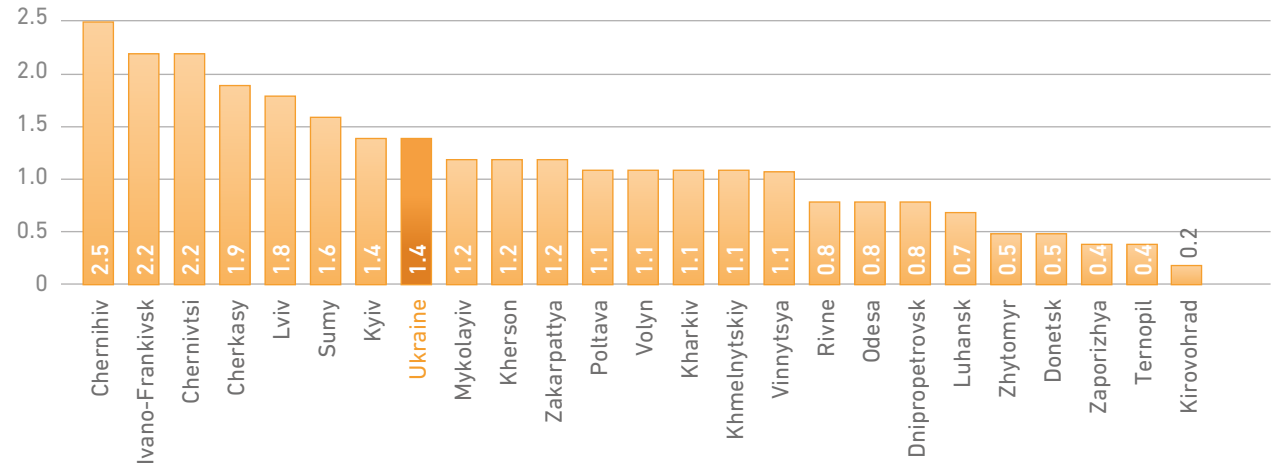
11.1.2. (a) Housing per capita/ per household, sq.m



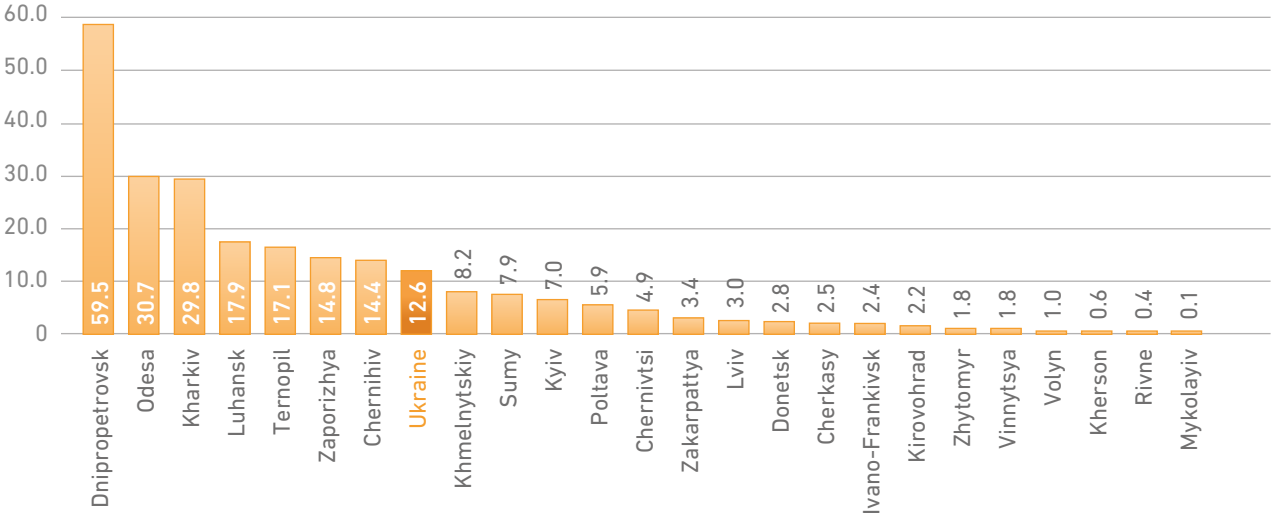
11.2.1. Share of cities and communities that have approved and implemented regional development strategies and action plans for their implementation developed with public participation, %



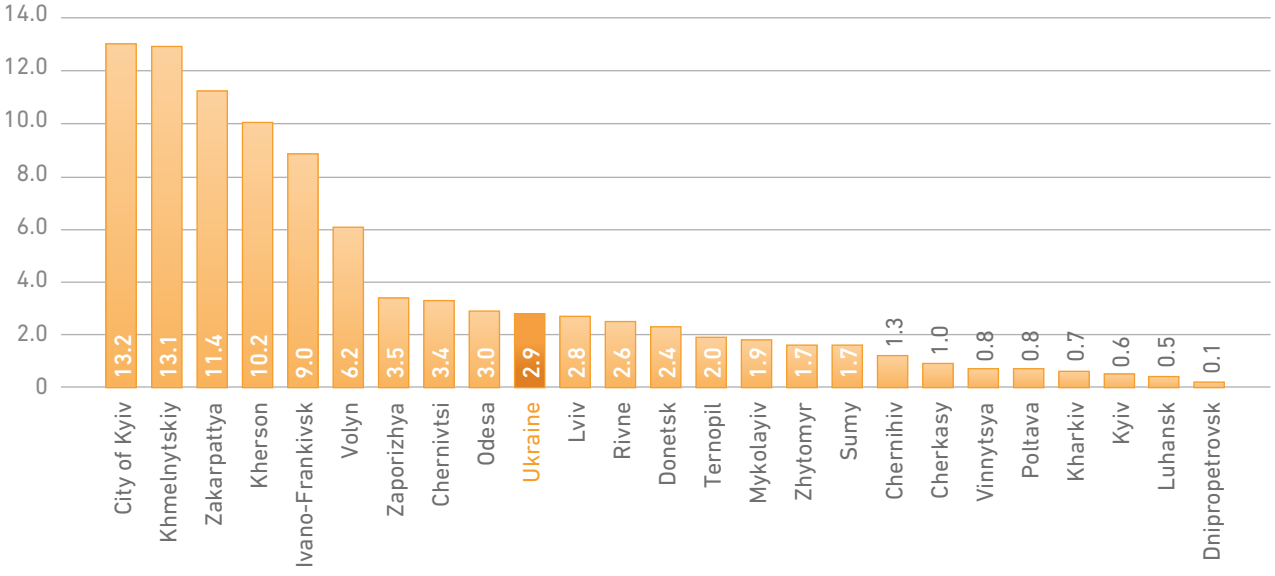
11.3.2. (a) Number of monuments of national importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area



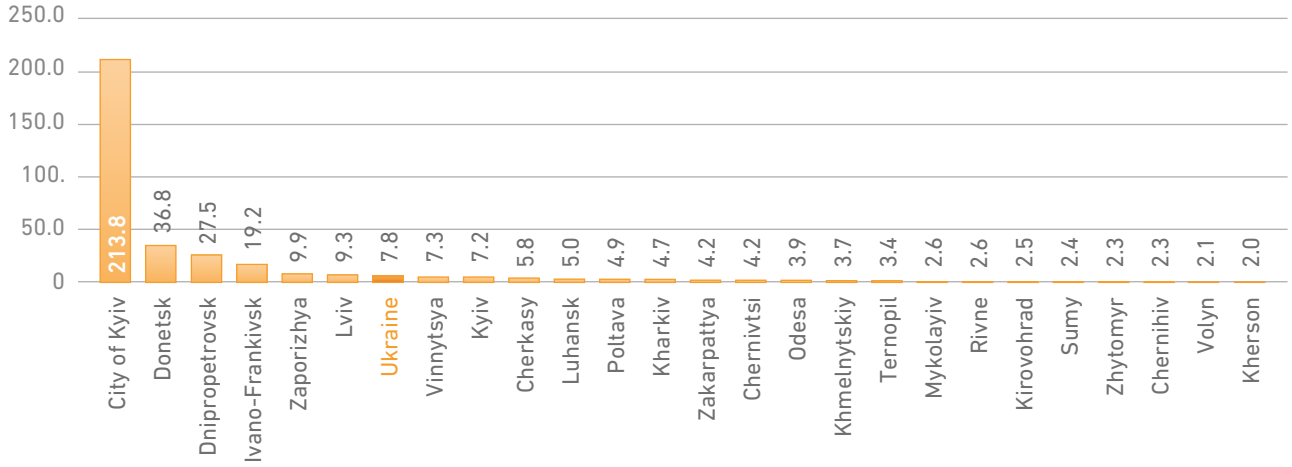
11.3.2.-1. Number of monuments of local importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area



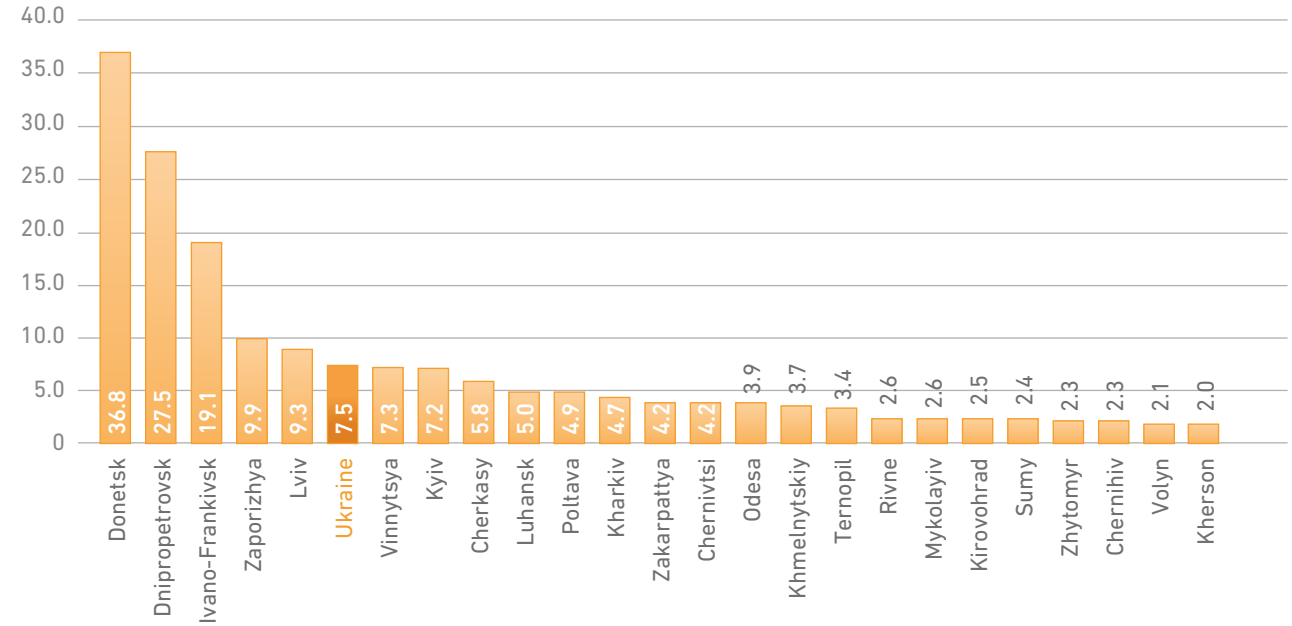
11.3.3. Area of the nature reserve fund of national importance, % of the region's area



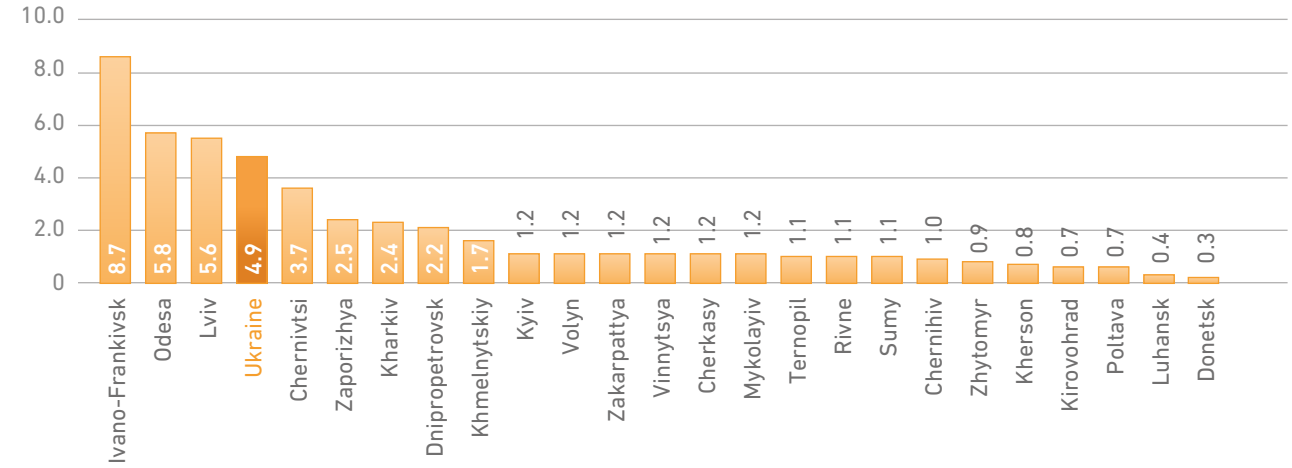
11.5.4. (a) Air emissions of pollutants from stationary and mobile sources of contamination calculated in tones per sq. km



11.5.4-1. Volume of air emissions of pollutants from stationary and mobile sources of contamination, thousand tones



11.6.1. (a) Number of jobs in the tourism industry (average payroll of collective means of accommodation and subjects of touristic activity), persons per 10.000 employed persons aged 15-70



Goal 12. Responsible Production and Consumption

Consumption is a generally recognized driving force of the economic growth much needed by Ukraine today. Growth of production is reasonable only in the event of meeting growing consumers' desire and opportunity to buy manufactured goods and services. At the same time, the growth of production and consumption requires an increase in additional natural resources input, in particular non-renewable and exhaustible ones. On the one hand, this leads to resources deterioration, and to the increase of volumes of waste polluting environment and worsening living conditions of people not only globally, but also in a separate settlement or habitat. In the regional context, there exists a certain relationship between contribution to economic growth and environmental pollution.

Therefore, the first target of this goal is to 'Reduce resource consumption of the economy', with baseline 2015 for the implementation of this indicator. The national task is to reduce the resource intensity of the economy to 60% of the 2015 level. This means that Ukraine in general and regions in particular must join the global movement for responsible (reasonable) consumption, and accordingly, responsible production based on the principles of the circular economy.

The second target should be the rationalization of waste and losses in the course of production and consumption. To achieve this, it is necessary to impose an obligation for the industrial and agricultural producers, as well as for suppliers of goods and services, to pursue special policies in their activities that would involve reduction of losses, especially after harvesting losses in the process of agricultural production, as well as disposal of waste based on the principles of the circular economy.

Local and regional authorities bear gross responsibility for waste management, primarily municipal solid waste (MSW). To do this, they have all appropriate powers and enough financial resources derived from payments for environmental pollution (environmental tax) and other sources of local budgets' income. At the same time, business has limited access to this market due to existing monopoly of local authorities. Establishment of competitive conditions will contribute to the attraction of funds from both domestic and foreign investors, as well as funds from international financial institutions.

The acceleration of the development of the agribusiness in Ukraine brings the issue of reduction of post-harvest losses to the forefront, which may ensure an increase in the productivity and performance of the agribusiness of oblasts and reduce the burden on existing agricultural land. Although such losses are being decreased, they remain to be significant.

Therefore, the second target for achieving this goal is 12.2. 'Reduce the loss of food along the production and marketing chains'. According to national indicators, progress should be measured by the 'Share of annual grain losses during storage in total produce of agricultural enterprises and farms' and 'Share of annual losses of vegetables, melons, potatoes inclusive during storage in total produce of agricultural enterprises and farms' indicators, which by 2030 should decrease, compared with the baseline year, from 2.2% to 0.5% and from 12.3% to 5%, respectively. In baseline 2015, the greatest losses in terms of 12.2.1. 'Share of annual grain losses during storage in total produce of agricultural enterprises and farms' are recorded in Donetsk, Luhansk and Rivne oblasts. With an average rate of 2.1% across Ukraine, their rates range from 5 to 2.8%. The lowest losses are registered in Zhytomyr, Lviv, and Zaporizhzhia oblasts, amounting to 1.2-1.6%. By the indicator 12.2.2. 'Share of annual losses of vegetables, melons, potatoes inclusive during storage in total produce of agricultural enterprises and farms' losses reach 66% in Luhansk, 36% in Ternopil and 25% in Khmelnytskyi oblasts, with an average rate of 17.1% across Ukraine. At the same time in Mykolayiv and Ivano-Frankivsk oblasts these losses constitute only 6.2% and 7.2%, respectively. Therefore, the significance of these indicators is not clearly related to the geographical location or climatic conditions of the oblasts. The culture of farming and the level of control effected by manufacturers are obviously decisive.

Of all types of waste generated by the enterprises and households, chemical waste poses a particular hazard. Therefore, an important target in the implementation of Goal 12 is 12.3. 'Ensure sustainable use of chemicals through innovative technologies and production'; the progress will be measured by using two indicators. The first one is 12.3.1. 'Number of enterprises which introduced a hazardous substances management system at the territory of region'. This indicator differs from the national because of regional inapplicability of the latter. According to this indicator, the most critical situation is found in Dnipropetrovsk oblast, reaching more than 7 thousand tons, with an average rate of 502 tons in Ukraine. In baseline 2015 Zakarpattia and

Goal	Goal 12. Responsible Production and Consumption							
Target	12.1 Reduce resource consumption of the economy		12.2 Reduce the loss of food along the production and marketing chains				12.3 Ensure sustainable use of chemicals through innovative technologies and production	
Indicator	12.1.2. Resource consumption in GRP (share of natural resources per unit of GRP), % of 2015 level		12.2.1. (a) Share of annual grain losses during storage in total produce of agricultural enterprises and farms, %		12.2.2. (a) Share of annual losses of vegetables, melons, potatoes inclusive during storage in total produce of agricultural enterprises and farms, %		12.3.1. (a) Volume of generated waste (I-IV hazard classes), tones per sq.km of the region's area	
	2015	+/-	2015	+/-	2015	+/-	2015	>1/<1
Ukraine (2015)	**100.0**		**2.14**		**17.09**		**501.87**	
Oblasts								
Vinnytsya	100.0	0.0	2.16	0.02	20.81	3.72	73.62	0.15
Volyn	100.0	0.0	2.35	0.22	23.07	5.98	31.71	0.06
Dnipropetrovsk	100.0	0.0	2.13	0.00	22.54	5.45	7113.24	14.17
Donetsk	100.0	0.0	5.03	2.90	11.56	-5.53	640.23	1.28
Zhytomyr	100.0	0.0	1.22	-0.92	20.52	3.43	17.38	0.03
Zakarpattya	100.0	0.0	2.25	0.11	10.99	-6.10	10.48	0.02
Zaporizhya	100.0	0.0	1.66	-0.48	8.71	-8.38	3.90	0.01
Ivano-Frankivsk	100.0	0.0	2.08	-0.06	7.24	-9.85	152.57	0.30
Kyiv	100.0	0.0	2.06	-0.08	12.82	-4.27	59.03	0.12
Kirovohrad	100.0	0.0	2.12	-0.02	8.38	-8.71	1356.11	2.70
Luhansk	100.0	0.0	3.94	1.81	66.34	49.25	-	-
Lviv	100.0	0.0	1.58	-0.56	11.03	-6.06	135.27	0.27
Mykolayiv	100.0	0.0	1.80	-0.34	6.24	-10.85	93.80	0.19
Odesa	100.0	0.0	1.84	-0.30	8.63	-8.46	18.09	0.04
Poltava	100.0	0.0	2.19	0.05	24.14	7.05	154.14	0.31
Rivne	100.0	0.0	2.81	0.68	13.86	-3.23	42.06	0.08
Sumy	100.0	0.0	2.10	-0.04	16.83	-0.26	35.24	0.07
Ternopil	100.0	0.0	2.24	0.10	36.64	19.55	58.51	0.12
Kharkiv	100.0	0.0	1.98	-0.15	13.60	-3.49	30.71	0.06
Kherson	100.0	0.0	1.78	-0.35	15.63	-1.46	14.66	0.03
Khmelnytskiy	100.0	0.0	1.92	-0.22	24.88	7.80	46.58	0.09
Cherkasy	100.0	0.0	1.87	-0.27	24.30	7.21	56.37	0.11
Chernivtsi	100.0	0.0	2.30	0.16	11.88	-5.21	49.16	0.10
Chernihiv	100.0	0.0	1.72	-0.41	11.69	-5.39	27.19	0.05
City of Kyiv	100.0	0.0	-		-		958.37	1.91

Goal	Goal 12. Responsible Production and Consumption							
Target	12.3 Ensure sustainable use of chemicals through innovative technologies and production				12.4 Reduce the amount of waste generation, and increase recycling and reuse through innovative technologies and production			
Indicator	12.3.1-1. Number of enterprises which introduced a hazardous substances management system at the territory of region		12.3.2. Share of enterprises which introduced a chemical substances management system in accordance with international standards, in total number of enterprises that use hazardous chemicals, %		12.4.1 (a) Volume of waste generated per unit of GRP, kg per USD 1.000 in actual prices		12.4.2. Share of burned and recycled waste in the total waste generated, %	
	2015	>1/<1	2015	+/-	2015	>1/<1	2015	+/-
Ukraine (2015)	**220.00**		**-**		**993.70**		**30.00**	
Oblasts								
Vinnytsya	3.00	0.01	-	-	223.90	0.23	22.50	-7.50
Volyn	1.00	0.00	-	-	133.40	0.13	22.80	-7.20
Dnipropetrovsk	24.00	0.11	-	-	6495.60	6.54	31.50	1.50
Donetsk	31.00	0.14	-	-	710.40	0.71	16.20	-13.80
Zhytomyr	6.00	0.03	-	-	87.80	0.09	19.70	-10.30
Zakarpattya	2.00	0.01	-	-	28.00	0.03	5.10	-24.90
Zaporizhya	16.00	0.07	-	-	418.20	0.42	50.10	20.10
Ivano-Frankivsk	4.00	0.02	-	-	285.10	0.29	34.00	4.00
Kyiv	16.00	0.07	-	-	105.40	0.11	8.90	-21.10
Kirovohrad	6.00	0.03	-	-	5855.40	5.89	25.90	-4.10
Luhansk	11.00	0.05	-	-	409.90	0.41	11.30	-18.70
Lviv	8.00	0.04	-	-	204.50	0.21	12.70	-17.30
Mykolayiv	12.00	0.05	-	-	328.90	0.33	4.40	-25.60
Odesa	14.00	0.06	-	-	40.60	0.04	4.70	-25.30
Poltava	8.00	0.04	-	-	320.50	0.32	70.00	40.00
Rivne	6.00	0.03	-	-	148.30	0.15	20.80	-9.20
Sumy	3.00	0.01	-	-	139.60	0.14	24.30	-5.70
Ternopil	7.00	0.03	-	-	188.50	0.19	17.60	-12.40
Kharkiv	11.00	0.05	-	-	89.50	0.09	19.80	-10.20
Kherson	8.00	0.04	-	-	90.60	0.09	21.20	-8.80
Khmelnytskiy	3.00	0.01	-	-	150.90	0.15	36.20	6.20
Cherkasy	15.00	0.07	-	-	154.80	0.16	61.40	31.40
Chernivtsi	3.00	0.01	-	-	133.60	0.13	22.70	-7.30
Chernihiv	2.00	0.01	-	-	155.60	0.16	16.70	-13.30
City of Kyiv	-		-	-	22.80	0.02	15.90	-14.10

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 12.1.2-12.4.1 (a) - de-stimulator, given the converse readings in colors.

Zaporizhzhia oblasts were reported as the cleanest oblasts under this indicator. This reading might speak either on unevenness of waste production and on irrelevance of intensity of life for this process, or on problems with correctness of monitoring this indicator.

While the previous indicator determines the amount of accumulated waste, the second indicator 12.3.1-1 'Number of enterprises which introduced a hazardous substances management system at the territory of region' defines the ability to deal with hazardous waste by engaging business into this activity. The largest number of engaged legal entities was registered in Donetsk, Dnipropetrovsk and Zaporizhzhia oblasts, which correlates with both the intensity of industrial activity in their territories and the volume of hazardous waste generated in Dnipropetrovsk and Donetsk oblasts.

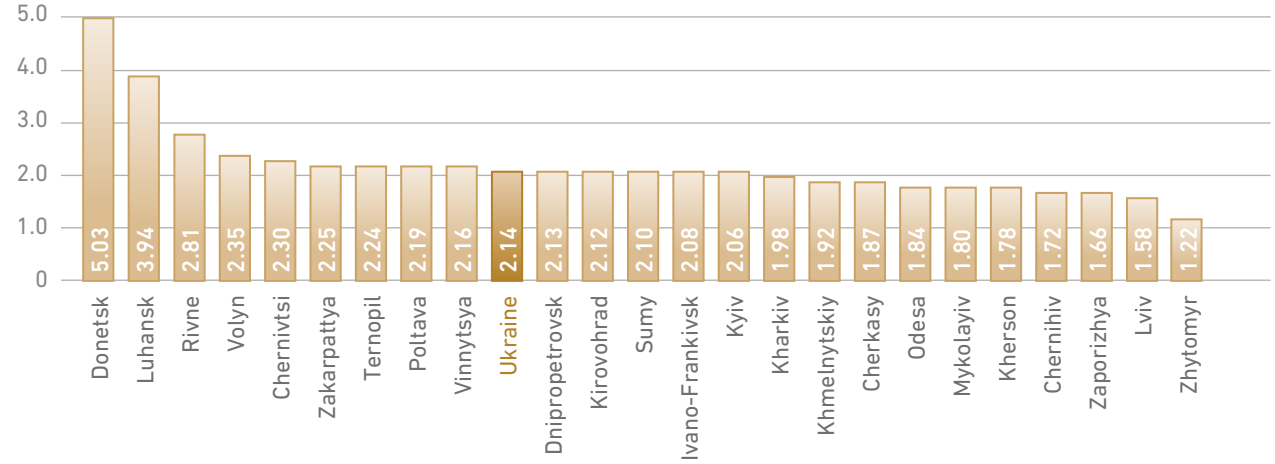
Next target 12.4. 'Reduce the amount of waste generation and increase recycling and reuse through innovative technologies and production' covers the whole range of issues that arise in in the process of waste management. 12.4.1. 'Volume of waste generated per unit of GRP, kg per USD 1,000 in actual prices' is the first indicator for this target. It shows the total volume of generated waste in respective territories of oblasts. The analysis of the baseline shows abnormally high readings in Dnipropetrovsk and Kirovograd oblasts, which must testify that the GRP of these areas is largely formed by industries generating a considerable amount of waste. If so, then regional authorities in these areas need to take measures to change the structure of production for the reduction of the share of waste in GDP.

Last indicator 12.4.2. 'Share of burned and recycled waste in the total waste generated' shows the progress in disposal of accumulated waste. At average in Ukraine one-third of generated waste was disposed of in 2015, and the remnants kept accumulated in landfills. However, some areas appeared to be more successful and demonstrated better results. For example, in Poltava oblast 70% of the generated waste was destructed, and 61% correspondingly in Chernyhiv oblast. At the same time, this rate does not reach 5% in Odesa and Mykolaiv oblasts.

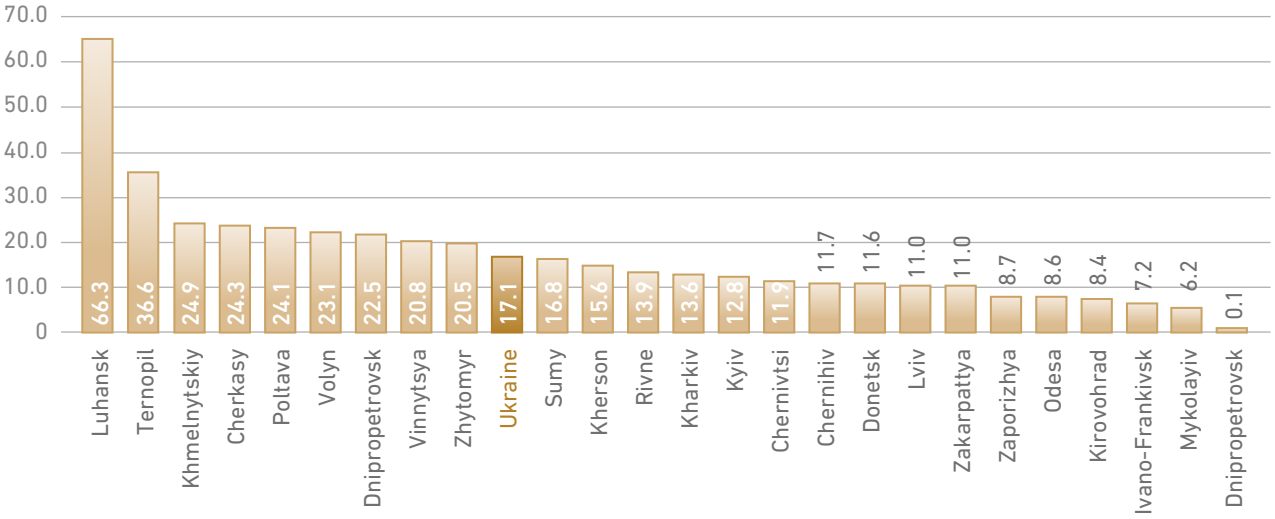
According to national indicators, the volume of generated waste per unit of GDP should be reduced by 2030 from 997 to 800 kg per 1,000 US dollars, in terms of share of disposed waste in their total volume - from 30% to 55%. While the first indicator can be actually implemented via waste reduction in Dnipropetrovsk and Kirovohrad oblasts (provided the situation won't get worser in other oblasts), the implementation of the second indicator requires an improvement in 23 oblasts, where the figures do not exceed 55%.

Baseline indicators of goal in 2015:

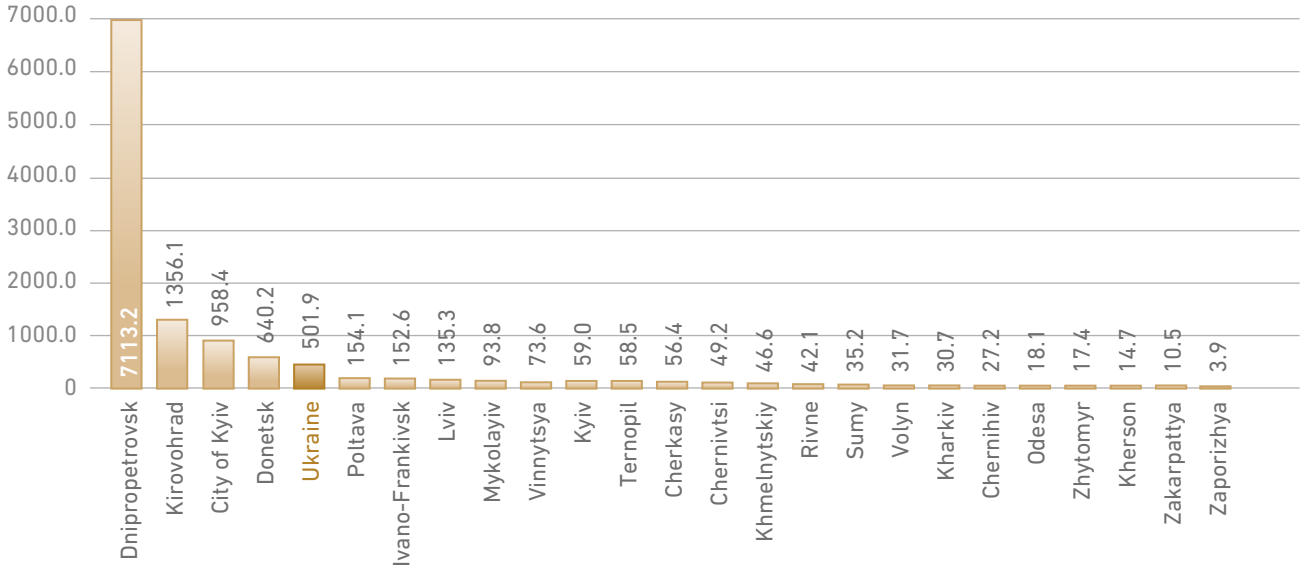
12.1.1. (a) Share of annual grain losses during storage in total produce of agricultural enterprises and farms, %



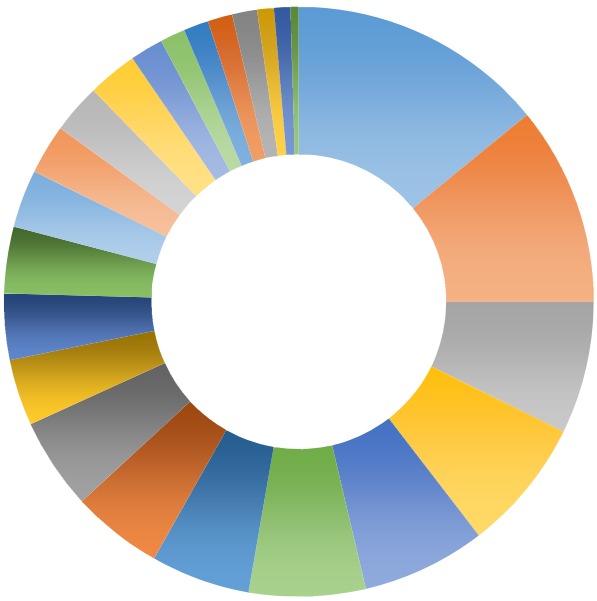
12.1.2. (a) Share of annual losses of vegetables, melons, potatoes inclusive during storage in total produce of agricultural enterprises and farms, %



12.3.1. (a) Volume of generated waste (I-IV hazard classes), tones per sq.km of the region's area

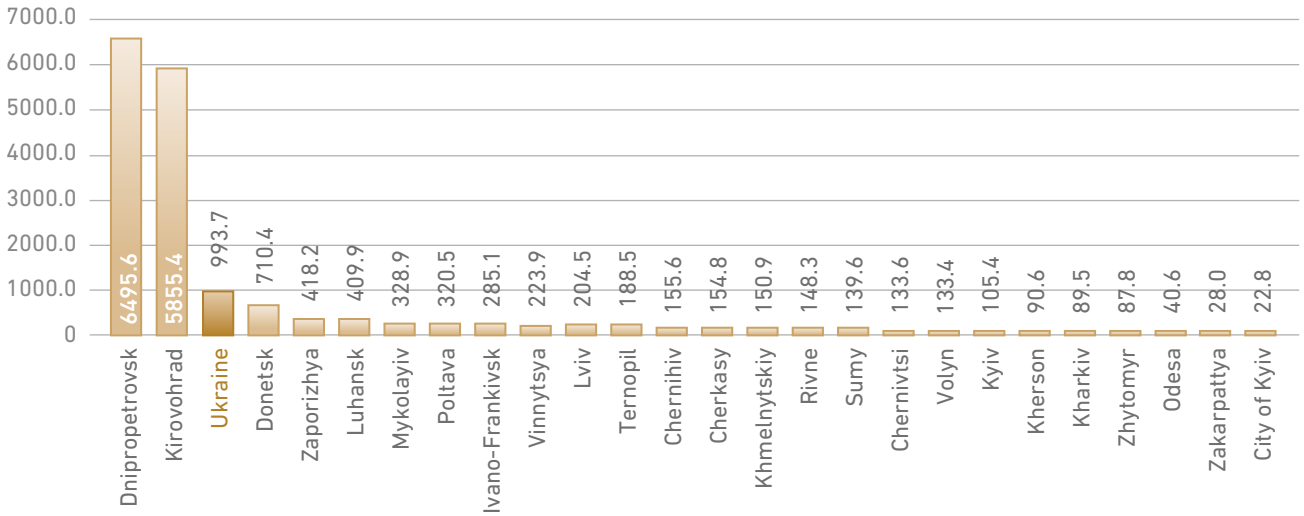


12.3.1-1. Number of enterprises which introduced a hazardous substances management system at the territory of region

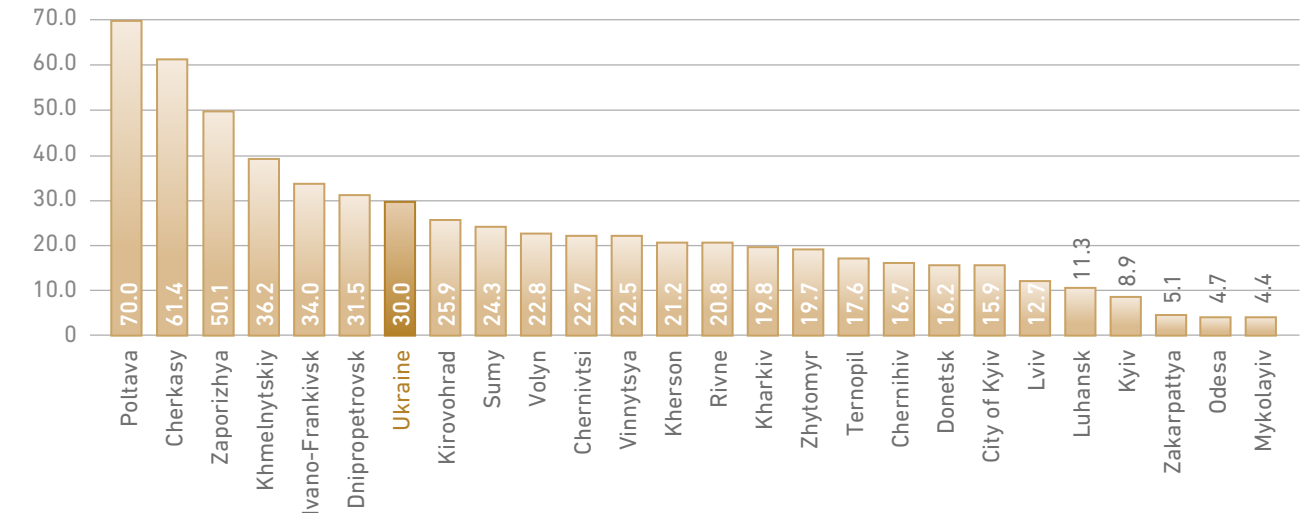


Donetsk	31.0	Ternopil	7.0
Dnipropetrovsk	24.0	Zhytomyr	6.0
Zaporizhya	16.0	Kirovohrad	6.0
Kyiv	16.0	Rivne	6.0
Cherkasy	15.0	Ivano-Frankivsk	4.0
Odesa	14.0	Vinnytsya	3.0
Mykolayiv	12.0	Sumy	3.0
Luhansk	11.0	Khmelnytskiy	3.0
Kharkiv	11.0	Chernivtsi	3.0
Lviv	8.0	Zakarpattya	2.0
Poltava	8.0	Chernihiv	2.0
Kherson	8.0	Volyn	1.0

12.4.1 (a) Volume of waste generated per unit of GRP, kg per USD 1.000 in actual prices



12.4.2. Share of burned and recycled waste in the total waste generated, %



Goal 13. Climate Action

Ukraine ratified the United Nations Framework Convention on Climate Change (hereinafter referred to as the Convention) in 1997. As its Party, Ukraine recognized that Earth's climate change and its adverse effects are a matter of common concern for humanity, and therefore all countries should make their contribution, given the common but differentiated responsibilities, to reduce greenhouse gas emissions, which, in their turn, cause global warming. Within the framework of the Convention (UNFCCC) on the regulation of measures to reduce carbon dioxide emissions from 2020, Ukraine has ratified the Paris Agreement to combat global climate change, replacing the Kyoto Protocol. The Paris Agreement came into force on November 4, 2016. It provides that each Party to the Convention will take specific steps to combat climate change in accordance with its capabilities subject to different national circumstances.

To meet its international commitments, Ukraine has adopted a Strategy of Low Carbon Development of Ukraine until 2050, which lays a basis for the development and implementation of economic instruments supporting country's transition to low carbon development, the attraction of innovative technologies and international financial resources.

Regional differentiation of CO_2 emissions is extremely big. Carbon intensity of the gross domestic product (GDP) in Ukraine is almost twice as high as the global average. Therefore, the largest amount of CO_2 emissions comes from the energy sector due to the combustion of fossil energy sources.

Ukraine has set its goal to reduce emissions by 40% of the year 1990 level.

According to the State Statistics Service, total atmospheric emission of pollutants and carbon dioxide in 1990 amounted to 15.6 million tons, 60.1% (9.4 million tons) of which was generated by stationary sources. Compared to 1990, in Ukraine the amount of these emissions decreased by 3.5 times to 4.5 million tons in 2015[15]. Moreover, this reading is reached owing to reduction of stationary sources pollution up to 2.86 million tons, which in terms of the total area of the country is 4.7 tons per km^2. A significant reduction in emissions occurred precisely in the first five years of Ukraine's independence, mainly due to the GDP drop, decrease in the population and in social standards. Over the past 20 years this figure remains at the level of 5-7 million tons.

It can be stated that the national targets of 2015 are met. However, given that the share of the energy sector in total emissions constitutes 65%[16] and brings to high differentiation of this indicator in the regional dimension, special attention should be paid to these oblasts.

According to the forecast of the Ministry of Ecology and Natural Resources of Ukraine, in the baseline (conservative) scenario, the share of greenhouse gas (GHG) emissions in the 'Energy' and 'Industrial Processes' sectors will constitute 54% of the 1990 levels in 2030, that is, it will increase by 23% compared to 2015 (31%). The 'Energy efficiency' and 'Energy efficiency and renewable energy' scenarios offer somewhat better indicators: 41% and 37% of the 1990 levels by 2030, respectively. According to other optimistic scenarios, the situation is better, but it is most likely that by 2030 emissions of pollutants will increase if the characteristics of most technologies of use and consumption of energy resources by the population, as well as at any stage of production of goods or services will remain unchanged. At the same time, the level of positive change of economic development in the industrial oblasts will have a significant impact on the increase of the respective emissions in these regions.

Regional authorities are substantially limited in their ability to influence many parameters that determine the level of air pollution both regionally and nationwide. At the same time, air pollution inflicted by some regions affects others.

The volume of pollutant emissions into the air from stationary sources of pollution in 2015 amounted to 2857.4 thousand tons. According to the State Statistics Service, 41.1% of emissions are generated in the field of electricity, gas, steam and conditioning air supply, 30.5% - in metallurgical production, and 14.9% - in the extraction of coal and lignite. In terms of manufacturing and production processes, process equipment (machinery), energy companies (9083 units) in 2015 produce 55.4% of all emissions, which constitutes at average 174.1 tons per enterprise. The largest share is generated in the process of burning by energy and manufacturing industries (42%). The production processes in the ferrous metallurgy and coal industry account for 21% of the total emissions.

A comparison of the regional dimension selected as indicators of the baseline for achieving Goal

[15] Exclusive of the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopil and a part of temporarily occupied territories in Donetsk and Luhansk oblasts

[16] Ukraine 2050 Low Emission Development Strategy

Goal	Goal 13. Climate Action		
Target	13.1 Limit greenhouse gas emissions in the economy		
Indicator	13.1.1. (a) Volume of emissions of air pollutants from stationary sources, tones per sq.km, of the region's area		Volume of emissions of air pollutants from stationary sources, thousands tones
	2015	>1/<1	2015
Ukraine (2015)	**4.73**		**2857.40**
Oblasts			
Vinnytsya	5.08	1.07	134.70
Volyn	0.23	0.05	4.70
Dnipropetrovsk	22.68	4.79	723.90
Donetsk	34.60	7.31	917.60
Zhytomyr	0.30	0.06	9.00
Zakarpattya	0.35	0.07	4.40
Zaporizhya	7.13	1.51	193.70
Ivano-Frankivsk	16.08	3.40	223.90
Kyiv	2.78	0.59	78.10
Kirovohrad	0.58	0.12	14.20
Luhansk	4.32	0.91	115.20
Lviv	4.69	0.99	102.40
Mykolayiv	0.64	0.14	15.80
Odesa	0.78	0.17	26.10
Poltava	1.93	0.41	55.60
Rivne	0.51	0.11	10.20
Sumy	0.73	0.16	17.50
Ternopil	0.61	0.13	8.50
Kharkiv	1.70	0.36	53.40
Kherson	0.31	0.07	8.90
Khmelnytskiy	0.89	0.19	18.30
Cherkasy	2.75	0.58	57.50
Chernivtsi	0.40	0.08	3.20
Chernihiv	1.06	0.22	33.90
City of Kyiv	31.94	6.75	26.70

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 13.1.1 (a) - de-stimulator, given the converse readings in colors.

Application of Indicator 'Emissions of air pollutants from stationary and mobile sources per sq.km,' is inappropriate due to discontinuance of its use by the State Statistics Service of Ukraine because of its calculation method imperfection since 2016. This allows to ensure further comparativeness in years for the purpose of progress evaluation.

13 has demonstrated a significant level of their differentiation.

In regional context, the largest volumes of emissions of air pollutants from stationary sources in the region's area are generated in coal and lignite basins, oil and gas regions and the capital, in particular: Donetsk (34.6%), Dnipropetrovsk (22.7%), Ivano-Frankivsk (16.1%) and Zaporizhzhia (7.1%) oblasts and the city of Kyiv (31.9%).

In absolute terms, more than half of the carbon emissions from stationary sources is produced by Donetsk (917.6 thousand tons) and Dnipropetrovsk (723.9 thousand tons) oblasts (1.6 million tons per year); and together with emissions in Ivano-Frankivsk (223.9 thousand tons) and Zaporizhzhia (193.7 thousand tons) oblasts, the amount of emissions reaches 2/3 of the total volume (2 million tons).

A city of Kryvyi Rih In Dnipropetrovsk oblast is responsible for almost half of pollutant emissions in the region (327 thousand tons), in Donetsk oblast the same is reported for a city of Mariupol (249.6 thousand tons) and city of Kurakhove (112.7 thousand tons), together they produce one third of the region's emissions; in Zaporizhzhia oblast a city of Zaporizhzhia (83.3 thousand tons) and a city of Enerhodar (103.9 thousand tons) are leading polluters; in Ivano-Frankivsk oblast a city of Burshtyn (198 thousand tons) is a gross polluter.

For example, the largest polluters in Zakarpattia oblast are the compressor stations Rososh and Uzhgorod, hydroelectric power station Berehove, OJSC Zakarpathaz and main gas pipeline authorities (Khust and Volovets). The largest share of emissions in Ivano-Frankivsk oblasts is produced by Burshtyn TPS, Kalush TPP and Dolynskyi Greenhouse and Vegetable Plant.

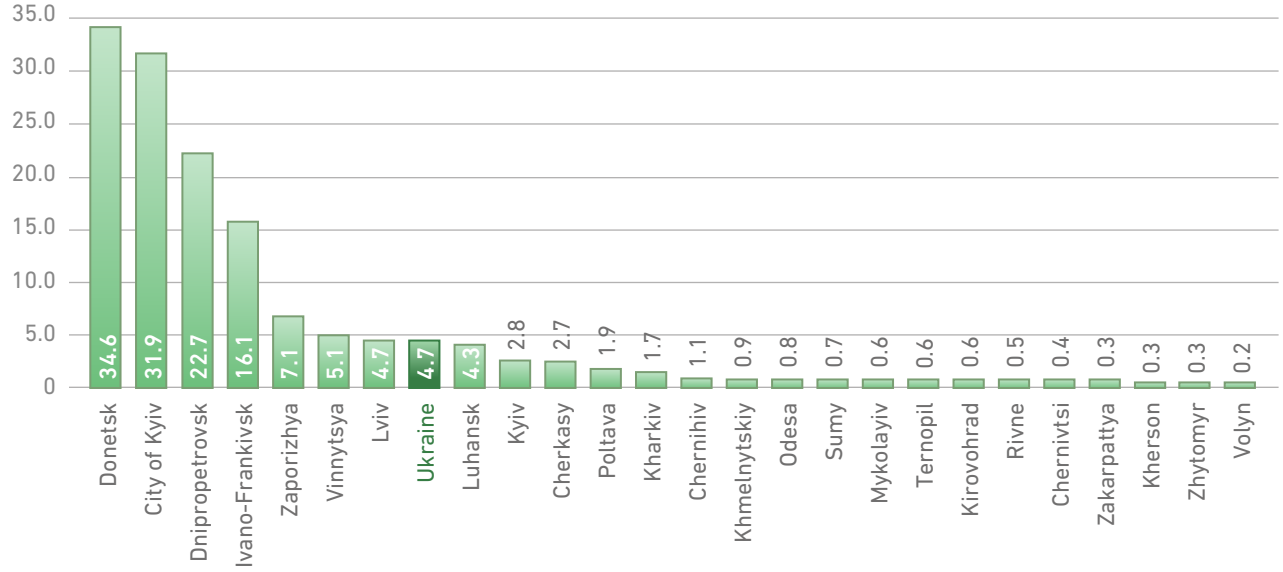
The higher the environmental burden in the oblast is, the more measures should be taken to control the situation with pollution and to overcome the consequences of man-made impacts. Thus, according to the State Statistics Service, in 2015 oblasts implemented 323 air protection measures at a cost of 1.1 billion UAH. 112 of these measures were carried out in the mentioned oblasts (Dnipropetrovsk, Donetsk, Zaporizhzhia and Ivano-Frankivsk oblasts).

Performed comparison proves the existence of significant environmental impact of the industrial peculiarities of Ukrainian regions. At the same time, the achievement of qualitative changes in improving this indicator for reducing pollutant emissions into the air from stationary sources in the long run is possible and necessary in the process of achieving the sustainable development goals, including the implementation of strategic tasks within the framework of national and local development priorities, and will primarily be the result of changes at the macro level. However, regional authorities could take a series of actions within their competence and can speed up the achievement of the target levels of indicators.

The situation in the country can turn around only with a new climate policy, gradual refusal from fossil fuels, introduction of energy efficient technologies and the general transition of the economy to the model of sustainable development.

Baseline indicators of goal in 2015:

13.1.1. (a) Volume of emissions of air pollutants from stationary sources, tones per sq.km, of the region's area



Goal 14. Life Below Water

The environmental condition of surface water bodies and the quality of water are the main factors of the sanitary and epidemic safety of the population. The deterioration of marine coastal and territorial waters of the Black and Azov Seas is virtually uncontrolled today; water deterioration is caused by toxic, microbiological and nutrient pollution incurred by the activities of ports, large cities, river and coastal runoff. Unsatisfactory state of the Black Sea estuaries, most of which belong to the nature reserve fund and are unique recreational resource should be noted separately. The main sources of water pollution are the discharges from industrial facilities, flushing from agricultural fields, improper state of water drain infrastructure and central treatment facilities in settlements of Ukraine, and non-compliance with the requirements for water conservation zones. Water pollution leads to spread of many diseases, a decrease in the overall resistance of organism and, consequently, to an increase in the overall incidence of diseases, in particular, infections and cancers.

Existing monitoring system of water condition is ineffective, obsolete and does not meet current European requirements. As a result, information collected on indicators of the environmental status of waters, their pollution, including in the waters of the Azov and Black Seas, is incomplete and does not reflect their real state.[17]

To achieve SDG-14, provision is made at national level for the triple reduction of the share of discharges of polluted wastewater in the total volume of discharges into the marine environment, for introduction of Integrated Coastal Zone Management by all administrative units (districts), for almost two-fold increase in the area of the territories and objects of the natural reserve fund in the sea area, as well as for increase in the volume of legal extraction of water bio-resources in the exclusive marine zone by 2030.

The coastal regions of Ukraine include Donetsk, Mykolaiv, Odesa, Zaporizhzhia and Kherson oblasts. At the same time, in connection with hostilities, demolition of infrastructure at the temporarily occupied territory of Donetsk oblast has brought to environmental imbalance, leading to detrimental environmental changes at the territory, threat of toxic mineral waters penetrating the Azov Sea, shutdown of treatment facilities and destruction of toxic and radioactive waste storage facilities at respective territory; all these factors dictate a need in additional environmental monitoring and close attention.

The differences in socio-economic development of Ukraine's regions cause an uneven man-induced burden for the natural environment. Special attention is needed to address above mentioned problems both at national and regional level with regard to handling specific industrial objects, taking measures to monitor compliance with sanitary standards and environmental status, extraction of water bio-resources and implementation of environmental protection measures, in particular in neighboring regions.

The State Environmental Inspection of Ukraine and its territorial bodies carry out state supervision (control) by observing the requirements of environmental protection legislation on the use, reproduction and protection of the marine environment and natural resources of sea waters, the territorial sea, the exclusive (marine) economic zone of Ukraine and the continental shelf of Ukraine. Within relevant legislation the above mentioned bodies are entitled to issue orders and instructions to the territorial bodies of central executive authorities, local executive authorities and local self-government bodies on suspension or cancellation of permits, licenses, certificates, conclusions, decisions, limits, quotas, approvals, certificates for special use of natural resources, emissions and discharges of pollutants into the environment, handling of hazardous chemicals, transboundary movement of plants and animals (in particular aquatic living resources).

It is the Government who plays a leading role in the implementation of environmental policy, still many problems can and must be solved at local level. Local authorities act as follows: build and operate communal infrastructure of drinking water supply systems, sewage systems, etc.; conduct control over the construction of housing and industrial facilities; establish local environmental protection requirements, make decisions on the organization of territories and objects of the local nature reserve fund and other territories, which are subject to special protection; deliver proposals to appropriate public authorities regarding the transformation of natural and other objects of environmental, historical, cultural or scientific value into protected natural, historical or cultural areas. All these and

[17] Draft of the Ukraine 2030 National Environmental Policy Strategy http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=63948

Goal	Goal 14. Life Below Water									
Target	14.1 Reduce marine pollution		14.2 Ensure the sustainable management and protection of marine and coastal ecosystems, and improve their resilience and recovery through innovative technologies						14.3 Implement effective regulation of extraction of marine resources	
Indicator	14.1.1. (a) Share of discharges of polluted wastewater into surface waters of the region in total discharges of sewage water, %		14.2.1. Share of administrative units (districts) which introduced an Integrated management of coastal areas, %		14.2.2. Area of territories and objects of the natural reserve fund of oblast, % of the total territory of oblast		14.2.3. Area of territories and objects of the natural reserve offshore sea, thousands of hectares		14.3.1. (a) Volumes of extraction of marine bio-resources in the exclusive maritime zone of the region, tones per thousand hectares	
	2015	+/-	2015	+/-	2015	+/-	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**17.8**		**0.00**		**4.26**		**585.60**		**4.11**	
Oblasts										
Donetsk	31.27	13.46	0.00	0.00	2.40	-1.86	0.00	0.00	2.40	0.58
Zaporizhya	7.34	-10.47	0.00	0.00	3.50	-0.76	97.80	0.17	8.29	2.01
Mykolayiv	27.18	9.37	0.00	0.00	1.90	-2.36	127.90	0.22	0.79	0.19
Odesa	23.72	5.91	0.00	0.00	3.00	-1.26	115.80	0.20	6.68	1.62
Kherson	0.21	-17.60	0.00	0.00	10.20	5.94	244.10	0.42	1.59	0.39

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 14.1.1 (a) - de-stimulator, given the converse readings in colors

other issues related to the approval of programs of socio-economic development of territories, local budget, formation of extra-budgetary funds, holding of a local referendum, approval of local urban development programs, general plans for the development of appropriate settlements, etc., which must take into account environmental drivers, should be solved exclusively at plenary sessions of a village, settlement or city council.

Within relevant legislation executive bodies of local councils are also entitled to confirm requests on imposing fines and contributions on enterprises, institutions and organizations for caused pollution of the environment and other environmental damage, as well as decide on location of production, utilities and other facilities in accordance with the legislation. The competence of district and oblast councils covers the organization of territories and objects of the local nature reserve fund and other territories subject to special protection.

Thus, regional authorities have a wide range of powers and tools that enable them to effectively influence the achievement of goals set.

A comparison of the regional dimension in selected indicators of the baseline for achieving Goal 14 has demonstrated a significant level of their differentiation.

According to the indicator 'Share of discharges of polluted wastewater into surface waters of the region in total discharges of sewage water of the region' among the coastal regions, Donetsk and Mykolaiv oblasts discharge almost one third of total polluted wastewater of the region (31.2% and 27.2% respectively). Odessa oblast discharges a quarter of polluted wastewater into the surface water objects of the region (23.7%). The smallest share of polluted water is being discharged by the enterprises of Kherson oblast (0.2%).

According to the data of environmental certificates, the threatening volumes of polluted discharges in these oblasts are produced by the water service companies and large industrial facilities, in the amount of 263.7 million m3 in Donetsk oblast, 70.04 million m3 in Zaporizhzhia oblast, 43.69 million m3 in Odesa oblast, which results in the environmental disaster of the basins of the Black and Azov Seas. At the same time the communal and utility service enterprises discharge the largest amount of polluted substances into the Black Sea, while industrial enterprises discharge polluted water into the Azov Sea.

The largest amount of pollutants was discharged into the Azov Sea in 2015 by the enterprises of:

- Zaporizhzhia oblast - total of 44.79 thousand tons, utility service enterprise Berdiansk-vodokanal owned by Berdiansk city council in the city of Berdyansk (5.7 million m^3);
- Donetsk oblast - PJSC Illich Iron&Steel Works, city of Mariupol (128.5 thousand tons) and PJSC Yenakiieve Iron&Steel Works (9.7 thousand tons). In 2015 total of 682 thousand tons of pollutants were discharged.

The state of the Azov Sea is significantly influenced by the flow of untreated sewage, meltwater, and wastewater from the inhabited area of the city of Berdyansk.

The largest amount of pollutants was discharged in the Black Sea in 2015 by the enterprises of:

- Odessa oblast - LLC Infox branch of Infox-vodokanal (59.4 million m^3). Total of 168.3 thousand tons of pollutants discharged in 2015 into the surface water objects of the region.
- Mykolaiv oblast - MUSE Mykolaivvodokanal (19.4 million m^3). Total of 24.3 thousand tons of pollutants discharged in 2015 into the surface water objects of the region.
- Kherson oblast - Total of 38.6 thousand tons of pollutants discharged in 2015 into the surface water objects of the region.
- Zaporizhzhia oblast - PJSC Zaporizhstal, city of Zaporizhzhia, discharged 69.3 million m^3 of polluted wastewater into the Dnipro River, which then flowed into the Black Sea.

The southwestern part of the Black Sea, in connection with the development of underwater oil and gas deposits, is severely polluted with petroleum products. Powerful port factories and port Yuzhnyi near Odessa pose a significant potential danger. Intensive recreational real estate development of coastal area has resulted in additional discharge of household wastewater and sewage into the sea.

Therefore, in order to achieve the target average Ukrainian rate, these oblasts must reduce their baseline rates by almost 3 to 5 times by 2030, which requires significant investments for equipping main industrial and utility service facilities of the oblasts with water treatment plants.

Indicator 'Volumes of extraction of marine bio-resources in the exclusive maritime zone of the region' describes the introduction of effective regulation of the extraction of marine biological resources. Mykolaiv and Kherson oblasts have the lowest relative indicators (0.79 and 1.59 tons per thousand hectares, respectively). At the same time, Odesa and Mykolaiv oblasts extract practically 7-8 times as much of marine bio-resources in the exclusive marine zone of the region.

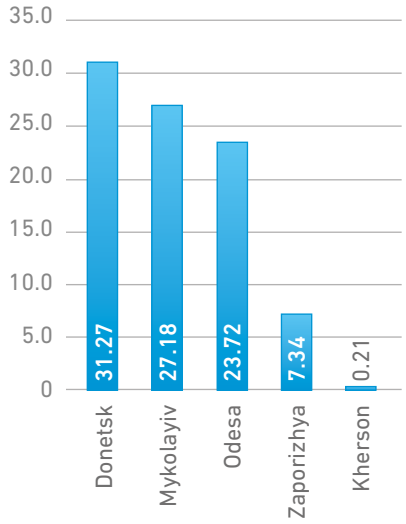
Coastal territories, in particular Odesa,

Zaporizhzhia, Kherson and Donetsk oblasts belong to the most anthropogenically modified regions of the state. The relevant indicator is a 'Share of the area of territories and objects of the natural reserve fund of oblast, of the total territory of oblast'. Thus, Kherson oblast possesses the largest share of the territories and objects of the natural reserve fund (10.2%), while Mykolaiv controls the smallest share (1.9%).

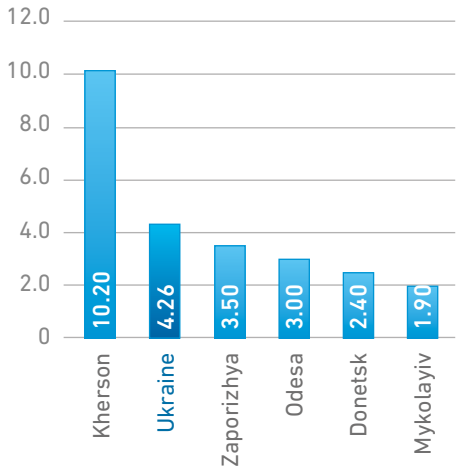
It should be noted that the total area of territories and objects of the nature reserve fund in the coastal regions is slowly growing (0.1% over 7 years), which suggests that in order to achieve the target average Ukrainian indicator of 2010, local authorities need to make significant efforts to expand the regional environmental network.

Baseline indicators of goal in 2015:

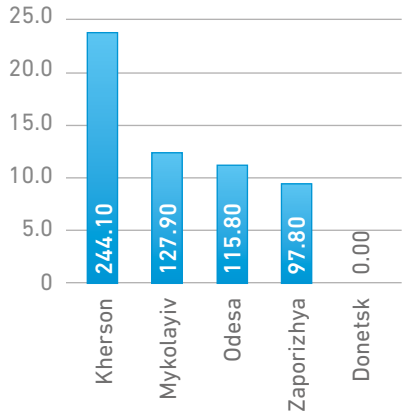
14.1.1. (a) Share of discharges of polluted wastewater into surface waters of the region in total discharges of sewage water, %



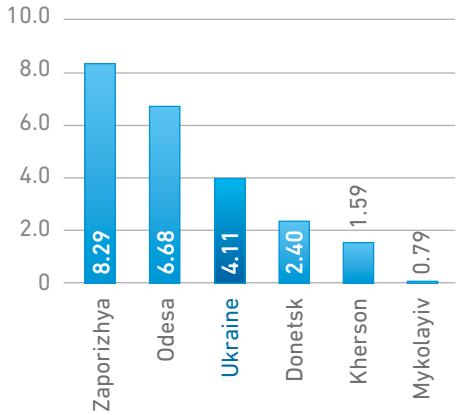
14.2.2. Area of territories and objects of the natural reserve fund of oblast, % of the total territory of oblast



14.2.3. Area of territories and objects of the natural reserve offshore sea, thousands of hectares



14.3.1. (a) Volumes of extraction of marine bio-resources in the exclusive maritime zone of the region, tones per thousand hectares



Goal 15. Life on Land

The geographic location and significant size of the territory of Ukraine bring to a significant biodiversity in its regions. Ukraine has virtually all landscapes and types of soils represented on its territory - from deserts in Kherson oblast to marshes and forests in the north, from steppe plains in the south to the Carpathian Mountains in the west. Ukrainian chernozem soils occupy the largest area in Europe. Such diversity requires various approaches to its protection and preservation across the country. The state of land is significantly affected by economic, especially agricultural activity, with historically different specialization from region to region.

That is why the regional differentiation of land ecosystem indicators is quite significant. Problems include high degree of land cultivation, constant pollution of the territory through industrial and agricultural activities, soil erosion, mining (often poorly controlled), artificial melioration, deforestation.

Some issues must be addressed by the central government, namely, the elaboration of a legislative and regulatory framework in the field of ecosystem protection, environmental protection issues, regulating wages in the field of environmental protection, taxation, the protection and maintenance of national parks, granting mining licenses and building permits.

However, the protection, conservation, and sometimes the restoration of existing ecosystems depends significantly on regional authorities. Regional government must exercise its powers in addressing a wide range of issues from the list below: issues concerned with treatment of polluted water and air, reasonable use of soils, prevention of water and wind erosion, efficient use of agricultural land through efficient crop rotation systems, financing of soil restoration projects, creation of local nature reserves, afforestation of territories, raising public awareness campaigns on environmental protection issues.

A comparison of the regional dimension in selected indicators of the baseline for achieving Goal 15 has demonstrated a significant level of their differentiation.

The indicators of the natural reserve funds and environmental network are highly important. The first of them is the total area of the nature reserves and national natural parks of the region in thousands of hectares and the share of the area of the territories and objects of the nature reserve fund in the general territory of the region. It is natural, that leading positions are kept by Kherson oblast owing to Askaniya-Nova reserve and the only desert in Ukraine - Oleshky sands (290.6 thousand hectares and 10.2% of the territory respectively) and by Carpathian region with a large number of national parks in the mountains: Khmelnytskyi (270.1 thousand ha and 13.1%), Zakarpattia (146 thousand ha and 11.4%) and Ivano-Frankivsk (125.70 thousand ha and 9%) oblasts. The smallest share of natural reserve lands is found in the east of Ukraine in Dnipropetrovsk (3.8 thousand ha and 0.1%) and Luhansk (12.4 thousand ha and 0.5%) oblasts. The next indicator is the share of the area of the environmental network in the total area of the region. The north-western regions are the leaders in this category, namely Rivne (94%), Zakarpattia (77.1%) and Ivano-Frankivsk (68%) oblasts. The smallest share of such territories belongs to Volyn (6.4%), Lviv (6.8%), Kharkiv (7%) and Chernihiv (7%) oblasts.

'Forested territory of the region, in percentage of the total area of the region' and 'wood stock in forests, in thousands of cubic meters per 100-hectare area of the region' are the other important environmental indicators for this target. These indicators have the highest values in Rivne oblast (40.2% and 6 thousand m^3 respectively) and the Carpathian region: Zakarpattia (56.8% and 12.68 thousand m^3), Ivano-Frankivsk (45.6% and 11.2 thousand m^3), Chernivtsi (31.9% and 7.66 thousand m^3) and Lviv (31.8% and 7.16) oblasts. Practically deforested territories are situated in southern and eastern regions, namely in Zaporizhzhia (4.4% and 0.03 thousand m^3), Mykolaiv (5.1% and 0.96 thousand m3), Kherson (5.3% and 42 thousand m^3) and Odessa (6.7% and 0.49 thousand m^3) oblasts.

The next indicator relates to capital investment and current expenses aimed at protection and restoration of soil, ground and surface waters, UAH per 1 hectare of the region's territory. The eastern regions, where this situation is the most complicated due to the large number of industrial objects, are the best to cope with such rehabilitation and protection: Dnipropetrovsk (274.24 UAH) and Zaporizhzhia (129.53 UAH) oblasts. The rest invests much less resources, and Zhytomyr (0.12 UAH), Chernihiv (0.23 UAH), Kyiv (0.62 UAH) and Zakarpattia (0.65 UAH) oblasts make least of all.

As for the environmental impact of agricultural production, there are important indicators

Goal	Goal 15. Life on Land							
Target	15.1 Ensure the conservation. restoration and sustainable use of terrestrial and inland freshwater ecosystems						15.2 Promote sustainable forest management	
Indicator	15.1.1. Area of territories and objects of the natural reserve fund of the region, thousands of hectares		15.1.2. Share of area of territories and objects of the natural reserve fund in the total area of the region, %		15.1.3. Share of the area of the environmental network in the total area of the region, %		15.2.1. Forested territory of the region, %	
	2015	>1/<1	2015	+/-	2015	+/-	2015	+/-
Ukraine (2015)	**1769.10**		**2.90**		**22.40**		**17.60**	
Oblasts								
Vinnytsya	20.20	0.01	0.80	-2.10	15.70	-6.70	14.30	-3.30
Volyn	124.70	0.07	6.20	3.30	6.40	-16.00	34.60	17.00
Dnipropetrovsk	3.80	0.00	0.10	-2.80	-	-	6.00	-11.60
Donetsk	64.30	0.04	2.40	-0.50	-	-	10.30	-7.30
Zhytomyr	51.00	0.03	1.70	-1.20	61.60	39.20	37.70	20.10
Zakarpattya	146.00	0.08	11.40	8.50	77.10	54.70	56.80	39.20
Zaporizhya	95.00	0.05	3.50	0.60	-	-	4.40	-13.20
Ivano-Frankivsk	125.70	0.07	9.00	6.10	68.00	45.60	45.60	28.00
Kyiv	17.20	0.01	0.60	-2.30	46.10	23.70	23.10	5.50
Kirovohrad	-	-	-	-	27.00	4.60	7.70	-9.90
Luhansk	12.40	0.01	0.50	-2.40	-	-	13.40	-4.20
Lviv	60.40	0.03	2.80	-0.10	6.80	-15.60	31.80	14.20
Mykolayiv	45.80	0.03	1.90	-1.00	18.20	-4.20	5.10	-12.50
Odesa	100.70	0.06	3.00	0.10	28.40	6.00	6.70	-10.90
Poltava	22.80	0.01	0.80	-2.10	-	-	9.90	-7.70
Rivne	52.50	0.03	2.60	-0.30	94.00	71.60	40.20	22.60
Sumy	40.40	0.02	1.70	-1.20	64.00	41.60	19.30	1.70
Ternopil	27.30	0.02	2.00	-0.90	30.10	7.70	14.60	-3.00
Kharkiv	22.70	0.01	0.70	-2.20	7.00	-15.40	13.30	-4.30
Kherson	290.60	0.16	10.20	7.30	20.20	-2.20	5.30	-12.30
Khmelnytskiy	270.10	0.15	13.10	10.20	-	-	13.90	-3.70
Cherkasy	19.90	0.01	1.00	-1.90	37.10	14.70	16.20	-1.40
Chernivtsi	27.80	0.02	3.40	0.50	12.80	-9.60	31.90	14.30
Chernihiv	42.00	0.02	1.30	-1.60	7.00	-15.40	23.20	5.60
City of Kyiv	11.00	0.01	13.00	10.10	-	-	41.90	24.30

Goal	Goal 15. Life on Land							
Target	15.2 Promote sustainable forest management		15.3 Restore degraded lands and soils through innovative technologies					
Indicator	15.2.2. (a) Wood stock in forests, thousands of cubic meters per 100 hectares of the region's area		15.3.1. (a) Volume of capital investment and current expenses aimed at protection and restoration of soil, ground and surface waters, UAH per 1 hectare of the region's territory		15.3.2. Amount of arable land, owned or rented agricultural business as of January, 1, thousands of hectares		15.3.3. Share of arable land in the total area of the region, %	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	+/-
Ukraine (2015)	**3.48**		**25.53**		**31131.00**		**51.60**	
Oblasts								
Vinnytsya	2.20	0.63	2.21	0.09	1667.30	0.05	62.90	11.30
Volyn	3.37	0.97	1.43	0.06	607.60	0.02	30.20	-21.40
Dnipropetrovsk	-	-	247.24	9.68	2082.60	0.07	65.20	13.60
Donetsk	0.42	0.12	31.50	1.23	1561.00	0.05	58.90	7.30
Zhytomyr	4.59	1.32	0.12	0.00	1053.40	0.03	35.30	-16.30
Zakarpattya	12.68	3.64	0.65	0.03	192.50	0.01	15.10	-36.50
Zaporizhya	0.03	0.01	129.53	5.07	1880.90	0.06	69.20	17.60
Ivano-Frankivsk	11.20	3.22	16.91	0.66	377.70	0.01	27.10	-24.50
Kyiv	5.51	1.58	0.62	0.02	1280.20	0.04	45.50	-6.10
Kirovohrad	0.79	0.23	1.13	0.04	1730.30	0.06	70.40	18.80
Luhansk	1.04	0.30	0.93	0.04	1227.30	0.04	46.00	-5.60
Lviv	7.16	2.06	25.07	0.98	719.00	0.02	32.90	-18.70
Mykolayiv	0.96	0.28	8.79	0.34	1646.80	0.05	67.00	15.40
Odesa	0.49	0.14	2.47	0.10	1961.80	0.06	58.90	7.30
Poltava	1.83	0.53	5.00	0.20	1713.10	0.06	59.60	8.00
Rivne	6.01	1.73	1.18	0.05	614.50	0.02	30.60	-21.00
Sumy	3.76	1.08	0.73	0.03	1159.70	0.04	48.70	-2.90
Ternopil	2.34	0.67	1.39	0.05	831.00	0.03	60.10	8.50
Kharkiv	2.58	0.74	7.58	0.30	1851.10	0.06	58.90	7.30
Kherson	0.41	0.12	0.46	0.02	1672.60	0.05	58.80	7.20
Khmelnytskiy	2.29	0.66	1.88	0.07	1217.60	0.04	59.00	7.40
Cherkasy	6.22	1.78	0.67	0.03	1242.00	0.04	59.40	7.80
Chernivtsi	7.66	2.20	19.07	0.75	322.10	0.01	39.80	-11.80
Chernihiv	5.50	1.58	0.23	0.01	1319.10	0.04	41.30	-10.30
City of Kyiv	0.00	0.00	0.00		-		-	

Goal	Goal 15. Life on Land									
Target	15.3 Restore degraded lands and soils through innovative technologies						15.4 Ensure the conservation of mountain ecosystems			
Indicator	15.3.4. (a) Agricultural area of organic amendment, thousands of hectares		15.3.5. Area of agricultural land of extensive use (hayfields, pastures) of the region, thousands of hectares		15.3.6. Share of area of agricultural land of extensive use (hayfields, pastures) in total area of the region, %		15.4.1. Area of the nature reserve fund in mountainous regions, thousands of hectares		15.4.2. Share of the area of the nature reserve fund in mountainous regions in the total area of the country (region), %	
	2015	>1/<1	2015	>1/<1	2015	+/-	2015	>1/<1	2015	-
Ukraine (2015)	**441.80**		**7840.5**		**12.99**		**669.00**		**1.10**	
Oblasts										
Vinnytsya	31.70	0.07	236.30	0.03	8.92	-4.07	-	-	-	-
Volyn	9.60	0.02	363.30	0.05	18.04	5.04	-	-	-	-
Dnipropetrovsk	13.40	0.03	332.50	0.04	10.42	-2.57	-	-	-	-
Donetsk	11.10	0.03	329.80	0.04	12.44	-0.55	-	-	-	-
Zhytomyr	17.30	0.04	311.90	0.04	10.46	-2.53	-	-	-	-
Zakarpattya	0.10	0.00	223.50	0.03	17.53	4.53	182.20	0.27	14.29	-
Zaporizhya	4.50	0.01	299.40	0.04	11.01	-1.98	-	-	-	-
Ivano-Frankivsk	13.50	0.03	210.20	0.03	15.09	2.10	218.80	0.33	15.71	-
Kyiv	62.60	0.14	251.60	0.03	8.95	-4.04	-	-	-	-
Kirovohrad	3.40	0.01	242.20	0.03	9.85	-3.14	-	-	-	-
Luhansk	8.80	0.02	555.00	0.07	20.80	7.81	-	-	-	-
Lviv	9.60	0.02	443.50	0.06	20.32	7.32	157.40	0.24	7.21	-
Mykolayiv	4.50	0.01	268.00	0.03	10.90	-2.09	-	-	-	-
Odesa	3.50	0.01	402.50	0.05	12.08	-0.91	-	-	-	-
Poltava	70.80	0.16	359.60	0.05	12.51	-0.48	-	-	-	-
Rivne	14.70	0.03	254.20	0.03	12.68	-0.31	-	-	-	-
Sumy	14.00	0.03	447.2	0.06	18.76	5.77	-	-	-	-
Ternopil	12.10	0.03	170.70	0.02	12.35	-0.64	-	-	-	-
Kharkiv	17.00	0.04	421.90	0.05	13.43	0.44	-	-	-	-
Kherson	2.20	0.00	165.60	0.02	5.82	-7.17	-	-	-	-
Khmelnytskiy	48.50	0.11	270.70	0.03	13.12	0.13	-	-	-	-
Cherkasy	42.20	0.10	143.20	0.02	6.85	-6.14	-	-	-	-
Chernivtsi	1.90	0.00	108.70	0.01	13.43	0.44	110.58	0.17	13.66	-
Chernihiv	24.80	0.06	589.00	0.08	18.46	5.47	-	-		
City of Kyiv	-									

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions: 15.2.2 (a) - data on Donetsk, Luhansk, Rivne oblasts as of 2016;
15.3.2. 15.3.3 - de-stimulator, given the converse readings in colors.

describing the amount of arable land, owned or rented agricultural business in thousands of hectares and the share of arable land in the total area of the region. Today, the most cultivated lands belong to Zaporizhzhia (69.2%), Mykolaiv (67%), Dnipropetrovsk (65.2%) and Vinnytsia (62.9%) oblasts. The smallest share of arable lands is located in Zakarpattia (15.1%), Ivano-Frankivsk (27.1%), Volyn (30.2%) and Rivne (30, 6%) oblasts.

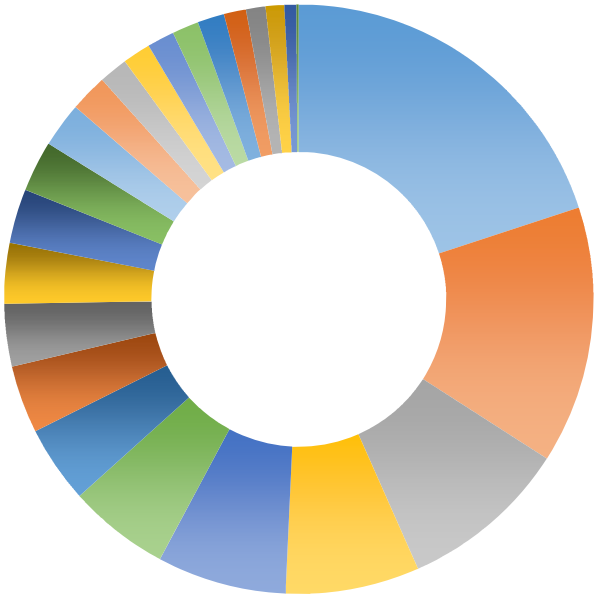
Another significant indicator in terms of impact on soil and envirnment is the agricultural area of organic amendment in thousands of hectares. Poltava (70.8 thousand ha), Kyiv (62.6 thousand ha), Khmelnytskyi (48.5 thousand ha) and Cherkasy (42.2 thousand ha) oblasts are ranked as leaders here.

The last group of indicators is the area of agricultural land of extensive use (hayfields, pastures) of the region in thousands of hectares, and their share in the total territory of the region, headed by Odessa (489 thousand ha and 36.99% respectively), Poltava (359.6 thousand ha and 12%), Dnipropetrovsk (332.5 thousand ha and 10.4%) and Kyiv (243.2 thousand ha and 8.65%) oblasts. The lowest rates are registered in Zakarpattia (0.3 thousand ha and 0.02%) and Chernihiv (71.7 thousand ha and 0.02%) oblasts.

Thus, virtually every region faces the problems associated with the protection and restoration of terrestrial ecosystems, and regional authorities must focus on the problems inherent to these territories. It is necessary to expand the territory of nature reserves and national parks, increase the amount of forest in regions, enlarge the share of organically fertilized soil. Furthermore, investments into protection and rehabilitation of the soil should be considerably increased. The achievement of selected indicators and reduction of their differentiation is quite possible and necessary in the achievement of the sustainable development goals. There is a need in immediate joint coordinated actions of central and regional authorities.

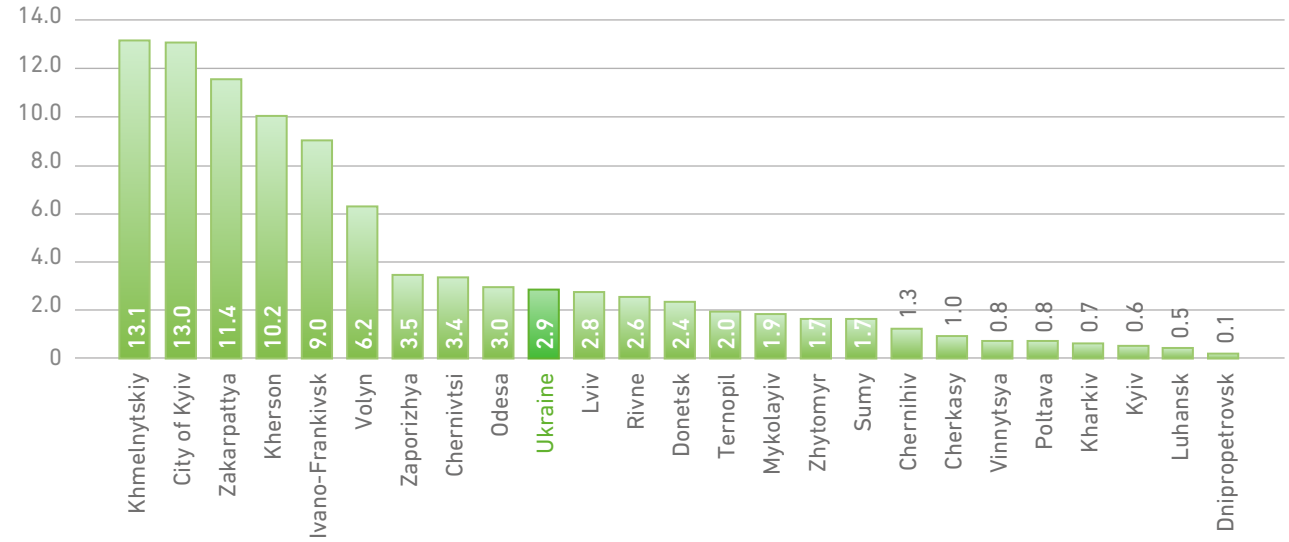
Baseline indicators of goal in 2015:

15.1.1. Area of territories and objects of the natural reserve fund of the region, thousands of hectares

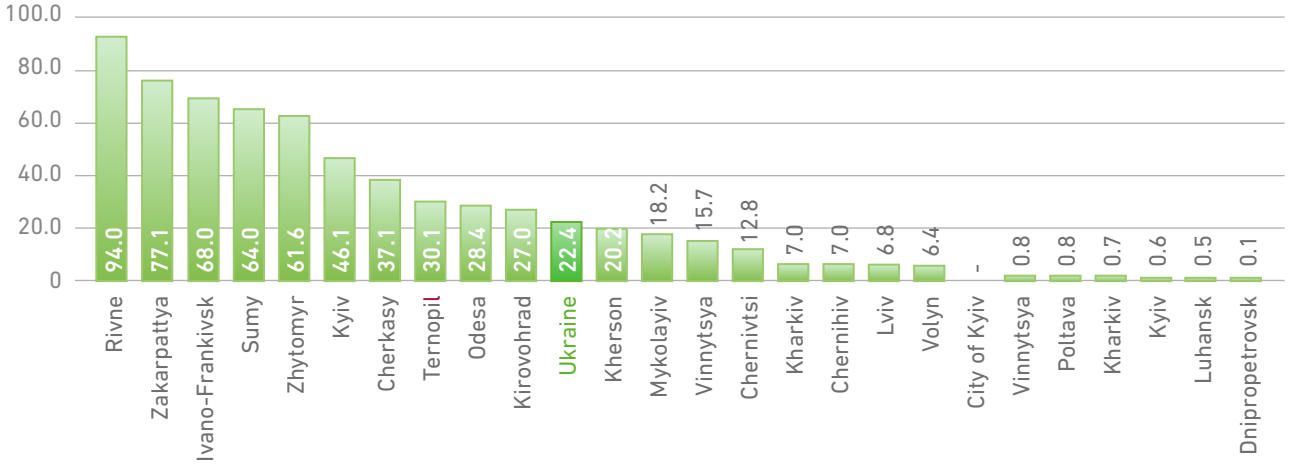


Kherson	290.6	Chernihiv	42.0
Khmelnytskiy	270.1	Sumy	40.4
Zakarpattya	146.0	Chernivtsi	27.8
Ivano-Frankivsk	125.7	Ternopil	27.3
Volyn	124.7	Poltava	22.8
Odesa	100.7	Kharkiv	22.7
Zaporizhya	95.0	Vinnytsya	20.2
Donetsk	64.3	Cherkasy	19.9
Lviv	60.4	Kyiv	17.2
Rivne	52.5	Luhansk	12.4
Zhytomyr	51.0	City of Kyiv	11.0
Mykolayiv	45.8	Dnipropetrovsk	3.8

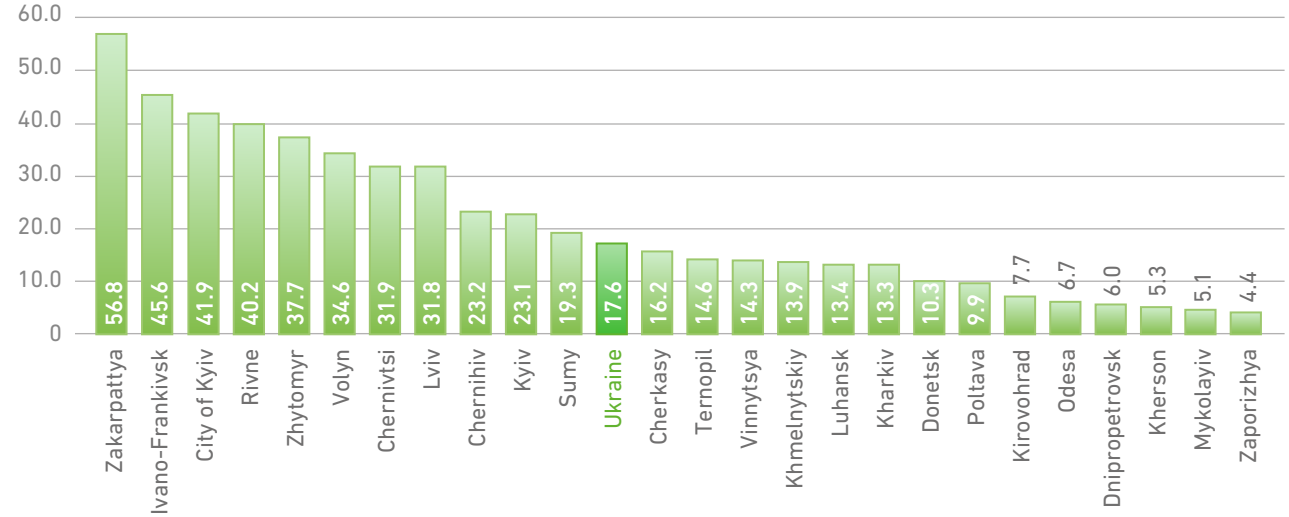
15.1.2. Share of area of territories and objects of the natural reserve fund in the total area of the region, %



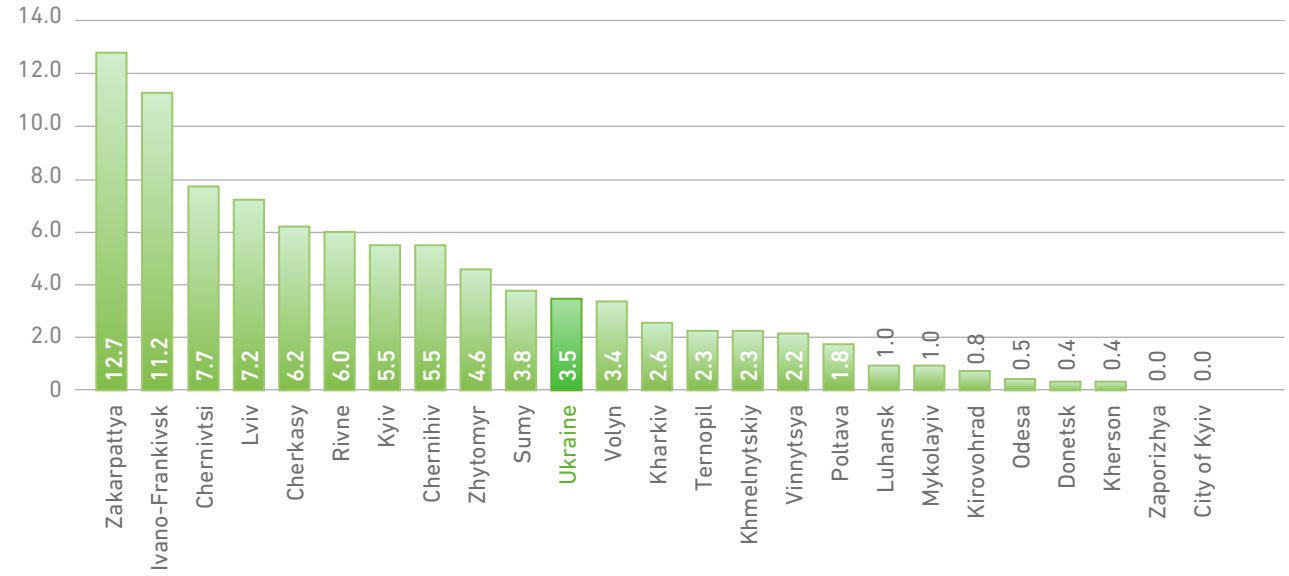
15.1.3. Share of the area of the environmental network in the total area of the region, %



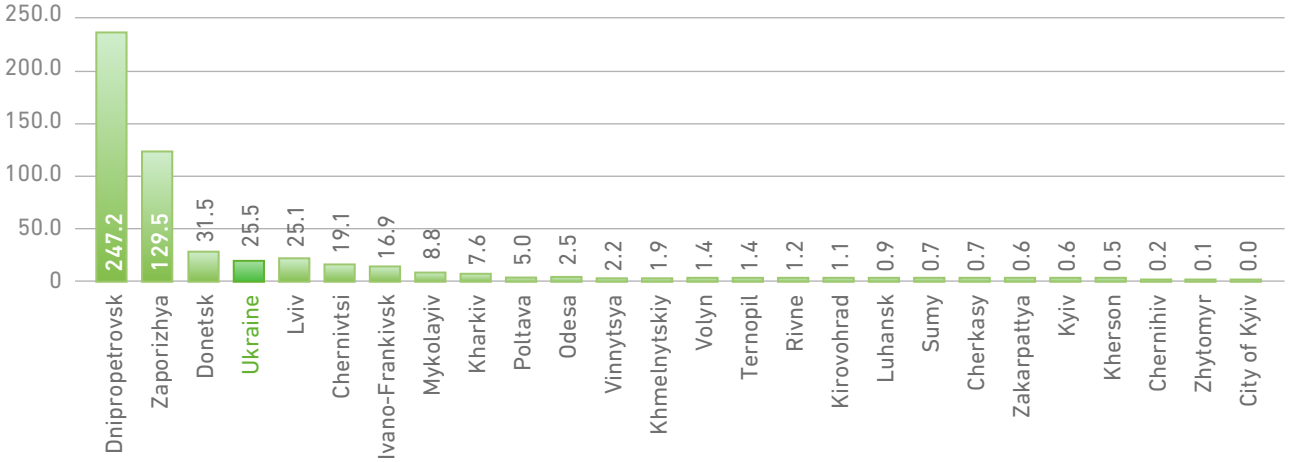
15.2.1. Forested territory of the region, %



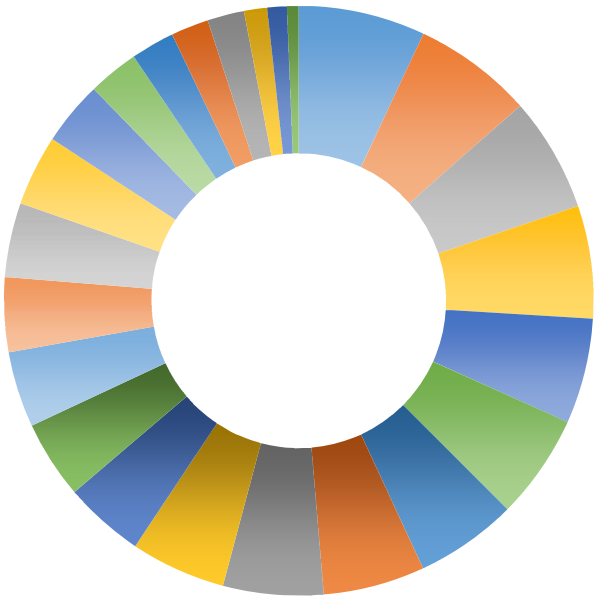
15.2.2. (a) Wood stock in forests, thousands of cubic meters per 100 hectares of the region's area



15.3.1. (a) Volume of capital investment and current expenses aimed at protection and restoration of soil, ground and surface waters, UAH per 1 hectare of the region's territory

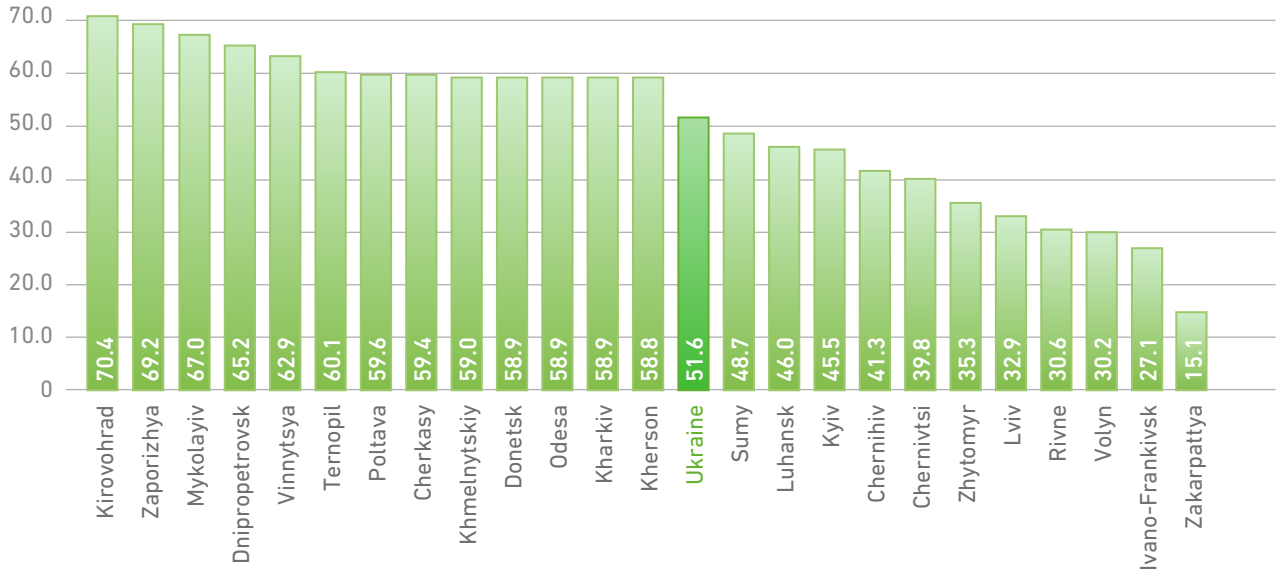


15.3.2. Amount of arable land, owned or rented agricultural business as of January, 1, thousands of hectares

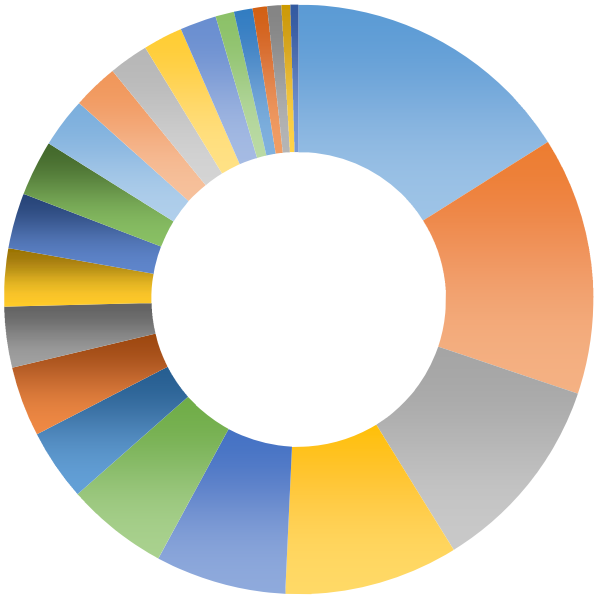


Dnipropetrovsk	2082.6	Cherkasy	1242.0
Odesa	1961.8	Luhansk	1227.3
Zaporizhya	1880.9	Khmelnytskiy	1217.6
Kharkiv	1851.1	Sumy	1159.7
Kirovohrad	1730.3	Zhytomyr	1053.4
Poltava	1713.1	Ternopil	831.0
Kherson	1672.6	Lviv	719.0
Vinnytsya	1667.3	Rivne	614.5
Mykolayiv	1646.8	Volyn	607.6
Donetsk	1561.0	Ivano-Frankivsk	377.7
Chernihiv	1319.1	Chernivtsi	322.1
Kyiv	1280.2	Zakarpattya	192.5

15.3.3. Share of arable land in the total area of the region, %



15.3.4. (a) Agricultural area of organic amendment, thousands of hectares

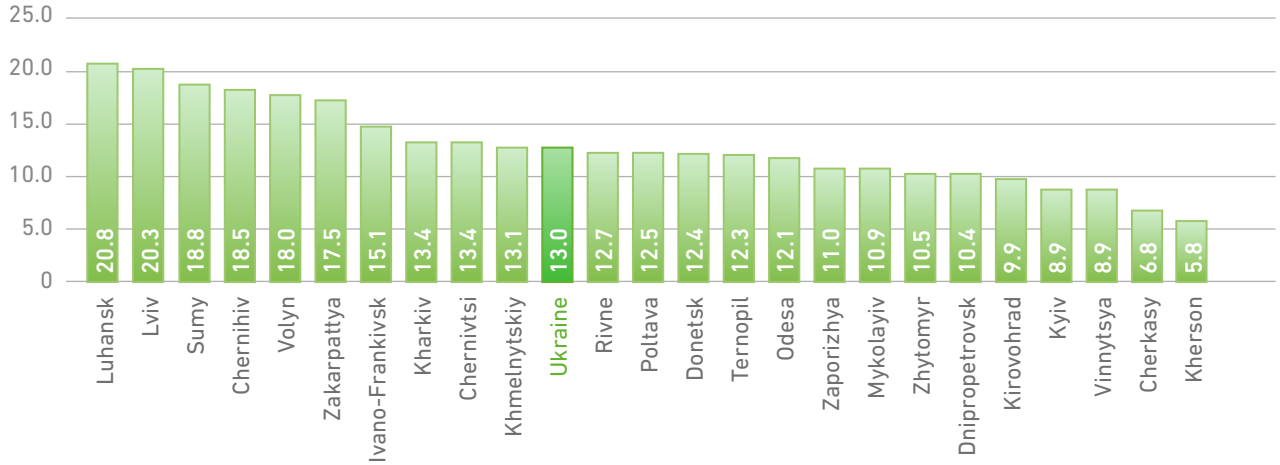


Poltava	70.8	Ternopil	12.1
Kyiv	62.6	Donetsk	11.1
Khmelnytskiy	48.5	Volyn	9.6
Cherkasy	42.2	Lviv	9.6
Vinnytsya	31.7	Luhansk	8.8
Chernihiv	24.8	Zaporizhya	4.5
Zhytomyr	17.3	Mykolayiv	4.5
Kharkiv	17.0	Odesa	3.5
Rivne	14.7	Kirovohrad	3.4
Sumy	14.0	Kherson	2.2
Ivano-Frankivsk	13.5	Chernivtsi	1.9
Dnipropetrovsk	13.4	Zakarpattya	0.1

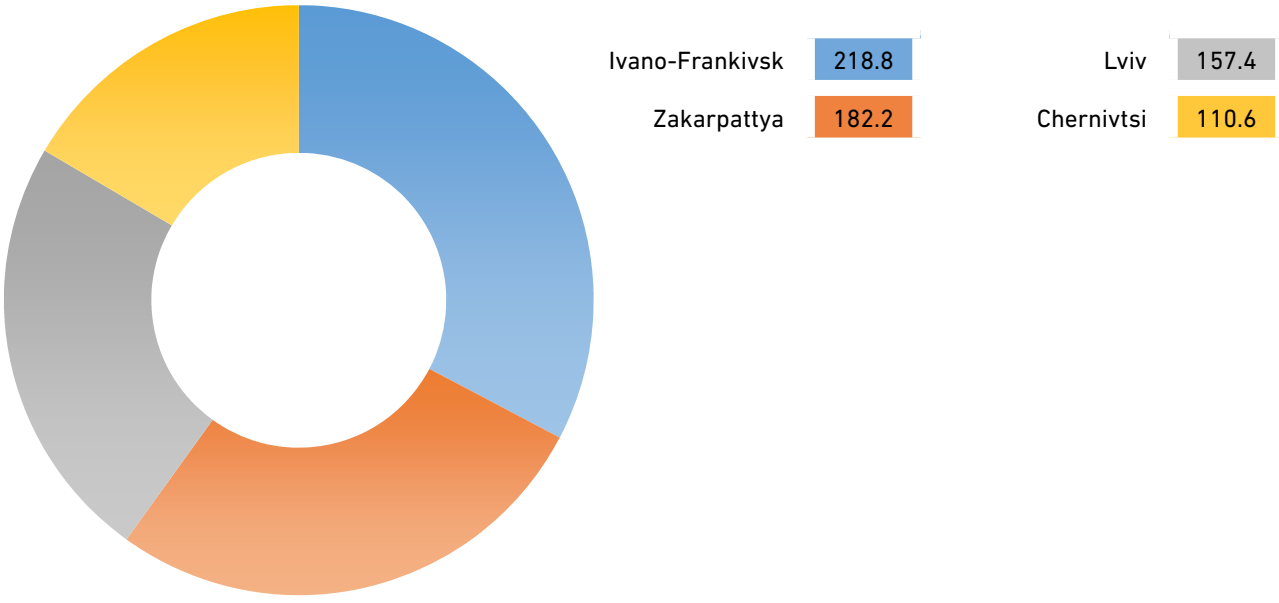
15.3.5. Area of agricultural land of extensive use (hayfields, pastures) of the region, thousands of hectares

Chernihiv	589.00	Khmelnytskiy	270.70
Luhansk	555.00	Mykolayiv	268.00
Sumy	447.2	Rivne	254.20
Lviv	443.50	Kyiv	251.60
Kharkiv	421.90	Kirovohrad	242.20
Odesa	402.50	Vinnytsya	236.30
Volyn	363.30	Zakarpattya	223.50
Poltava	359.60	Ivano-Frankivsk	210.20
Dnipropetrovsk	332.50	Ternopil	170.70
Donetsk	329.80	Kherson	165.60
Zhytomyr	311.90	Cherkasy	143.20
Zaporizhya	299.40	Chernivtsi	108.70

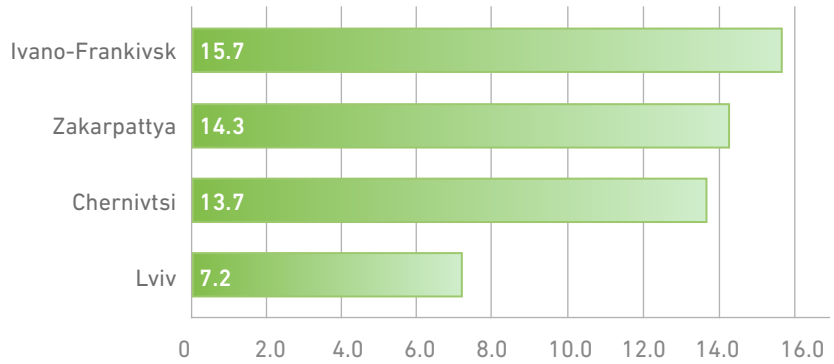
15.3.6. Share of area of agricultural land of extensive use (hayfields, pastures) in total area of the region, %



15.4.1. Area of the nature reserve fund in mountainous regions, thousands of hectares



15.4.2. Share of the area of the nature reserve fund in mountainous regions in the total area of the country (region), %



Goal 16. Peace, Justice and Strong Institutions

Ensuring peace and justice in communities is an integral task, which should be met through the strengthening of institutions at the national and local levels. All measures on building trust, fairness and inclusiveness of communities shall be based on esuring personal security as an essential asset of any person. Therefore, the reduction of violence is the first target in achieving this goal. Difficult situation in the national economy, the decrease in the standard of living of the population and low employment rates lead to an increase of social tension, which feeds the escalation of violence, both in relation to criminal offenses and to overall conflict proneness in family, production relations, outdoor, etc.

A large variety of types of violence is addressed with a variety of countermeasures, with the law enforcement bodies activity being only a part of these countermeasures. The ability of law inforcement system to effectively reduce the level of violence is restricted due to many factors, like low legal literacy of citizens, lack of trust in the ability of law enforcement agencies to ensure justice, peculiar features of a number of offenses inciting the attempts to resolve them outside of official justice (domestic violence, relations associated with the shadow economy, etc.). Therefore, relatively low current rates in this sector (1032 criminal offenses, in general across Ukraine, committed against the will, honor and dignity of the person in 2015, and 788 sexual freedom and sexual integrity abuses) do not fully illustrate the situation in these areas and, to the extent of the institutional improvement of society, will probably increase.

Further improvement of trust relationships is possible only based on increase of the efficiency of public authorities, and especially of local self-government, who are directly responsible for the quality of life of citizens. Low efficiency of government is demonstrated by current non-inclusive decision-making process, chronic inability to implement a significant part of these decisions, weak interagency cooperation, significant corporate influences and favorable conditions for the spread of corruption. Taken collectively, these factors result in low public confidence in the government.

There will be a specific individual challenge for Ukraine, namely, to restore the territories affected by the aggression of the Russian Federation in the East of Ukraine and to reestablish peace and cohesion in this region. Some key issues to be addressed are: the deterioration of the quality of life and the difficulty of ensuring basic constitutional rights for the population of the territories adjacent to the conflict zone; a large number of internally displaced persons to be settled down and integrated into new communities; destruction of a housing stock, social, communal, communication infrastructure and life support systems as a result of the military conflict; the need for social rehabilitation and reintegration into the peaceful life of ATO participants and displaced persons. Addressing these problems is hampered by the lack of proper coordination between central executive authorities, central and local authorities, regional communities, civil society organizations, etc. The reform of the local government system in the conflict zone is extremely slow, as decentralization processes and formation of the ATHs have been blocked in sizeable territiries.

Actual overcoming of the problems related to the achievement of the goal is possible only on condition of close cooperation of national authorities with regional and local ones. The latter can contribute greatly into reducing the crime rate of the local environment by reducing poverty (job offers), providing leisure for youth, targeted work with risk groups, countering anti-social phenomena and area improvement (lighting, public transport, walkways, etc.).

Amalgamation of hromadas and ensuring the effectiveness of their self-government bodies and their respective executive bodies is a major task of the improvement of the efficiency of local government activities. This process falls first and foremost within the competencies of the regional authorities and of communities themselves and should be ensured with maximum inclusiveness. Therefore, an appropriate basis for increasing community cohesion and the activity of their members needs to be installed iva informing, arranging communications, legal educating, promoting community self-organization at micro level, etc. The powers and effectiveness of local self-government bodies in the area of improvement of the quality of life inside community are being logically improved via sectoral decentralization.

The local authorities' competence regarding actions in the zone of united forces operation are limited due to the specifics of the work of military civilian administrations. There are essential challenges that cannot be addressed either at regional level or, moreover, at the level of hromadas, like the impossibility of elections in the newly formed AHSs located near the line of conflict, as well as the reconstruction of the destroyed territories. The actions of the regional and local authorities are important primarily in the areas of restoration of cohesion, regional and national identity, the development of living areas, creation of friendly

Goal	Goal 16. Peace, Justice and Strong Institutions									
Target	16.1 Reduce the prevalence of violence						16.2 Increase detection of victims of human trafficking and all forms of exploitation			
Indicator	16.1.1. (a) Number of revealed serious crimes and extremely serious crimes in oblasts, cases per 1.000 persons		16.1.2. (a) Number of killed and injured victims of crimes in oblast, cases per 1.000 persons		16.1.3. (a) Number of crimes involving sexual abuse in the last 12 months according to criminal proceedings, per 100.000 persons of population		16.2.1. (a) Number of crimes of trafficking or other illicit agreements for human trading in criminal proceedings in the last 12 months, per 1 million of population		16.2.2. (a) Number of orphans and children deprived of parental care as of the year end, per 100.000 persons of population	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	>1/<1
Ukraine (2015)	**5.00**		**10.00**		**1.84**		**0.49**		**199.33**	
Oblasts										
Vinnytsya	3.00	0.60	8.00	0.80	9.11	4.96	8.54	17.42	737.43	3.70
Volyn	3.00	0.60	8.00	0.80	7.86	4.28	5.75	11.74	152.76	0.77
Dnipropetrovsk	5.00	1.00	11.00	1.10	0.83	0.45	0.31	0.62	269.46	1.35
Donetsk	4.00	0.80	6.00	0.60	0.42	0.23	0.23	0.48	109.99	0.55
Zhytomyr	4.00	0.80	9.00	0.90	9.89	5.38	0.00	0.00	1183.01	5.93
Zakarpattya	3.00	0.60	6.00	0.60	0.32	0.17	0.00	0.00	182.71	0.92
Zaporizhya	9.00	1.80	20.00	2.00	0.28	0.15	0.00	0.00	215.42	1.08
Ivano-Frankivsk	2.00	0.40	5.00	0.50	0.43	0.24	0.72	1.48	109.59	0.55
Kyiv	6.00	1.20	9.00	0.90	0.06	0.03	0.00	0.00	206.04	1.03
Kirovohrad	7.00	1.40	14.00	1.40	2.76	1.50	0.00	0.00	319.59	1.60
Luhansk	3.00	0.60	4.00	0.40	1.33	0.72		0.00	271.08	1.36
Lviv	3.00	0.60	10.00	1.00	1.34	0.73	1.18	2.41	100.28	0.50
Mykolayiv	6.00	1.20	12.00	1.20	2.41	1.31	0.00	0.00	294.42	1.48
Odesa	6.00	1.20	10.00	1.00	11.65	6.33	9.39	19.16	1092.10	5.48
Poltava	5.00	1.00	12.00	1.20	0.00	0.00	0.00	0.00	162.89	0.82
Rivne	3.00	0.60	7.00	0.70	0.86	0.47	0.86	1.76	158.85	0.80
Sumy	4.00	0.80	10.00	1.00	1.61	0.88	0.00	0.00	190.91	0.96
Ternopil	2.00	0.40	5.00	0.50	0.75	0.41	0.00	0.00	102.17	0.51
Kharkiv	5.00	1.00	12.00	1.20	1.14	0.62	0.37	0.75	161.18	0.81
Kherson	5.00	1.00	13.00	1.30	3.19	1.74	0.00	0.00	276.87	1.39
Khmelnytskiy	3.00	0.60	9.00	0.90	2.16	1.17	0.00	0.00	159.57	0.80
Cherkasy	5.00	1.00	9.00	0.90	2.65	1.44	0.00	0.00	179.98	0.90
Chernivtsi	3.00	0.60	8.00	0.80	10.77	5.86	0.00	0.00	121.00	0.61
Chernihiv	6.00	1.20	11.00	1.10	2.67	1.45	0.00	0.00	207.27	1.04
City of Kyiv	8.00	1.60	14.00	1.40	0.00	0.00	0.00	0.00		

Goal	Goal 16. Peace, Justice and Strong Institutions							
Target	16.2 Increase detection of victims of human trafficking and all forms of exploitation		16.3 Increase confidence in courts and ensure equal access to justice				16.4 Strengthen thesystem for preventing and counteracting the legalization of illegal incomes, the financing of terrorism and the proliferation of weapons of mass destruction	
Indicator	16.2.3. (a) Number of crimes of sexual exploitation (under Articles 302 and 303 of the Criminal Code of Ukraine) in the last 12 months, per 1 million of population		16.3.1. (a) Share of the poled entrepreneurs who trust courts, %		16.3.2. (a) Number of issued instructions on rendering free secondary legal assistance per 1.000 oblast citizen		16.4.1. (a) Number of revealed criminal offenders committing crimes of money laundering (under Articles 209, 209-1 of the Criminal Code of Ukraine) in total number of criminal offences under mentioned articles, with pretrial investigation performed in reporting period, %	
	2015	>1/<1	2015	+/-	2015	>1/<1	2015	+/-
Ukraine (2015)	**5.31**		**9.00**		**11.00**		**12.00**	
Oblasts								
Vinnytsya	31.32	5.90	11.00	2.00	11.00	1.00	0.00	-12.00
Volyn	3.84	0.72	7.00	-2.00	8.00	0.73	25.00	13.00
Dnipropetrovsk	5.51	1.04	8.00	-1.00	14.00	1.27	0.00	-12.00
Donetsk	0.00	0.00	10.00	1.00	7.00	0.64	-	-
Zhytomyr	7.32	1.38	10.00	1.00	8.00	0.73	0.00	-12.00
Zakarpattya	0.00	0.00	5.00	-4.00	11.00	1.00	0.00	-12.00
Zaporizhya	0.00	0.00	7.00	-2.00	18.00	1.64	50.00	38.00
Ivano-Frankivsk	3.62	0.68	7.00	-2.00	4.00	0.36	0.00	-12.00
Kyiv	65.29	12.29	10.00	1.00	11.00	1.00	0.00	-12.00
Kirovohrad	1.02	0.19	13.00	4.00	14.00	1.27	0.00	-12.00
Luhansk	3.79	0.71	11.00	2.00	10.00	0.91	100.00	88.00
Lviv	4.34	0.82	7.00	-2.00	8.00	0.73	0.00	-12.00
Mykolayiv	0.86	0.16	17.00	8.00	17.00	1.55	0.00	-12.00
Odesa	39.45	7.43	14.00	5.00	15.00	1.36	0.00	-12.00
Poltava	13.16	2.48	8.00	-1.00	18.00	1.64	100.00	88.00
Rivne	5.17	0.97	2.00	-7.00	8.00	0.73	0.00	-12.00
Sumy	21.46	4.04	10.00	1.00	10.00	0.91	0.00	-12.00
Ternopil	0.94	0.18	14.00	5.00	8.00	0.73	0.00	-12.00
Kharkiv	3.67	0.69	6.00	-3.00	11.00	1.00	33.33	21.33
Kherson	10.33	1.94	9.00	0.00	12.00	1.09	0.00	-12.00
Khmelnytskiy	0.77	0.15	9.00	0.00	8.00	0.73	0.00	-12.00
Cherkasy	0.00	0.00	9.00	0.00	9.00	0.82	-	-
Chernivtsi	2.20	0.41	14.00	5.00	5.00	0.45	0.00	-12.00
Chernihiv	1.90	0.36	12.00	3.00	10.00	0.91	0.00	-12.00
City of Kyiv			4.00	-5.00	12.00	1.09		

Goal	Goal 16. Peace, Justice and Strong Institutions							
Target	16.5 Reduce illicit trafficking of weapons, ammunition and explosive materials						16.6 Reduce the scale of corruption	
Indicator	16.5.1. (a) Number of weapons seized from individuals, organized groups and criminal organizations, units per 100.000 persons of population		16.5.2. (a) Amount of ammunition seized from individuals, organized groups and criminal organizations, units per 100.000 persons of population		16.5.3. (a) Number of criminal offences under Article 263 of the Criminal Code of Ukraine (illegal handling of weapons, ammunition or explosives) in the last 12 months in the criminal proceedings per 100.000 persons of population		16.6.1. Share of the poled entrepreneurs who report the absence of hindrance on behalf of public authorities in oblast, % of pole participants	
	2015	>1/<1	2015	>1/<1	2015	>1/<1	2015	+/-
Ukraine (2015)	**8.41**		**556.53**		**14.96**		**50.00**	
Oblasts								
Vinnytsya	27.90	3.32	1133.77	2.04	52.39	3.50	51.00	1.00
Volyn	29.63	3.52	1327.49	2.39	84.87	5.67	68.00	18.00
Dnipropetrovsk	11.70	1.39	1320.43	2.37	12.77	0.85	50.00	0.00
Donetsk	4.67	0.56	1109.46	1.99	0.05	0.00	49.00	-1.00
Zhytomyr	34.42	4.09	1267.22	2.28	64.81	4.33	63.00	13.00
Zakarpattya	1.27	0.15	28.67	0.05	1.75	0.12	60.00	10.00
Zaporizhya	8.69	1.03	247.42	0.44	11.42	0.76	37.00	-13.00
Ivano-Frankivsk	6.00	0.71	258.45	0.46	4.77	0.32	59.00	9.00
Kyiv	3.47	0.41	466.45	0.84	10.52	0.70	50.00	0.00
Kirovohrad	4.91	0.58	241.69	0.43	11.47	0.77	47.00	-3.00
Luhansk	14.58	1.73	3196.91	5.74	20.26	1.35	46.00	-4.00
Lviv	2.92	0.35	96.02	0.17	12.30	0.82	47.00	-3.00
Mykolayiv	14.04	1.67	819.36	1.47	19.46	1.30	47.00	-3.00
Odesa	25.55	3.04	4008.49	7.20	41.51	2.77	45.00	-5.00
Poltava		0.00		0.00	16.62	1.11	47.00	-3.00
Rivne	8.95	1.06	327.00	0.59	11.80	0.79	44.00	-6.00
Sumy	7.96	0.95	1770.46	3.18	16.01	1.07	64.00	14.00
Ternopil	2.72	0.32	194.23	0.35	6.74	0.45	54.00	4.00
Kharkiv	4.70	0.56	567.71	1.02	11.08	0.74	51.00	1.00
Kherson	10.80	1.28	401.83	0.72	23.47	1.57	53.00	3.00
Khmelnytskiy	4.24	0.50	97.93	0.18	7.40	0.49	52.00	2.00
Cherkasy	9.14	1.09	1.28	0.00	15.63	1.04	50.00	0.00
Chernivtsi	0.22	0.03	23.74	0.04	0.00	0.00	55.00	5.00
Chernihiv	11.43	1.36	652.66	1.17	20.37	1.36	54.00	4.00
City of Kyiv							46.00	-4.00

Goal	Goal 16. Peace, Justice and Strong Institutions									
Target	16.7 Increase the efficiency of government bodies and local self-government		16.8 Recovery of conflict affected areas in eastern Ukraine						16.9 Strengthen social stability, and promote peacebuilding and community security	
Indicator	16.7.1. Share of the population satisfied with their recent experience of the use of local authorities' services, %		16.8.1. Share of the population satisfied with their experience of the use of infrastructure and the level of social services in key areas in Donetsk and Luhansk obl., %		16.8.2. (a) Positive or negative migration balance in Donetsk (Luhansk) oblasts, thousand persons		16.8.3. Demined area in Donetsk (Luhansk) oblasts, hectares		16.9.1. Index of social cohesion and reconciliation (SCORE)	
	2015	+/-	2015	+/-	2015	-	2015	-	2015	+/-
Ukraine (2015)	**38.00**		-		-	-	-	-	**6.70**	
Oblasts										
Vinnytsya	72.00	34.00							7.10	-13.80
Volyn	44.00	6.00							6.50	-13.20
Dnipropetrovsk	34.00	-4.00							6.50	-13.20
Donetsk	40.00	2.00	-	-	-9.20	-	-	-	7.00	-13.70
Zhytomyr	37.00	-1.00							6.10	-12.80
Zakarpattya	41.00	3.00							6.60	-13.30
Zaporizhya	36.00	-2.00							6.80	-13.50
Ivano-Frankivsk	26.00	-12.00							6.40	-13.10
Kyiv	33.00	-5.00							6.30	-13.00
Kirovohrad	31.00	-7.00							6.70	-13.40
Luhansk	43.00	5.00	-	-	-5.60	-	-	-	6.80	-13.50
Lviv	41.00	3.00							6.20	-12.90
Mykolayiv	38.00	0.00							7.60	-14.30
Odesa	32.00	-6.00							6.50	-13.20
Poltava	29.00	-9.00							6.50	-13.20
Rivne	36.00	-2.00							6.50	-13.20
Sumy	42.00	4.00							6.80	-13.50
Ternopil	46.00	8.00							7.10	-13.80
Kharkiv	49.00	11.00							7.10	-13.80
Kherson	27.00	-11.00							6.60	-13.30
Khmelnytskiy	42.00	4.00							6.30	-13.00
Cherkasy	31.00	-7.00							6.80	-13.50
Chernivtsi	32.00	-6.00							7.20	-13.90
Chernihiv	33.00	-5.00							6.10	-12.80
City of Kyiv	33.00	-5.00							6.70	-13.40

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

Exceptions:
16.1.3 (a)- data on Donetsk oblast as of 2017, Luhansk oblast as of 2016; 16.2.1 (a) - data on Donetsk oblast as of 2017; 16.2.3 (a) - data on Donetsk oblast as of 2017, Luhansk oblast as of 2016; 16.4.1 (a) - data on Luhansk oblast as of 2016; 16.5.1(a)- data on Donetsk oblast as of 2017, Luhansk oblast as of 2016; 16.5.2 (a) - data on Donetsk and Luhansk oblasts as of 2016; 16.5.3 - data on Donetsk oblast as of 2017, Luhansk oblast as of 2016.
16.1.1 (a) -16.2.3 (a) - de-stimulator, given the converse readings in colors.

conditions for the development of local economies, which should lay a basis for the improvement of the economic and socio-political situation in the region.

Statistical data show a significant gap between crime rates in different regions of Ukraine. The number of detected serious and especially grave crimes per 1 thousand varies from 2 to 9. At the same time, the lowest crime rates are registered in the western region of the country, namely in Ivano-Frankivsk, Ternopil, Vinnytsia, Volyn, Zakarpattia, Luhansk, Lviv, Rivne, Khmelnytskyi, and Chernivtsi oblasts. The highest crime rates are registered in the southern and some central regions, namely in Zaporizhzhia (9 crimes per 1,000 population), Kyiv (8), Kirovohrad (7), Chernihiv, Odessa, Mykolaiv, and Kyiv (6) oblasts. Bigger crime rates generally correlate with lower income rates of the population and with higher rates of urbanization of oblasts.

A substantial level of criminal risks is associated with illegal possession of weapons. Volyn (84.3 per 100 thousand people), Zhytomyr (64.8), Vinnytsia (52.4) and Odesa (41.5) oblasts stand out of the pack as concerns the frequency of crimes related to the illegal use of arms, ammunition and explosives. The minimal rate of such crimes is found in Chernivtsi (0), Zakarpattia (1.8), Ivano-Frankivsk oblasts (4.8), etc. Extremely low readings for this indicator in Donetsk oblast make a statistical artefact, which is obviously explained with the peculiarities of recording such crimes in the ATO zone. In general, such crimes may be detected owing to their association with other criminal situations. For example, cases related to the so called 'amber' confrontations in the northwest regions of the country. The detected weapon-handling related crimes also correlate with the number of weapons seized from the population.

The differentiation of regions in terms of rates of crimes committed against sexual freedom and sexual integrity of a person is a unique one. According to statistical data, Kyiv, Zaporizhzhia, Zakarpattia, Donetsk, and Ivano-Frankivsk oblasts demonstrate the best situation. The worst situation is registered in Odesa, Chernivtsi, Zhytomyr, Vinnytsia, and Volyn oblasts, where the crime rate per 100,000 persons ranges from 7.9 (Volyn) to 11.7 (Odesa), with an average rate of 1.8 across Ukraine.

A dramatic regional unevenness is reported in category of human trafficking. According to statistics, such crimes were detected only in nine oblasts, including Vinnytsia, Volyn, Lviv, Rivne, Ivano-Frankivsk oblasts. Thus, there is an essential impact of cross-border criminal activity in the form of fraud in recruiting migrant workers, in particular in sex industry. The latter is proved by the synchronization of selected indicator with the rate of crimes related to sexual exploitation: the highest rates are also found in Odesa and Vinnytsia oblasts. At the same time, Kyiv oblast (65.3 crimes per 1 million people, with the national average of 5.3) sits highest ranks in this category; Sumy and Kherson oblasts report significantly big readings as well.

However, while performing an analysis of criminal activity data it is necessary to consider that number of officially registered crimes also depends on the effectiveness and integrity of the law enforcement agencies, as well as on actual detection of such crimes, which directly correlates with the trust of the population in these bodies.

The distribution of the number of orphans and children deprived of parental care per 100,000 population shows a smaller share of such children in the western obasts of the country (Ivano-Frankivsk, Chernivtsi, Volyn, Rivne, Khmelnytskyi, and other oblasts) and larger share in the southern and eastern oblasts (Zaporizhzhia, Dnipropetrovsk, Luhansk, Kherson, Mykolaiv, Kirovohrad oblasts). The number of orphans in Zhytomyr, Odesa and Vinnytsia oblasts is much higher than the average across Ukraine due to a high concentration of specialized institutions in these regions.

The discrepancies in the provision of free secondary legal aid generally correlate with the general crime rates, since they are directly related to providing protection against charges laid. It is worth paying attention to the differences in the changes of these indicators, which may speak for inefficiency of judicial institutions in the regions. In particular, Chernihiv, Kyiv and Kirovohrad oblasts, and the city of Kyiv provide relatively smaller share of legal aid against existing higher crime rates. Sometimes (especially in the city of Kyiv) this difference may also be attributed to the ability of the accused individuals to apply for paid assistance. In Zakarpattia and Vinnytsia oblasts the frequency of calls for free legal assistance, otherwise, is significantly higher than the average.

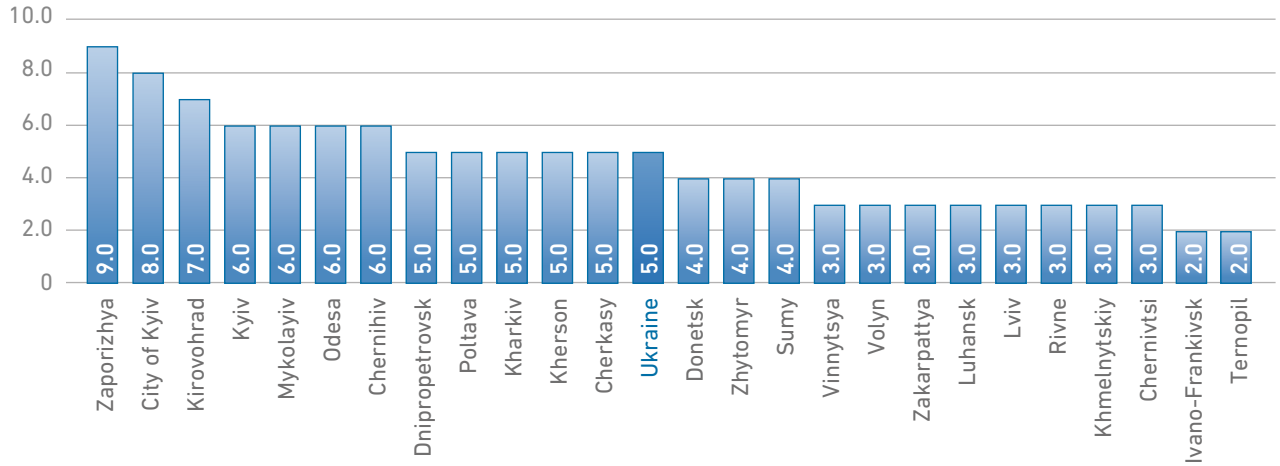
Numerous assessments of corruption rates at regional level provide rather divergent results. An indicator selected for this study is the share of entrepreneurs who reported the absence of obstacles on behalf of public authorities; it illustrates primarily corruption rate in the regulatory and fiscal sectors of public government. According to this indicator, entrepreneurs in Volyn, Sumy, Zhytomyr and Zakarpattia oblasts meet the least number of obstacles. Meanwhile, the entrepreneurs in Zaporizhzhia, Rivne, Odesa oblasts report the biggest number of complaints regarding actions of public authorities. It should be noted that western oblasts with a more developed small business network mostly face with a smaller number of bureaucratic and corruption obstacles.

Assessments of the effectiveness of public authorities in this study have been determined by the share of the population satisfied with their recent experience of the use of local authorities' services. Vinnytsia oblast (72%) shows the best indicator;

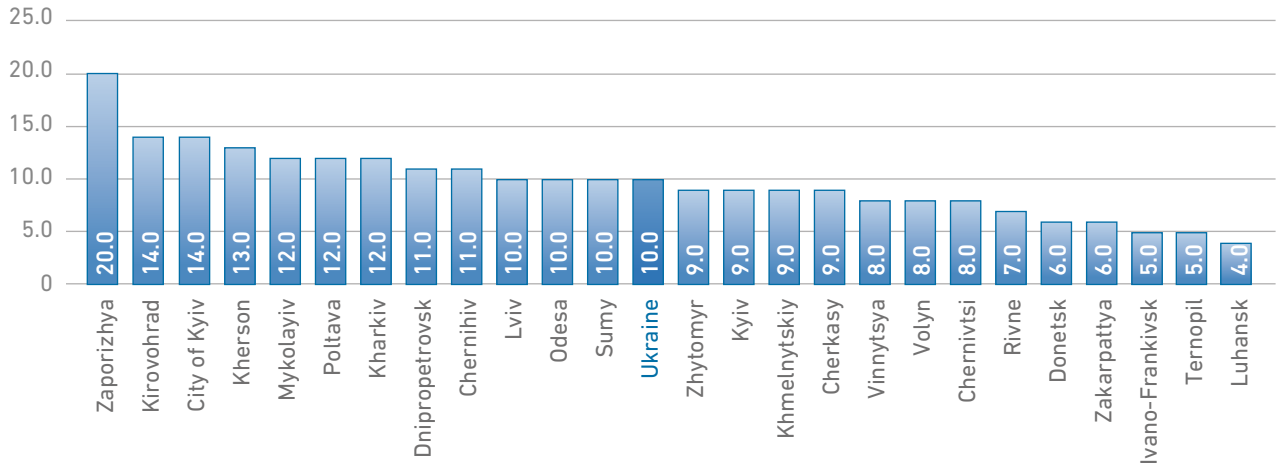
more than 40% being satisfied in ten oblasts, including Kharkiv, Ternopil, Volyn, Luhansk, Sumy, Khmelnytskyi, Zakarpattia, Lviv and Donetsk oblasts. Low level of satisfaction with local authorities (less than 30%) is reported in Ivano-Frankivsk, Kherson and Poltava oblasts. Such discrepancies in the attitude of respondents give no grounds to make any conclusions on geographical patterns. No relationship is also found with the trends of AHs creation. Meanwhile, it might be reasonable to study the best practice of the most successful hromadas in the field of public outreach in mentioned regions.

Baseline indicators of goal in 2015:

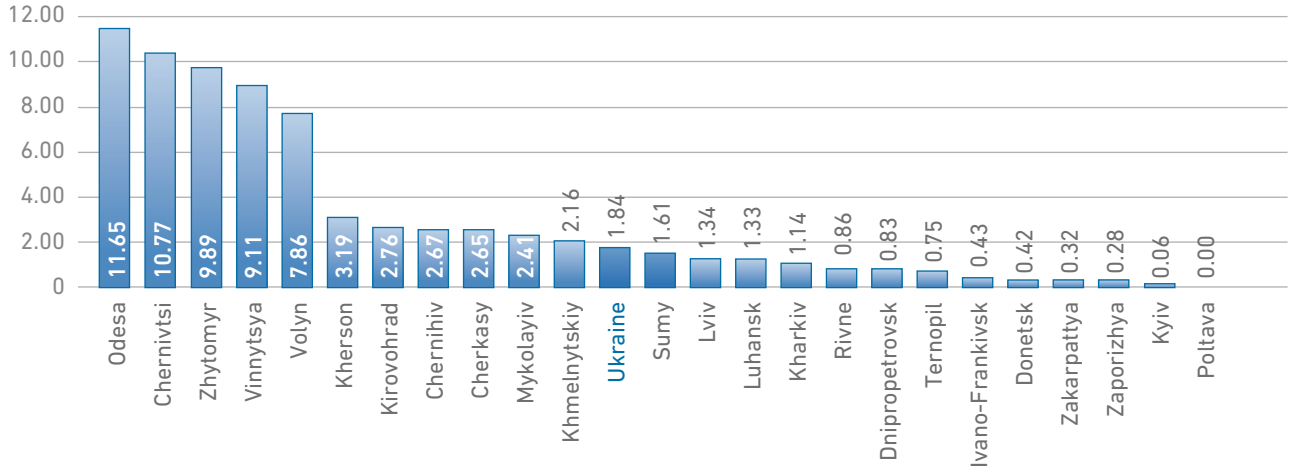
16.1.1. (a) Number of revealed serious crimes and extremely serious crimes in oblasts, cases per 1.000 persons



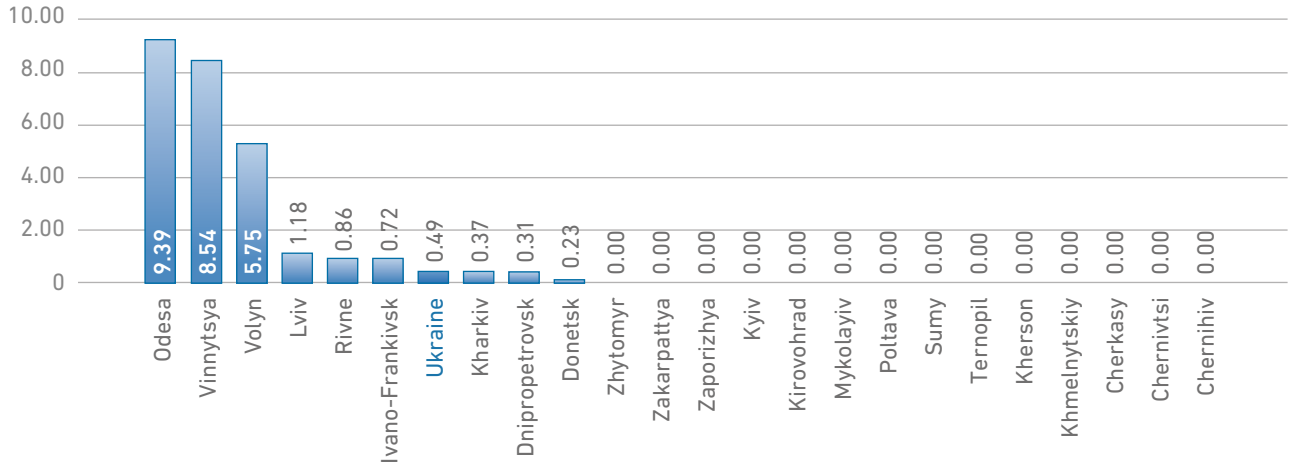
16.1.2. (a) Number of killed and injured victims of crimes in oblast, cases per 1.000 persons



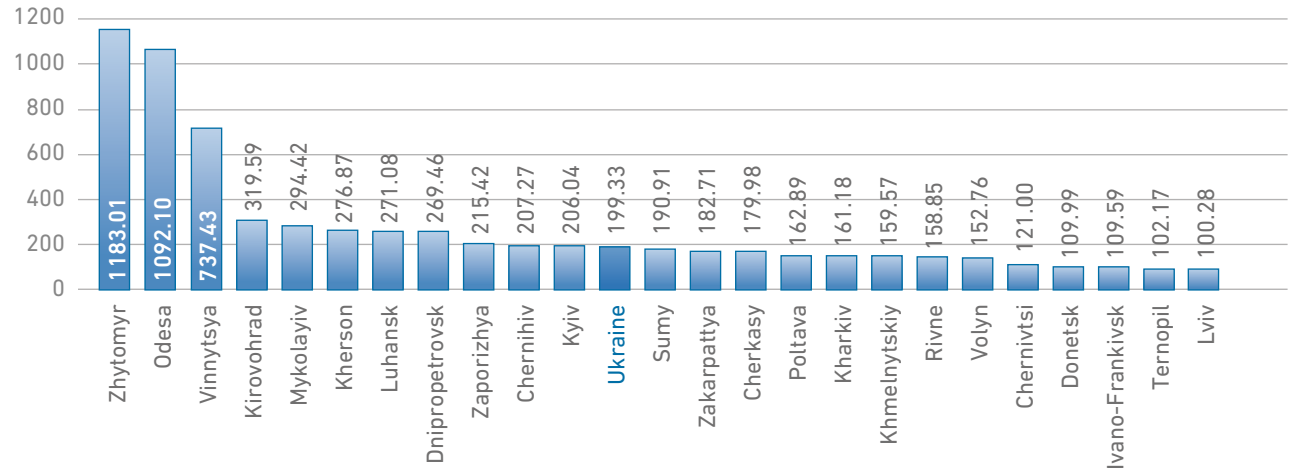
16.1.3. (a) Number of crimes involving sexual abuse in the last 12 months according to criminal proceedings, per 100.000 persons of population



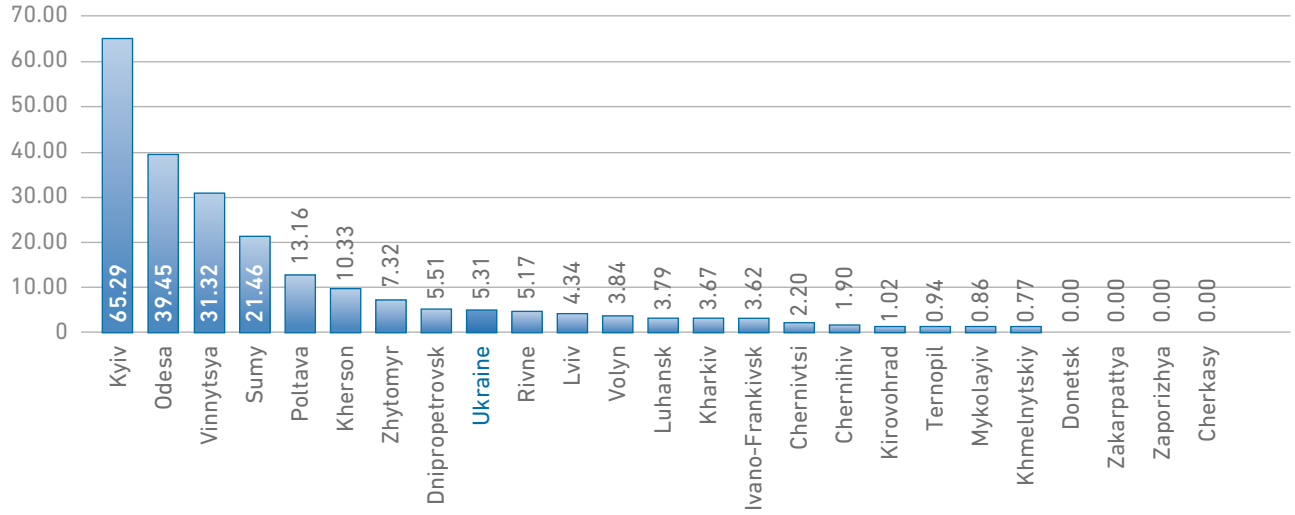
16.2.1. (a) Number of crimes of trafficking or other illicit agreements for human trading in criminal proceedings in the last 12 months, per 1 million of population



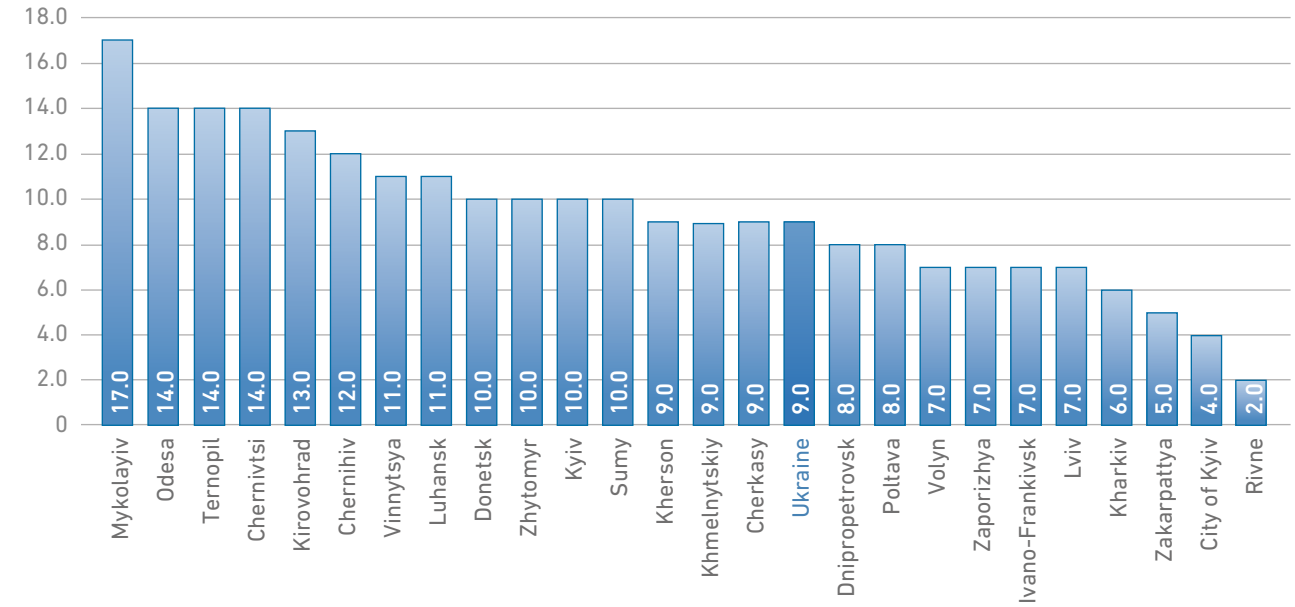
16.2.2. (a) Number of orphans and children deprived of parental care as of the year end, per 100.000 persons of population



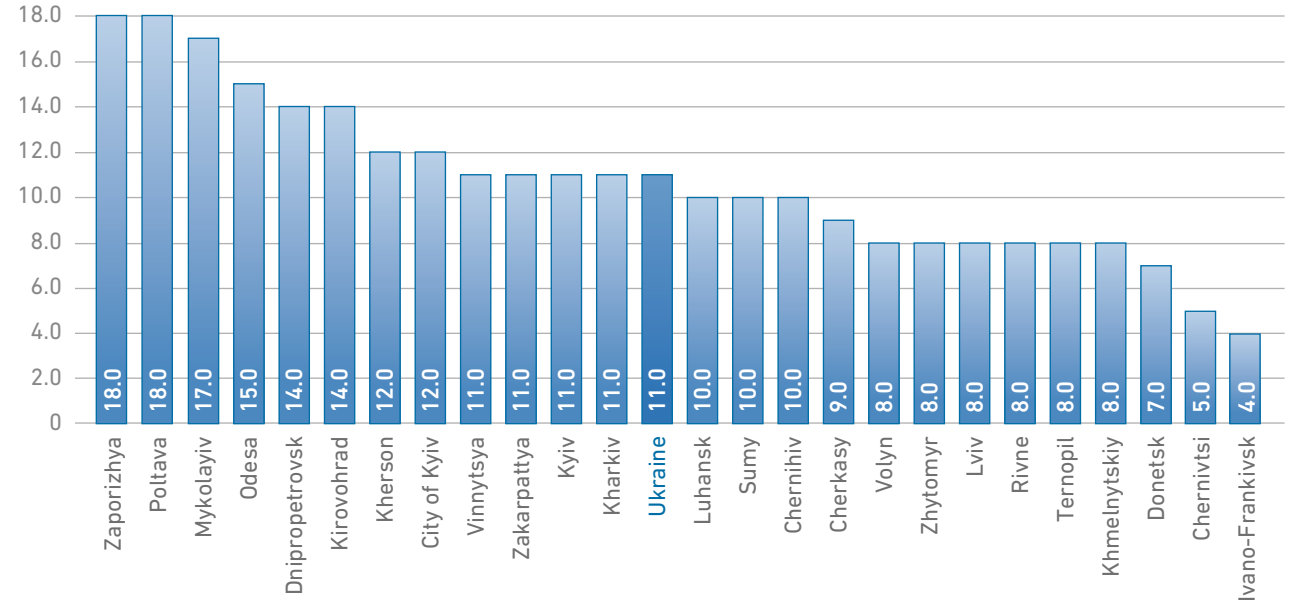
16.2.3. (a) Number of crimes of sexual exploitation (under Articles 302 and 303 of the Criminal Code of Ukraine) in the last 12 months, per 1 million of population



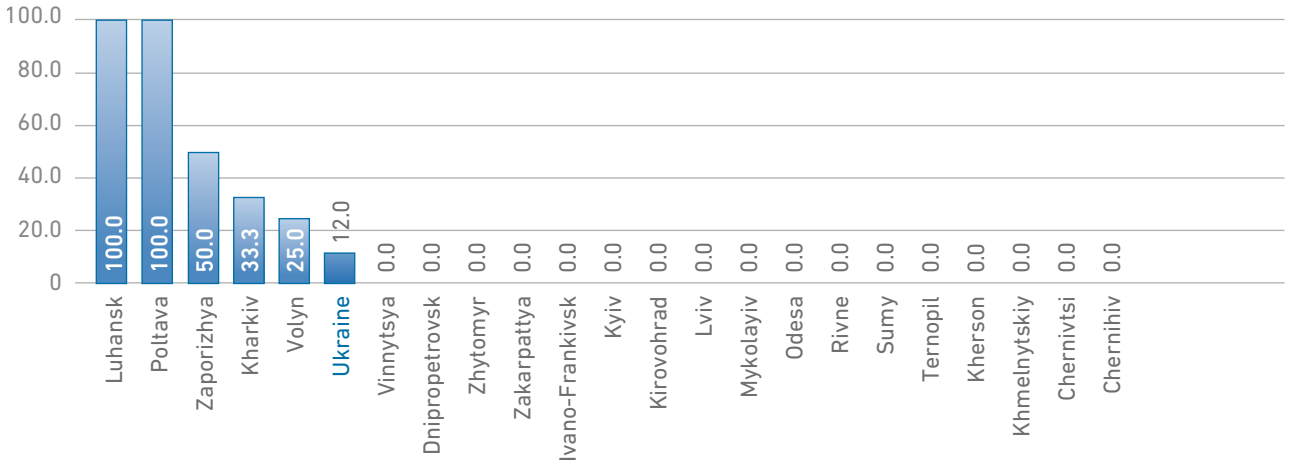
16.3.1. (a) Share of the poled entrepreneurs who trust courts, %



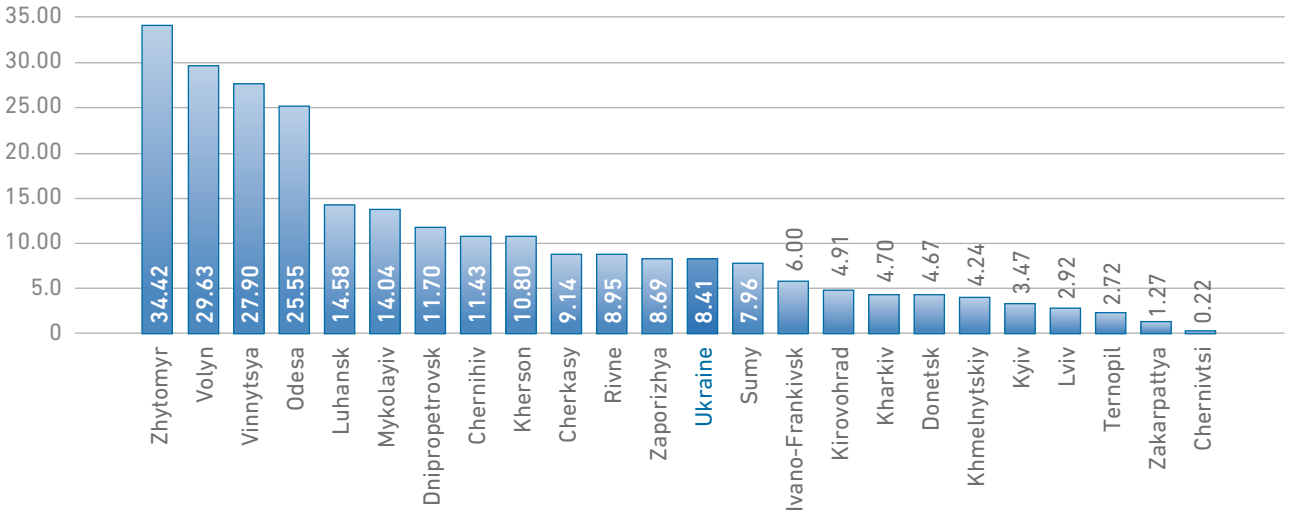
16.3.2. (a) Number of issued instructions on rendering free secondary legal assistance per 1.000 oblast citizen



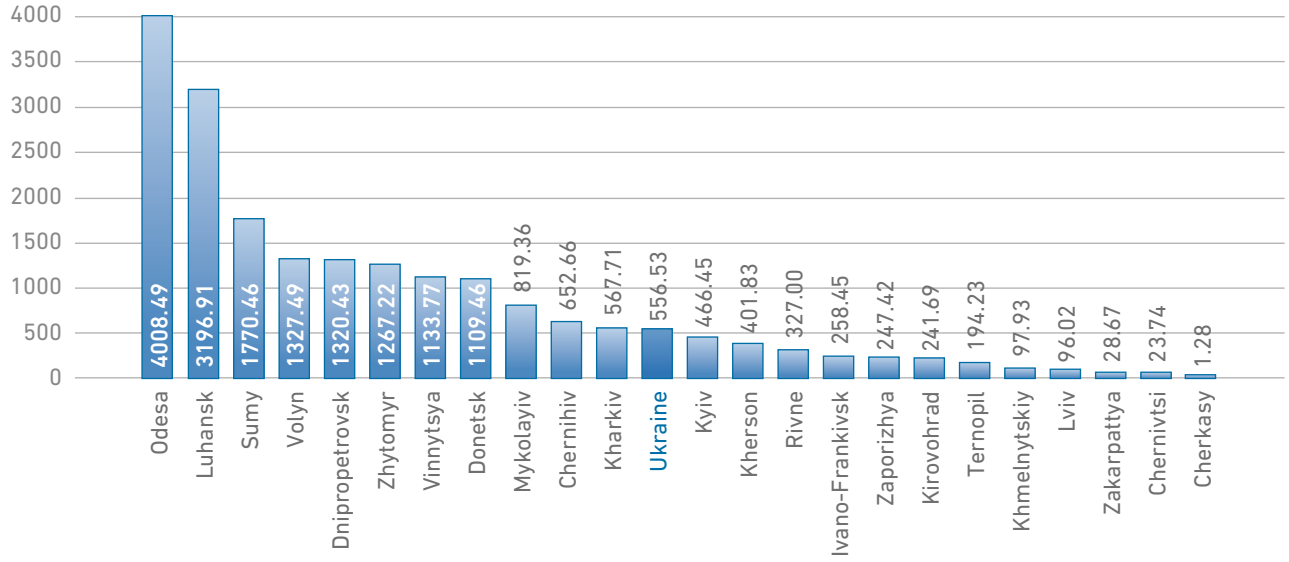
16.4.1. (a) Number of revealed criminal offenders committing crimes of money laundering (under Articles 209, 209-1 of the Criminal Code of Ukraine) in total number of criminal offences under mentioned articles, with pretrial investigation performed in reporting period, %



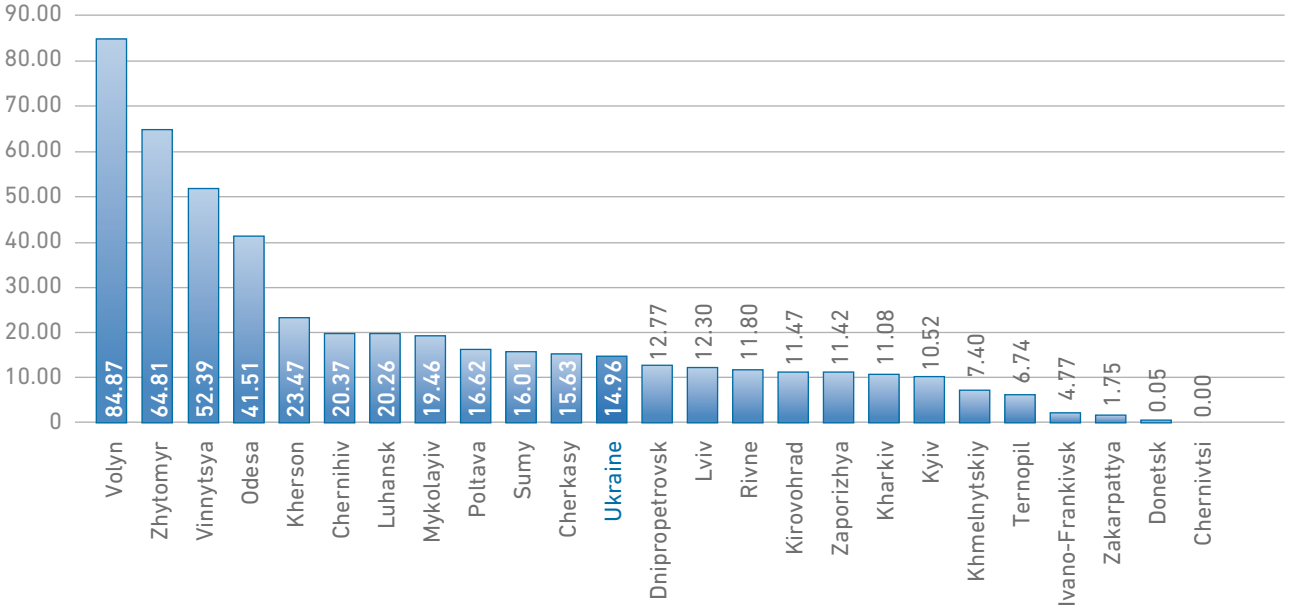
16.5.1. (a) Number of weapons seized from individuals, organized groups and criminal organizations, units per 100.000 persons of population



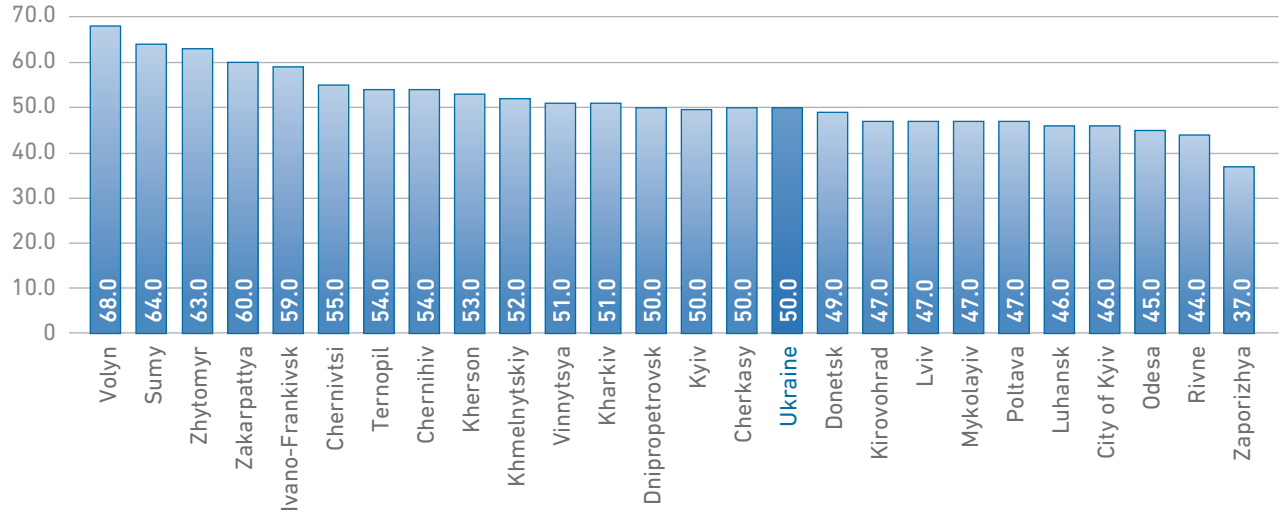
16.5.2. (a) Amount of ammunition seized from individuals. organized groups and criminal organizations, units per 100.000 persons of population



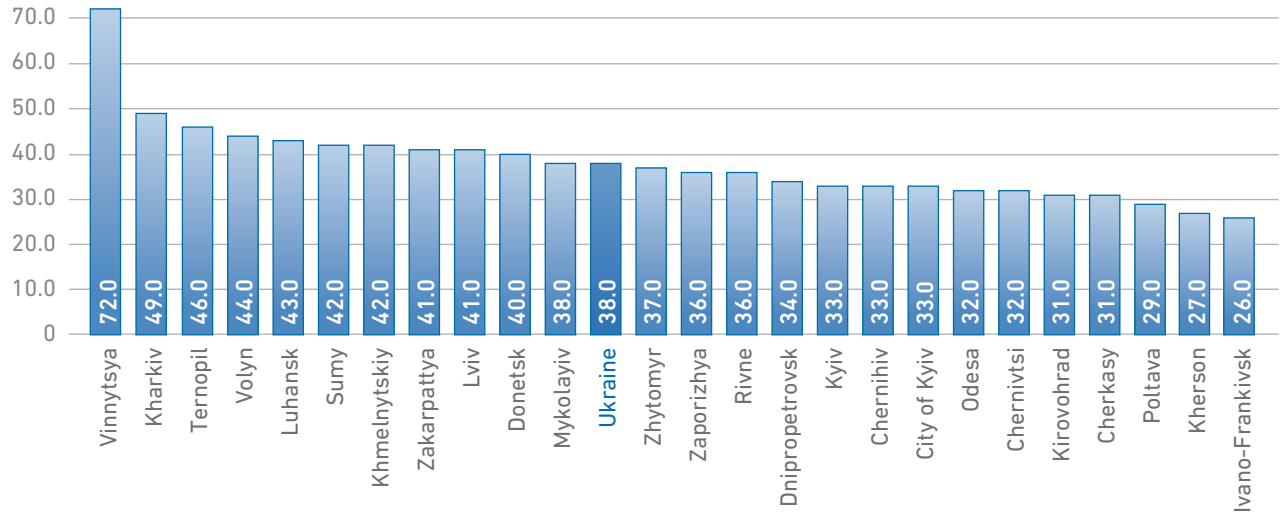
16.5.3. (a) Number of criminal offences under Article 263 of the Criminal Code of Ukraine (illegal handling of weapons, ammunition or explosives) in the last 12 months in the criminal proceedings per 100.000 persons of population



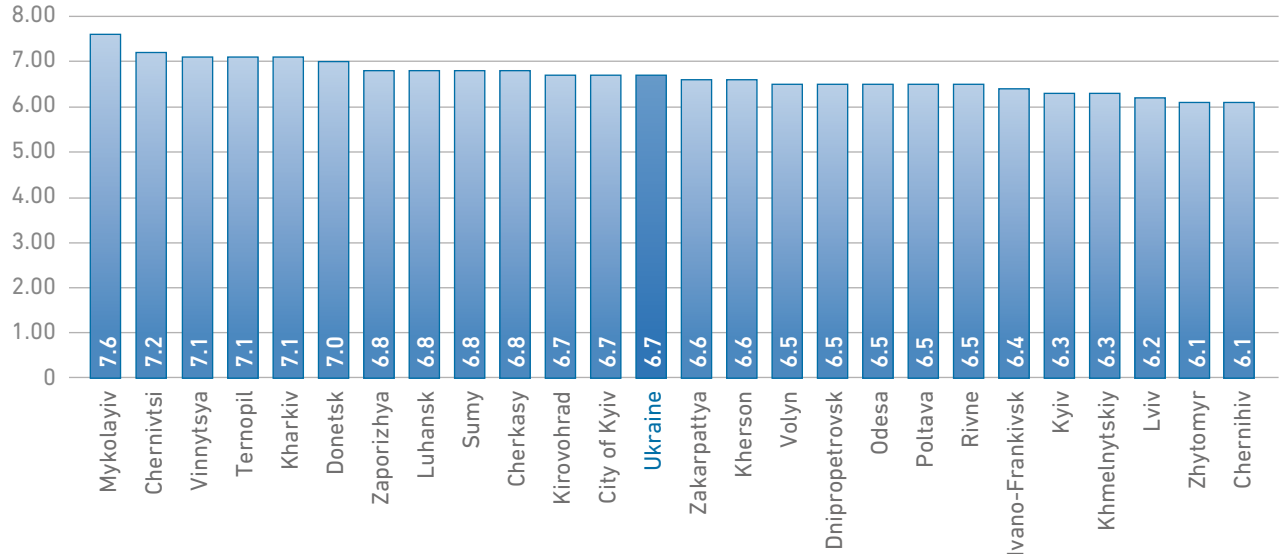
16.6.1. Share of the poled entrepreneurs who report the absence of hindrance on behalf of public authorities in oblast, % of pole participants



16.7.1. Share of the population satisfied with their recent experience of the use of local authorities' services, %



16.9.1. Index of social cohesion and reconciliation (SCORE)



CHAPTER 3.17

Goal 17. Partnerships for the Goals

The national economy's sustainable development depends to a large extent on the effective management of the public investment process based on the strategic priorities of public investment that meet the investment demands and capacity of the respective territories.

Goal 17 sets two region-level targets, namely on mobilization of additional financial resources via encouraging foreign and domestic investors and on developing of partnerships between government and business to achieve the Sustainable Development Goals. Ending these targets is extremely important not only in terms of economic development of the country, but also for ensuring the implementation of all the goals and targets of sustainable development, as defined in the Baseline national report 'Sustainable Development Goals'. The importance of these targets requires the elaboration of both specific Ukraine investment development strategy, which should declare the governmental initiatives aimed at stimulating investment activities of national agents, attracting direct foreign investment, vision of the optimal sector investment priorities, etc., and regional investment programs.

Based on the affinity of socio-economic problems which are common across the state, today all oblasts of the country have formed their own lists of strategic goals, aimed at addressing major challenges, such as: improving the economic situation, improving living standards of the population and ensuring environmental well-being. At the same time, all adopted strategies, both at the national and local levels, have common deficiency, namely they lack a list of well-defined investment priorities and forecasted volumes of attracted investment necessary for the implementation of these strategies. In the absence of mentioned priorities neither do private (domestic and foreign) investors get any specific milestones, nor the necessary interrelation between the state and regional budget policy and sustainable development policy is ensured. In addition, this creates obstacles to systematization and intensification of the prosess of involvement of Official Development Assistance (ODA). ODA is to be obtained by Ukraine for the achivement of the SDG-2030 within the framework of the Agenda.

Achievement of Goal 17 is suggested to be measured using three indicators, which together describe the investment attractiveness of the region. At national level, there is a target to increase the annual net inflow of foreign direct investment (FDI) by almost 6 times and to increase the number of public-private partnership projects by 9 times, as well as to ensure a steady inflow of private money transfers from abroad and facilitate their investment into the economy.

It is apparent that the volume of investment attraction depends largely on national investment climate, level of profitability of certain industries, rates of return of particular projects, cost of labor and certain levels of risk both at national and local levels. Central authorities play a significant role both in creating a certain regulatory environment for investors, rate and conditions of fees and taxes payment and in ensuring the international investment image of the country. At the same time, local authorities can also influence the attraction of investors by using such instruments as co-financing investment projects (in particular through the State Fund for Regional Development), providing local guarantees, creating local favorable doing business conditions within their territory, reducing artificial barriers for entry, facilitating the provision of administrative services and permitting procedures, as well as providing conditions for the launch and implementation of public-private partnership projects.

Current practice of existing PPP agreements implementation in Ukraine is ineffective, as the competitive conditions have been developed virtually for one participant (concessionaire), hence a failure of such projects. As a result, Ukraine has no large-scale project on concession implemented so far; yet concession mechanism is globally used to implement large-scale infrastructure projects, kind of which must be performed in Ukraine to achieve many of the goals and targets of sustainable development (SDG-6, 7, 9, 16).

Subject to the above, oblasts are cautious about this mechanism of attraction of investments and neglect the development of partnerships through the PPP.

By the level of achievement of regional indicators of Goal 17 in the baseline year 2015 and their comparison with the average Ukrainian indicators, it can be generally described as highly probable to be failed in 2030 in many oblasts of Ukraine, should status quo persist. Such conclusions are based on almost all oblasts lagging far behind main leaders in attracting foreign direct investment, as well as on the number of concluded PPP agreements.

Thus, the indicator 'Net foreign direct investment

Goal	Goal 17. Partnerships for the Goals					
Target	17.1 Mobilize additional financial resources by promoting foreign and domestic investment				17.3 Develop a partnership between government and business to achieve the SDGs	
Indicator	17.1.1. Ratio of volume of private remittance from relatives, other persons and other cash returns to GRP, %		17.1.2. (a) Net foreign direct investment in oblast (equities and bonds), USD per person of population per year		17.3.1. Number of projects of public–private partnership, inter alia concession and property lease in oblasts as of end of period, units	
	2015	+/-	2015	>1/<1	2015	н/п
Ukraine (2015)	**0.40**		**102.51**		**97.00**	
Oblasts						
Vinnytsya	0.54	0.14	15.09	0.15	0.00	-
Volyn	0.42	0.02	18.99	0.19	0.00	-
Dnipropetrovsk	0.24	-0.16	33.65	0.33	5.00	-
Donetsk	0.01	-0.39	0.61	0.01	9.00	-
Zhytomyr	0.43	0.03	51.63	0.50	1.00	-
Zakarpattya	0.97	0.57	12.77	0.12	1.00	-
Zaporizhya	0.38	-0.02	12.33	0.12	7.00	-
Ivano-Frankivsk	0.56	0.16	7.88	0.08	1.00	-
Kyiv	0.14	-0.26	42.99	0.42	13.00	-
Kirovohrad	0.51	0.11	1.02	0.01	0.00	-
Luhansk	0.55	0.15	0.42	0.00	1.00	-
Lviv	0.38	-0.02	10.86	0.11	4.00	-
Mykolayiv	0.36	-0.04	13.86	0.14	17.00	-
Odesa	0.38	-0.02	51.84	0.51	0.00	-
Poltava	0.34	-0.06	16.27	0.16	34.00	-
Rivne	0.23	-0.17	4.79	0.05	0.00	-
Sumy	0.43	0.03	2.32	0.02	0.00	-
Ternopil	0.92	0.52	0.14	0.00	0.00	-
Kharkiv	0.26	-0.14	5.76	0.06	-	-
Kherson	0.67	0.27	31.45	0.31	1.00	-
Khmelnytskiy	0.53	0.13	0.85	0.01	2.00	-
Cherkasy	0.38	-0.02	5.69	0.06	0.00	-
Chernivtsi	1.00	0.60	6.13	0.06	0.00	-
Chernihiv	0.54	0.14	3.71	0.04	1.00	-
City of Kyiv	0.12	-0.28	1130.90	11.03		-

+/- or >1/<1 - deviation from /ratio with the national indicator as of 2015

in oblast (equities and bonds) for 2015' offers a considerable differentiation. The city of Kyiv ($1,130 per person per year) and fiveoblasts, namely Odesa ($51.84 per person per year), Zhytomyr ($51.63 per person per year), Kyiv ($42.99 per person per year), Dnipropetrovsk ($33.65 per person per year) and Kherson ($31.45 per person per year) oblasts keep leading positions here.

At the same time, with absolute volumes of FDI attracted in 2015, the leaders are as follows: in addition to the city of Kyiv ($ 3.8 billion), Dnipropetrovsk ($109.9 million) and Kyiv (USD 74.4 million) oblasts. Traditionally low volumes of FDI are attracted in Ternopil, Kirovohrad and Khmelnytskyi oblasts ($154 thousand, $1 million, $1.1 million, respectively).

However, even the leaders in attracting investments per capita are far distanced from the capital, attracting several thousand times less FDI per capita than the city of Kyiv does. Therefore, all regions report this indicator to fall below national average reading ($102.5 per capita).

This situation aggravated in recent years, given the unfavorable investment climate in Ukraine and hostilities in its East. It should be noted that the situation continues to deteriorate. Thus, according to the State Statistics Service, in 2017 Ukrainian economy received $1,630.4 million of foreign direct investments (equities), which is half the amount studied in 2015.

Therefore, Ukraine's regions still has been attracting dangerously small amount of FDI in recent years. Due to this, both national and local authorities need to place a priority on their efforts on attraction of FDI to regions of Ukraine in order to allocate resources for the implementation of the targets of sustainable development.

The 'ratio of volume of private remittance from relatives, other persons and other cash returns to GRP, %' is an important indicator of SDGs. It should be noted that total of $1.8 billion was attracted in remittances in 2015, however, according to the new NBU methodology for calculating the amount of private money transfers to Ukraine[18], additional estimate of the amount of private money transfers to Ukraine in 2015-2017 was made, and this reading reportedly amounted to $7 billion in 2015. In the structure of private transfers, a share of the remittances of labor migrants for more than a year constituted 59.7%[19].

By their volume, money transfers twice exceed the amount of FDI in Ukraine, which allow us to suggests that this category of public income cannot be neglected; given proper policy implementation this moneymight be contributed for the purpose of sustainable development among other purposes.

Western cross-border oblasts of Ukraine, namely Chernivtsi, Zakarpattia and Ternopil, are reported to be the leaders in terms of getting financial assistance from relatives, as they get up to 1% of GRP; such situation is related to the labor migration of these oblasts' population abroad. This volume has been steadily increasing over recent years. It is forecasted that in 2018, the growth of income derived from labor migrants will continue to grow massively: from $9.3 billion in 2017 to $11.6 billion[20]. The main reasons for the increase in the volume of money transfers from abroad to the NBU are the strengthening of migration processes and the growth of the level of remuneration in the countries where Ukrainian migrants work. At present, the bulk of these funds is used for household expenses and the construction of private housing. At the same time, given the trend to increase the volumes of transferred money, a share of savings of the households receiving such assistance also grows. Such savings are a potential source of investment for regional economic development.

As for 'the number of projects of public–private partnership, concession and property lease in oblasts inclusive', in 2015 Poltava (34 projects), Mykolaiv (17 projects) and Kyiv (13 projects) oblasts took leading positions here. At the same time, no project was launched in ten oblasts, such as Vinnytsia, Volyn, Kirovohrad, Luhansk, Odesa, and Rivne.

The Law of Ukraine On public-private partnership entered into force in 2010. In international practice the definition of public-private partnership is used, yet the definition of public-private partnership envisaged with Ukrainian legislation is not limited to the national level, and embraces territorial communities represented by relevant state bodies and local self-government bodies; due to this, national and international concept can be considered identical. According to Ukrainian legislation, public-private partnership shall be implemented through the concession, property management, joint activity and other agreements. The concession is the most widespread form of PPP, both globally and in Ukraine. Vast majority of such contracts are being implemented in the housing and utilities services sector.

[18] Source: the National Bank of Ukraine, Access mode: https://bank.gov.ua/control/uk/publish/article?art_id=66326691&cat_id=55838

[19] Source: the National Bank of Ukraine, Access mode: https://bank.gov.ua/doccatalog/document?id=19208358

[20] Interview with Deputy Governor of the National Bank of Ukraine Dmytro Solohub during a monetary briefing. Access mode: https://hromadske.ua/posts/hroshovi-perekazy-ukrainskykh-zarobitchan-u-2018-rotsi-skladut-116-mlrd

As of January 1, 2018, in Ukraine there are 191 PPP concluded, 182 of which (157 concession agreements, 24 joint venture agreements, one public-private partnership agreement) are being currently implemented, and 9 contracts remained uncompleted (4 contracts expired, 3 contracts terminated, 2 contracts suspended). Most projects are implemented in such areas of economic activity as waste treatment and collection, water treatment and supply, 64.7% (116 projects) and 21.4% (39 projects), respectively, of the total number of projects. The most common form of PPP is a concession (86% of the total number of contracts).

A comparison of the regional baseline for achieving Goal 17 has demonstrated a significant level of differentiation in values of indicators and their lagging behind the national average in many oblasts. In particular, Zaporizhzhia, Kyiv, Lviv, Odesa, Rivne, Kharkiv and Cherkasy oblasts were registered below the national average rate in all three indicators of Goal 17.

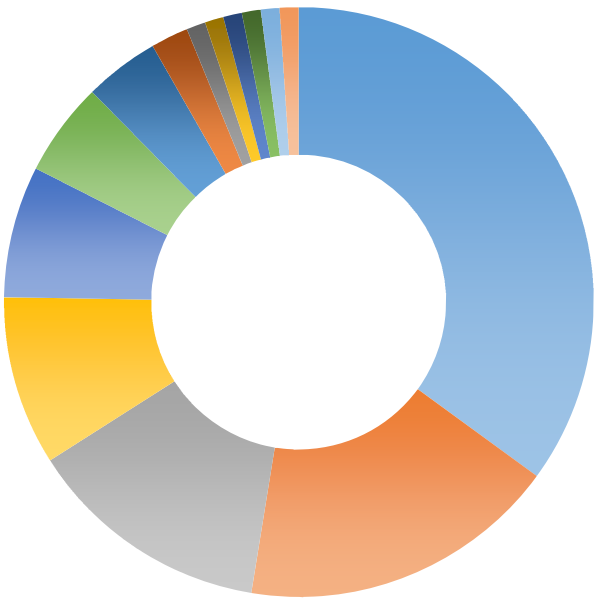
Itit is important to incorporate all SDGs and indicators into local policies and local budgets, while defining the amount of resources needed to achieve each particular goal. During the process of determining the necessary funding amounts, regional authorities must apply such tools, which might ensure the optimization of resources and their most efficient allocation to support the most important directions, both identified by national and international commitments of Ukraine and by those priorities of highest investment potential in terms of fostering advanced economic development and increasing the competitiveness of the region.

This approach will make much more reason for international partners, explain them the vision of oblasts of Ukraine and will favor getting ODA from the developed countries, offering private donors and investors to co-finance sustainable development projects together with the government and the local self-government.

Thus, both national and regional SDG-based strategies supported by financing mechanisms can be considered as benchmarks for identifying investment priorities which ensure growth benefit of Ukrainian economy based on sustainable development principles.

Baseline indicators of goal in 2015:

17.3.1. Number of projects of public–private partnership, inter alia concession and property lease in oblasts as of end of period, units



Poltava	34.00	Chernihiv	1.00
Mykolayiv	17.00	Luhansk	1.00
Kyiv	13.00	Vinnytsya	0.00
Donetsk	9.00	Volyn	0.00
Zaporizhya	7.00	Kirovohrad	0.00
Dnipropetrovsk	5.00	Odesa	0.00
Lviv	4.00	Rivne	0.00
Khmelnytskiy	2.00	Sumy	0.00
Zhytomyr	1.00	Ternopil	0.00
Zakarpattya	1.00	Cherkasy	0.00
Ivano-Frankivsk	1.00	Chernivtsi	0.00
Kherson	1.00	Kharkiv	0.00

4

CHAPTER

REGIONS OF UKRAINE IN DIMENSION OF SUSTAINABLE DEVELOPMENT GOALS

THE CONTENT OF THIS CHAPTER

Chapter 4 is made of 24 paragraphs which contain the SDG achievement baseline estimates for each region of Ukraine. Each paragraph is devoted to separate region and provides the following information.

Resume of the SDG achievement in relevant region as of 2015. On the basis of actual values of regional indicators in baseline year and of their comparison with respective national indicators' values, the analytic study was performed, and the regions' development trends and priorities defined. Similar to previous Chapter, this resume is built on analysis of data as of baseline 2015. Though, even given the dynamics of recent years changes at all levels, performed research allows to define general areas of development that should get utmost attention and resources.

Radar chart of the SDG achievement in respective region. This chart clearly demonstrates the status of the region's achievement of the SDG by *separate indicators* in baseline year. It is not intended to demonstrate full data on all SDG indicators achievement, as it aims to show a perspective grounded on sample data only. Therefore, this chart offers one of many possible viewpoints on multidimensional picture. To achieve this, a selection of indicators was formed by choosing one *leading indicator* in each of the component of the system of indicators in each separate SDG. It should be noted that a specific set of *leading indicators* in this case was expertly chosen by the authors of this study. To make graphs simple, the values of indicators were normalized by scaling them from 1 to 10. Please check Chapter 2 for the detailed description of method of multidimensional comparisons and for the list of selected *leading indicators*.

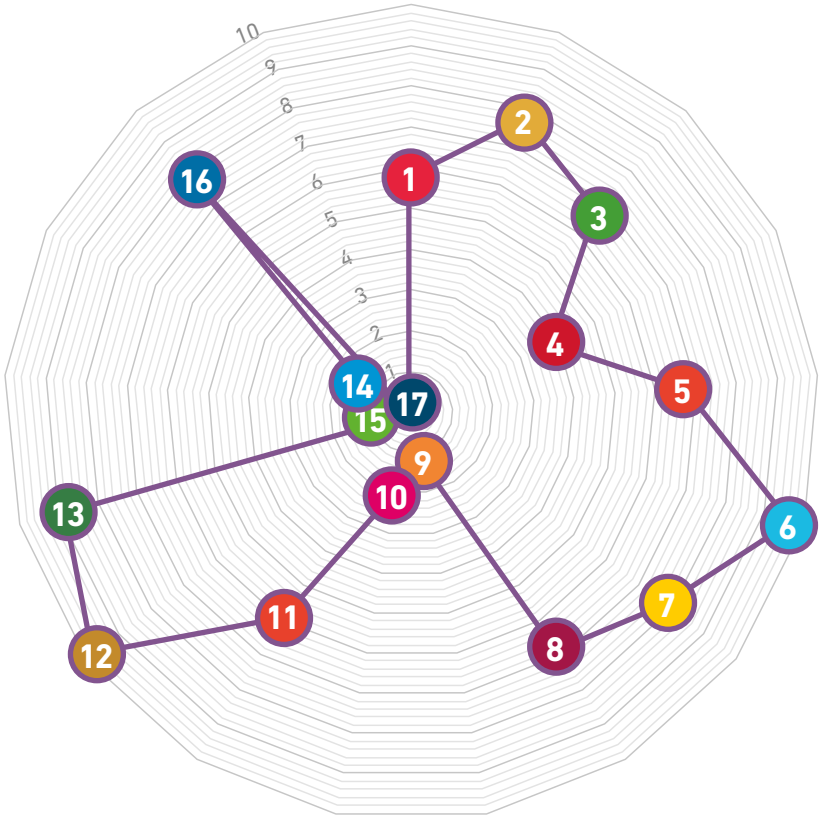
Table of values of indicators which measure the SDG in respective region. Data in this table is arranged as follows. Column 'indicator' gives the code numbers of indicators (please see a full list in Annex 1). At the same time, indicator stimulator is printed with black color, while indicator de-stimulator is printed with red color. Columns 'regional' provide data on relevant region level indicator in baseline year; column 'national' provides data on relevant nation level indicator as defined in the National Report 'Sustainable Development Goals: Ukraine' dated 2017. For easy reference to comparison the neighboring column contains absolute divergence or relative divergence of values of region level indicator from values of respective nation level indicators; these are also marked with colors, blue for deviation of positive meaning, red for opposite cases.

Additionally, **electronic table with data** in MS Excel is made available for each oblast at separate link. This table demonstrates detailed data on table mentioned above with data on SDG indicators together with relevant diagram.

4.1. Vinnitsia oblast

By the overwhelming majority of indicators of socio-economic development, Vinnytsia oblast sits in the middle of the list of Ukraine's regions. As of 2015, it ranked 11th by GRP per capita (the city of Kyiv exclusive). Owing to the widely represented food industry (65.7% of the sold industrial products), the region even reported an industrial production growth in 2015 (against a background of a nationwide decline by 13.4%). This oblast was the only one to demonstrate an increase in commodity exports (by 14.1%). The situation in the agrarian sector was worse, namely the decline was above the Ukrainian average (4.8%) and amounted to 9.5%. Meanwhile, in 2015 about one third of capital investment was deployed precisely into agricultural production. The oblast is uninviting for investors: the share of foreign direct investment per capita ($15.1) is 6.8 times less than the average Ukrainian one.

SDG baseline for Vinnytsya oblast in 2015



As for the sustainable development, Vinnytsia oblast has the following features[21].

1. The oblast has better than the average Ukrainian actual indicators of quality and conditions of life of the population: the share of the population whose average per capita monetary income is lower than the real subsistence level (1.1.1. (a)) is close to average country level, and consumption of basic products (2.1.1-2.1.3) is higher. Labor productivity in agricultural production (2.2.1) exceeded the national average by 23%. At the same time, the perception of the quality of life (1.3.1. (a)) differed for the worse: 81.4% of households reported themselves poor (by 11% more than across Ukraine) and having low access to health care and educational services (3.9.1. (a)) (although the availability of medical facilities in rural settlements (10.3.1-10.3.2) is much better than generally across Ukraine).
2. Against the background of a generally positive morbidity picture, there are negative trends in women's health. The number of cases of

[21] Detailed data of indicators of region are available by link

maternal mortality (3.1.1) is bigger than the national average by 20%, rate of mortality from malignant cervical tumors (3.4.4) is higher by 13%. This indicator correlates with an excessively high level of abortion (5.5.1. (a)) (71.4 per 10,000 women against 44.5 on average across Ukraine), domestic violence (5.2.2. (a)) (13 times exceeding the national indicator[22]) and the high level of sexual abuse associated crime (9.1 cases of crime against sexual freedom (16.1.3. (a)) per 1000 population against 1.8 on average across Ukraine).

3. The higher educational services offer is insufficient: the share of students (4.4.1. (a)) is 1.6 times less than the national average. Consequently, the share of youth not in employment and education is significantly higher (8.4.1) - 21.3% against 12.8 across Ukraine.
4. The situation with water supply is complicated. The use of fresh water (6.1.2. (a)) is 1.6 times less than across Ukraine, only 6.7% of rural (6.1.5) and 78% of urban population (6.1.6) have access to centralized water supply (24.2 and 89.4%). The rural population does not have access to centralized drainage (6.2.1. (a)).
5. The prevalence of low-tech productions predetermines the GRP per one employed person (8.2.2. (a)), which is 1.4 times lower than in general across Ukraine. This brings to the lower than the all-Ukrainian wages rate (the average wage constituted 80.9% of the general Ukrainian indicator; the oblast ranked 14th among Ukraine's regions (the city of Kyiv exclusive). Low incomes of employees might be among the reason to pessimistic moods over the living standards of the region's population.
6. This oblast demonstrates good readings in indicators of the share of small and medium-sized enterprises (8.6.2. (a)), while the share of employed by SMEs (8.6.1. (a)) (19%) is smaller than the national one (25.4%), which speaks for an extreme pettiness of this type of business.
7. Low representation of monuments of local importance (11.3.2-1), nature reserves and national parks (11.3.3) remains to be a significant gap for the region. Not only such situation diminishes the potential for tourism development, but also hinders the development of regional identity and cohesion.
8. Against the background of generally low crime rates (16.1.1. (a)) (1.7 times lower against the national average), the readings in some indicators are high, like in crimes against sexual freedom (16.1.3. (a)) (5 times more), sexual exploitation (16.2.3. (a)) (6 times more), as well as crimes associated with human trafficking (16.2.1. (a)) (17 times more). Crimes related to illegal handling of weapons (16.5.3. (a)) are committed 3,5 times more frequently.

[22] Due to excessive deviation, data needs to be verified

Table of values of indicators which measure the SDG in Vinnitsia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	64.7	62.6	2.10	5.2.2 (a)	35.6	2.7	13.00
1.2.1 (a)	59.5	56.3	3.20	5.3.1	-	-	-
1.3.1 (a)	81.4	70.7	10.70	5.4.2	10.7	-	-
1.3.2	52.8	53.1	-0.30	5.4.3 (a)	70.7	77.1	-6.40
2.1.1 (a)	51.3	50.9	1.01	5.5.1 (a)	71.4	44.5	1.60
2.1.2 (a)	214.0	209.9	1.02	5.5.2	29.7	27.3	1.09
2.1.3 (a)	54.3	50.9	1.07	5.6.1	78.8	74.9	3.90
2.2.1	274.2	223.3	1.23	5.6.2 (a)	56.7	56.2	0.50
2.2.2	91.8	95.2	-3.40	5.6.3 (a)	68.7	71.9	-3.18
2.3.1	98.6	89.3	9.30	6.1.1 (a)	8.6	7.6	1.00
2.3.2	78.4	38.2	40.20	6.1.2 (a)	18.8	29.6	0.64
2.3.3 (a)	2.7	2.5	0.20	6.1.3 (a)	7.2	4.6	2.60
2.4.1	134.0	141.5	-7.50	6.1.4	-	90.0	-
3.1.1	18.3	15.3	1.20	6.1.5	6.7	24.2	-17.48
3.2.1	8.8	9.7	0.91	6.1.6	78.0	89.4	-11.40
3.3.1	18.9	37.2	0.51	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	47.4	56.0	0.85	6.2.2	60.0	73.0	-13.00
3.4.1	53.4	61.1	0.87	6.3.1	1.0	875.0	0.00
3.4.2	22.5	27.6	0.82	6.3.2	1.6	16.4	-14.82
3.4.3	18.8	24.0	0.78	6.4.1	2.0	4.9	0.41
3.4.4	12.5	11.1	1.13	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.7	52.2	1.01	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.7	62.0	1.01	7.1.1	5471.0	163682.0	-
3.6.1	12.5	11.2	1.12	7.1.2	13.8	11.7	2.04
3.6.2 (a)	100.0	100.0	1.00	7.1.3	13.0	18.8	-5.82
3.7.1	-	-	-	7.3.1	3.6	3.0	0.56
3.8.1 (a)	13.3	18.4	-5.10	7.4.1 (a)	62.2	55.2	1.13
3.9.1 (a)	70.6	29.3	41.30	8.1.1	97.1	90.2	6.90
4.1.1 (a)	81.5	78.5	3.00	8.1.2	12.3	13.7	-1.42
4.2.1	65.0	55.0	10.00	8.1.3	5.0	19.2	-14.22
4.3.1	11.1	7.6	3.50	8.1.4 (a)	1.0	0.7	0.27
4.4.1 (a)	203.2	321.0	0.63	8.2.1 (a)	43.4	33.1	10.33
4.4.1-1	65.0	55.2	9.77	8.2.2 (a)	88.0	121.0	0.73
4.4.2 (a)	0.4	0.7	0.56	8.2.3 (a)	74.3	43.7	30.52
4.5.1 (a)	278.7	374.7	0.74	8.3.1 (a)	57.7	56.7	1.00
4.5.2	42.9	48.9	-6.00	8.4.1	21.3	12.8	8.50
4.6.1	15.6	15.3	0.30	8.5.1 (a)	26.2	25.9	1.01
4.7.1	80.7	81.0	-0.29	8.5.2	100.0	100.0	0.00
4.7.2	80.7	60.1	20.60	8.5.3	9.9	12.7	-2.77
4.7.3	6.2	9.4	-3.20	8.6.1 (a)	19.0	25.4	-6.43
5.1.1	0.0	-	-	8.6.2 (a)	71.7	60.2	11.53
5.2.1 (a)	0.0	0.1	-0.03	8.6.3 (a)	6.6	7.6	-1.00

(continuation)

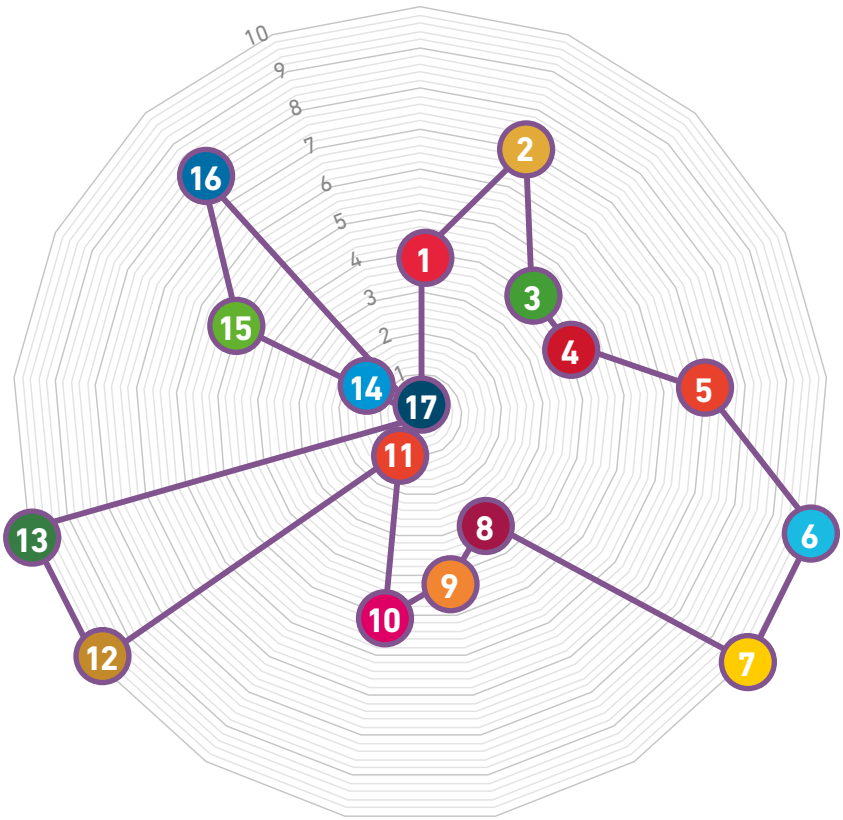
Table of values of indicators which measure the SDG in Vinnitsia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	8.8	10.7	-1.94	12.4.2	22.5	30.0	-7.50
9.1.2	20.4	1474.0	0.01	13.1.1 (a)	5.1	4.7	1.07
9.1.3 (a)	7.3	1.4	5.22	14.1.1 (a)	-	17.8	-
9.2.1 (a)	55.0	35.3	19.74	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	94.7	97.8	-3.05	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.4	2.4	-2.06	15.1.1	20.2	1769.1	0.01
9.4.2 (a)	2.2	10.0	-7.80	15.1.2	0.8	2.9	-2.10
9.4.3	10.8	21.0	-10.24	15.1.3	15.7	22.4	-6.70
9.5.1	0.0	0.6	-0.57	15.2.1	14.3	17.6	-3.30
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	2.2	3.5	0.63
9.6.1	35.3	39.0	0.90	15.3.1 (a)	2.2	25.5	0.09
9.7.1 (a)	42.4	37.4	5.00	15.3.2	1667.3	31131.0	0.05
10.1.1 (a)	5.1	4.5	0.60	15.3.3	62.9	51.6	11.30
10.1.2	-	15.0	-	15.3.4 (a)	31.7	441.8	0.07
10.2.1	-	9.0	-	15.3.5	236.3	7840.5	0.03
10.3.1 (a)	18.4	27.0	-8.60	15.3.6	8.9	13.0	-4.07
10.3.2 (a)	5.6	8.3	-2.74	15.4.1	-	669.0	-
10.3.3 (a)	10.9	11.2	-0.33	15.4.2	-	1.1	-
10.4.1	2.5	2.7	0.93	16.1.1 (a)	3.0	5.0	0.60
10.5.1	40.9	37.7	3.22	16.1.2 (a)	8.0	10.0	0.80
11.1.1 (a)	39.9	37.8	2.09	16.1.3 (a)	9.1	1.8	4.96
11.1.2 (a)	29.3	22.9	1.28	16.2.1 (a)	8.5	0.5	17.42
11.2.1	-	0.0	-	16.2.2 (a)	737.4	199.3	3.70
11.3.1	-	6.0		16.2.3 (a)	31.3	5.3	5.90
11.3.2 (a)	1.1	1.4	0.78	16.3.1 (a)	11.0	9.0	2.00
11.3.2-1	1.8	12.6	0.14	16.3.2 (a)	11.0	11.0	1.00
11.3.3	0.8	2.9	-2.10	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	27.9	8.4	3.32
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1133.8	556.5	2.04
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	52.4	15.0	3.50
11.5.4 (a)	7.3	7.8	0.94	16.6.1 (a)	51.0	50.0	1.00
11.5.4-1	194.6	4521.3	0.04	16.7.1	72.0	38.0	34.00
11.6.1 (a)	1.2	4.9	0.25	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.2	2.1	0.02	16.8.3	-	-	-
12.2.2 (a)	20.8	17.1	3.72	16.9.1	7.1	6.7	0.40
12.3.1 (a)	73.6	501.9	0.15	17.1.1	0.5	0.4	0.14
12.3.1-1	3.0	220.0	0.01	17.1.2 (a)	15.1	102.5	0.15
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	223.9	993.7	0.23				

4.2. Volyn oblast

As of 2015, Volyn oblast ranked 17th by GRP per capita (the city of Kyiv exclusive). In 2015 Index of industrial products made up 98.6% as of 2014 (it constituted 86.6% across Ukraine).

SDG baseline for Volyn oblast in 2015



As for the sustainable development, Volyn oblast[23] has the following features.

1. The majority of the oblast's residents does not feel being poor, in particular Indicator 1.3.1 (household surveys) significantly exceeds the average Ukrainian indicators. This corresponds to local authorities' social policy; the oblast occupies the last place (20%) by coverage of population with social care services. These indicators are in certain contrast with the structure of household expenditure, namely, compared to other oblasts, the largest share of expenditure of Volyn households' own budgets is a food expenditure. This is an indicator for a higher level of poverty. At the same time, the consumption of dairy products rate (2.1.2. (a)) exceeds the average Ukrainian indicators, as opposed to meat and vegetable consumption. It can be assumed that milk often serves as a meat substitute in this oblast, which can be explained by higher prices of food products compared to other oblasts (2.4.1). At the same time, according to the indicators of income differentiation (10.2.1 and 10.4.1), the oblast ranks the lowest positions nationally.
2. In general, the oblast has high readings for indicators of the health conditions and health care services accessibility. At the same time, the population of the region is smokes less (3.8.1. (a)). The oblast has the lowest mortality rate among children under 5 years, which is three times lower than the average Ukrainian one (3.2.1). At the same time, attention should be paid to the number of cases of maternal mortality (3.1.1) which is almost twice as high as national average.
3. Despite small number of universities (4.4.2. (a)) and students (4.4.1. (a)), as well as insufficient

[23] Detailed data of indicators of region are available by link

number of pre-school institutions (4.2.1), the population report on the almost average rate of education accessibility compared to other oblasts (4.3.1). Attention should be paid to Indicator 'Share of youth not in employment, education or professional training in the total number of population aged 15–24' (8.4.1.), which constitutes 27.4% and outperforms greatly the national average (12.8%). Meanwhile, the oblast has the lowest in the country male representation among school teachers (4.6.1), which constitutes 10% (5.6% lower than national average).

4. The level of economic activity (5.6.2. (a)) and employment of women (5.6.3. (a)), together with the ratio of wages of women and men (5.6.1) are above the average Ukrainian indicators. At the same time, gender equality in leading positions has not yet been achieved, thus there are only 10.9% of women (5.4.2) among the members of local councils of the oblast.
5. Environmental conditions of this oblast are relatively good, in particular it is characterized by availability of large forested territory (15.2.1), low volumes of pollutant emissions into the atmosphere and discharges into surface waters of contaminated wastewater. Quality of drinking water in the oblast is mostly better than the average Ukrainian rate (by 5.3% for rural sources (6.1.1. (a)) and by 3.4% for communal sources of drinking water supply (6.1.3. (a)), which is conditioned with the best indicators of water intensity of GRP (6.4.1) and the actual minimal discharges of contaminated wastewater into the water bodies of the oblast (6.3.1, 6.3.2). Still, the issue of the centralized water supply accessibility for the rural population (6.1.5) and drainage accessibility (6.2.1. (a)) requires attention.
6. As for electricity generation, this oblast has the lowest value in indicator (7.1.1), while the rate of energy intensity of GRP (7.4.1. (a)) is almost twice higher than the average Ukrainian one.
7. While ranking high positions in terms of GRP (8.1.1), capital investment (8.1.2, 8.2.1), use of high technologies in the production (8.1.3) and waste generated per unit of GRP (12.4.1. (a)), this oblast is not innovative at all, namely it shows very low values in indicators of correlation of innovative expenses to GRP (8.1.4. (a)), implemented innovative products new on the market (9.5.2) and expenditure on scientific and technical work in GRP (9.5.1). The comparative analysis of the employment in SMEs rate (8.6.1. (a)) and the volumes of product produced by these enterprises (8.6.2. (a)) gives the evidence of the higher productivity of such enterprises in this oblast compared to the national average.
8. The oblast needs to attract investment, as the share of FDI per capita ($19) is 5.4 times smaller than the national average (17.1.2. (a)). In order to intensify this process, attention should be paid to the oblast's infrastructure, id est, roads (9.3.2. (a)), broadband Internet (9.6.1), waste management system (12.4.2) and public-private partnerships in the region (17.3.1).

Table of values of indicators which measure the SDG in Volyn oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	72.7	62.6	10.10	5.2.2 (a)	8.9	2.7	3.26
1.2.1 (a)	20.0	56.3	-36.30	5.3.1	-	-	-
1.3.1 (a)	45.6	70.7	-25.10	5.4.2	10.9	-	-
1.3.2	59.8	53.1	6.70	5.4.3 (a)	73.7	77.1	-3.40
2.1.1 (a)	50.3	50.9	0.99	5.5.1 (a)	43.5	44.5	0.98
2.1.2 (a)	221.3	209.9	1.05	5.5.2	27.1	27.3	0.99
2.1.3 (a)	43.9	50.9	0.86	5.6.1	79.0	74.9	4.10
2.2.1	242.5	223.3	1.09	5.6.2 (a)	38.0	56.2	-18.20
2.2.2	95.4	95.2	0.20	5.6.3 (a)	69.8	71.9	-2.10
2.3.1	96.1	89.3	6.80	6.1.1 (a)	2.3	7.6	-5.30
2.3.2	23.0	38.2	-15.20	6.1.2 (a)	19.0	29.6	0.64
2.3.3 (a)	4.6	2.5	2.10	6.1.3 (a)	1.2	4.6	-3.40
2.4.1	142.4	141.5	0.90	6.1.4	-	90.0	-
3.1.1	29.4	15.3	1.92	6.1.5	12.3	24.2	-11.90
3.2.1	3.1	9.7	0.32	6.1.6	88.6	89.4	-0.80
3.3.1	26.7	37.2	0.72	6.2.1 (a)	4.6	4.1	0.50
3.3.2	62.8	56.0	1.12	6.2.2	82.0	73.0	9.00
3.4.1	60.3	61.1	0.99	6.3.1	0.0	875.0	0.00
3.4.2	26.6	27.6	0.97	6.3.2	0.0	16.4	-16.38
3.4.3	23.5	24.0	0.98	6.4.1	2.3	4.9	0.47
3.4.4	17.3	11.1	1.56	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.4	52.2	0.99	6.5.1	0.0	0.0	0.00
3.5.2 (a)	63.1	62.0	1.02	7.1.1	54.0	163682.0	-
3.6.1	16.0	11.2	1.43	7.1.2	12.5	11.7	0.80
3.6.2 (a)	100.0	100.0	1.00	7.1.3	13.1	18.8	-5.72
3.7.1	-	-	-	7.3.1	0.0	3.0	-3.00
3.8.1 (a)	16.2	18.4	-2.20	7.4.1 (a)	34.5	55.2	0.62
3.9.1 (a)	33.9	29.3	4.60	8.1.1	95.3	90.2	5.10
4.1.1 (a)	85.6	78.5	7.10	8.1.2	19.5	13.7	5.73
4.2.1	52.0	55.0	-3.00	8.1.3	48.3	19.2	29.10
4.3.1	6.6	7.6	-1.00	8.1.4 (a)	0.2	0.7	-0.49
4.4.1 (a)	181.7	321.0	0.57	8.2.1 (a)	48.8	33.1	15.73
4.4.1-1	65.6	55.2	10.41	8.2.2 (a)	79.2	121.0	0.65
4.4.2 (a)	0.4	0.7	0.57	8.2.3 (a)	42.0	43.7	-1.73
4.5.1 (a)	254.9	374.7	0.68	8.3.1 (a)	53.1	56.7	-3.60
4.5.2	40.2	48.9	-8.70	8.4.1	27.4	12.8	14.60
4.6.1	10.0	15.3	-5.30	8.5.1 (a)	44.8	25.9	1.73
4.7.1	60.0	81.0	-20.99	8.5.2	100.0	100.0	0.00
4.7.2	73.0	60.1	12.90	8.5.3	9.0	12.7	-3.70
4.7.3	19.0	9.4	9.60	8.6.1 (a)	25.2	25.4	-0.25
5.1.1	1.0	-	-	8.6.2 (a)	46.9	60.2	-13.30
5.2.1 (a)	0.0	0.1	-0.05	8.6.3 (a)	1.5	7.6	-6.10

(continuation)

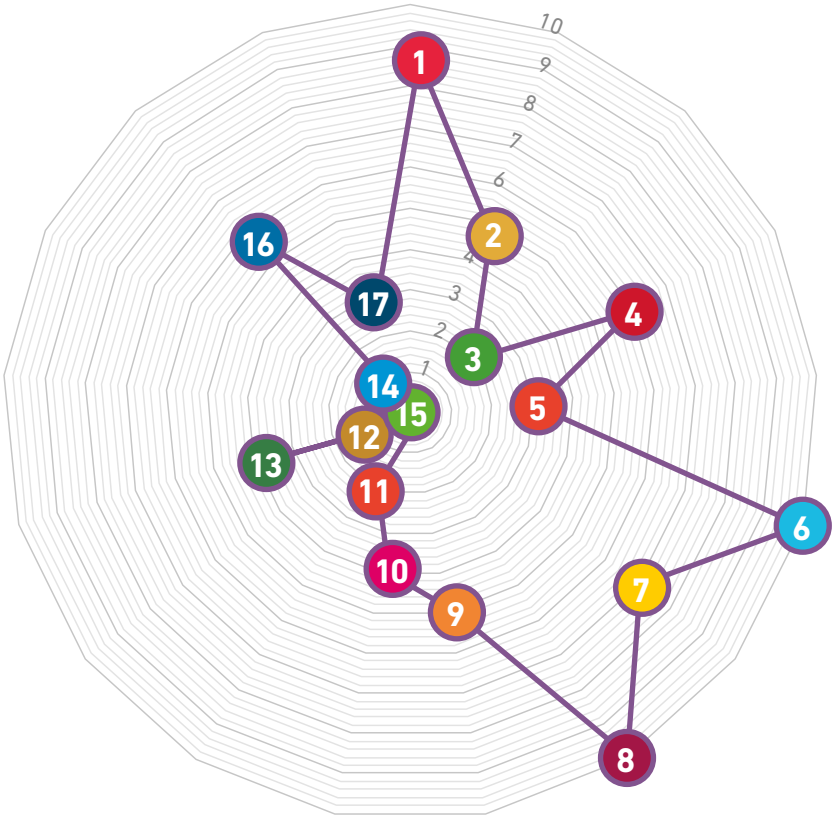
Table of values of indicators which measure the SDG in Volyn oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	4.8	10.7	-5.94	12.4.2	22.8	30.0	-7.20
9.1.2	11.6	1474.0	0.01	13.1.1 (a)	0.2	4.7	0.05
9.1.3 (a)	1.1	1.4	0.80	14.1.1 (a)	-	17.8	-
9.2.1 (a)	24.8	35.3	-10.42	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	93.5	97.8	-4.24	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	2.1	2.4	-0.28	15.1.1	124.7	1769.1	0.07
9.4.2 (a)	35.9	10.0	25.88	15.1.2	6.2	2.9	3.30
9.4.3	26.8	21.0	5.72	15.1.3	6.4	22.4	-16.00
9.5.1	0.6	0.6	-0.05	15.2.1	34.6	17.6	17.00
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	3.4	3.5	0.97
9.6.1	32.4	39.0	0.83	15.3.1 (a)	1.4	25.5	0.06
9.7.1 (a)	57.5	37.4	20.10	15.3.2	607.6	31131.0	0.02
10.1.1 (a)	4.1	4.5	-0.40	15.3.3	30.2	51.6	-21.40
10.1.2	-	15.0	-	15.3.4 (a)	9.6	441.8	0.02
10.2.1	-	9.0	-	15.3.5	363.3	7840.5	0.05
10.3.1 (a)	18.0	27.0	-8.97	15.3.6	18.0	13.0	5.05
10.3.2 (a)	18.0	8.3	9.68	15.4.1	-	669.0	-
10.3.3 (a)	79.3	11.2	68.09	15.4.2	-	1.1	-
10.4.1	4.1	2.7	1.52	16.1.1 (a)	3.0	5.0	0.60
10.5.1	41.1	37.7	3.40	16.1.2 (a)	8.0	10.0	0.80
11.1.1 (a)	37.6	37.8	-0.25	16.1.3 (a)	7.9	1.8	4.28
11.1.2 (a)	22.5	22.9	0.98	16.2.1 (a)	5.8	0.5	11.74
11.2.1	-	0.0	-	16.2.2 (a)	152.8	199.3	0.77
11.3.1	-	6.0	-	16.2.3 (a)	3.8	5.3	0.72
11.3.2 (a)	1.1	1.4	0.80	16.3.1 (a)	7.0	9.0	-2.00
11.3.2-1	1.0	12.6	0.08	16.3.2 (a)	8.0	11.0	0.73
11.3.3	6.2	2.9	3.30	16.4.1 (a)	25.0	12.0	13.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	29.6	8.4	3.52
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1327.5	556.5	2.39
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	84.9	15.0	5.67
11.5.4 (a)	2.1	7.8	0.27	16.6.1 (a)	68.0	50.0	18.00
11.5.4-1	42.8	4521.3	0.01	16.7.1	44.0	38.0	6.00
11.6.1 (a)	1.2	4.9	0.25	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.4	2.1	0.22	16.8.3	-	-	-
12.2.2 (a)	23.1	17.1	5.98	16.9.1	6.5	6.7	-0.20
12.3.1 (a)	31.7	501.9	0.06	17.1.1	0.4	0.4	0.02
12.3.1-1	1.0	220.0	0.00	17.1.2 (a)	19.0	102.5	0.19
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	133.4	993.7	0.13				

4.3. Dnipropetrovsk oblast

Dnipropetrovsk oblast is hosting a developed industrial complex (producing 19.3% of all products sold in Ukraine), which covers almost all fields of industry from mineral extraction to high-tech space and military-technical branches. Also, this oblast has a developed agricultural complex based on 'from farm to fork' principle, starting from crop cultivation and livestock production to its processing and supply to the domestic and foreign markets. Accordingly, in terms of the SDGs achievement this oblast has all the advantages and challenges inherent for the agro-industrial economy: better results are shown as for the development, less encouraging results are shown as for sustainability. In general, Goals 4, 8, 9 and 10, which relate to the economic development and generation of incomes of employed population, demonstrate better than average achievement progress across Ukraine. As for Goals related to environment, health and safety of population and social protection (Goals 1, 3, 11, 12 and 16), the indicators in baseline 2015 are generally somewhat lower than the average Ukrainian ones.

SDG baseline for Dnipropetrovsk oblast in 2015



As for the sustainable development, Dnipropetrovsk oblast has the following features[24].

1. There are certain outstanding indicators measuring the successful goals, like Indicator 8.2.2. 'GRP per one employed person', which is 29% higher than the average Ukrainian. Indicator 8.3.1. 'Employment rate among those aged 15-70', which is also 4.2% higher than average, Indicator 8.1.4. 'Share on innovation costs in GRP', which is 3.5% compared to the average Ukrainian (0.69%). As for Goal 9, Indicators 9.4.1. 'Share of sold products (goods, services) of enterprises according to economic activity type that belong to the high-tech sector of processing industry' (7.4% against the national 2.4%) and 9.4.2. 'Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-

[24] Detailed data of indicators of region are available by link

tech sector of processing industry' (18.3% against the national 10%) come into notice. The state of infrastructure development of the oblast, in particular, of road infrastructure and access of the population to centralized water supply and drainage, is estimated above the average. Goal 4 also demonstrates high results in separate baseline indicators. In particular, these are Indicator 4.1.1. 'Share of attendants of secondary education institutions in total permanent population aged 6-17', which is 86.9%, with the average Ukrainian - 78.5%, and Indicator 4.2.1. 'Net pre-primary education institutions coverage for number of children of relevant age', which is 63%, while the average Ukrainian constitutes 55%. Another positive indicator should be considered as well, namely Indicator 4.5.1. 'Number of persons who attended educational institutions (I-IV accreditation grade), per 10 thousand of population' (382.6 against the average Ukrainian constituting 374.7), which illustrates young people coverage with higher education.

2. As mentioned before, in 2015 (which was selected as the SDG achievement baseline year) the situation with most Goals was more complicated in comparison with average Ukrainian readings. This is especially true for Goal 3 indicators and for the number of indicators that describe the environmental status and criminal offenses statistics.
3. Despite the low maternal mortality rate achieved in this oblast (almost twice lower than across Ukraine), all other indicators related to morbidity and mortality remain worse or similar in comparison with the average Ukrainian ones. Obviously, this is explained both with troublesome environmental situation and declining industries in urbanized cities of this oblast, which are accompanied with enterprises' shutdown, loss of jobs and, consequently, an increase in morbidity and mortality, especially caused by cardiovascular diseases and diseases associated with harmful habits. As to the environment and reasonable use of resources, Indicator 7.4.1. 'Energy intensity of GRP (losses of energy-yielding materials and petro-chemical products) tons of oil equivalent per UAH million by GRP' (89.7 against the average Ukrainian constituting 55.2) draws attention. This is to evidence that despite certain progress achieved in electricity generation from alternative sources, high energy consumption is deterring oblast's development. As for the environment, Indicator 13.1.1 'Volume of emissions of air pollutants from stationary sources, tones per sq.km. of the region's area' is quite representative with 22.7 in Dnipropetrovsk oblast against the average reading across the country registered as 4.7.
4. Thus, the oblast has a positive tendency to ensure education for children and youth; also, there's a good baseline conditions for successful industrial development, increase of incomes of population and budget. Should all 39 approved regional strategies and programs be successfully implemented, the abovementioned factors might create conditions for future innovation development. This, in turn, should generate the necessary financial and organizational resources to address the problems arising in the process of industrial development and associated with the environmental deterioration, increase of morbidity and violence rates.

Table of values of indicators which measure the SDG in Dnipropetrovsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	56.6	62.6	-6.00	5.2.2 (a)	5.4	2.7	1.97
1.2.1 (a)	56.0	56.3	-0.30	5.3.1	-	-	-
1.3.1 (a)	80.2	70.7	9.50	5.4.2	14.0	-	-
1.3.2	52.9	53.1	-0.20	5.4.3 (a)	86.5	77.1	9.40
2.1.1 (a)	58.8	50.9	1.16	5.5.1 (a)	61.5	44.5	1.38
2.1.2 (a)	194.7	209.9	0.93	5.5.2	27.3	27.3	1.00
2.1.3 (a)	57.1	50.9	1.12	5.6.1	67.3	74.9	-7.60
2.2.1	211.9	223.3	0.95	5.6.2 (a)	2.0	56.2	-54.20
2.2.2	106.3	95.2	11.10	5.6.3 (a)	59.0	71.9	-12.90
2.3.1	106.8	89.3	17.50	6.1.1 (a)	0.8	7.6	-6.80
2.3.2	6.2	38.2	-32.00	6.1.2 (a)	54.8	29.6	1.85
2.3.3 (a)	1.1	2.5	-1.40	6.1.3 (a)	1.2	4.6	-3.40
2.4.1	142.0	141.5	0.50	6.1.4	-	90.0	-
3.1.1	9.0	15.3	0.59	6.1.5	50.0	24.2	25.80
3.2.1	10.4	9.7	1.07	6.1.6	87.6	89.4	-1.80
3.3.1	88.3	37.2	2.37	6.2.1 (a)	16.5	4.1	12.40
3.3.2	78.7	56.0	1.41	6.2.2	85.4	73.0	12.40
3.4.1	67.5	61.1	1.11	6.3.1	267.0	875.0	0.31
3.4.2	31.9	27.6	1.16	6.3.2	39.1	16.4	22.71
3.4.3	28.3	24.0	1.18	6.4.1	5.1	4.9	1.05
3.4.4	10.8	11.1	0.97	6.4.2	100.0	100.0	0.00
3.5.1 (a)	50.5	52.2	0.97	6.5.1	0.0	0.0	0.00
3.5.2 (a)	60.8	62.0	0.98	7.1.1	5304.0	163682.0	-
3.6.1	12.2	11.2	1.08	7.1.2	4.7	11.7	-7.07
3.6.2 (a)	100.0	100.0	1.00	7.1.3	20.0	18.8	1.18
3.7.1	-	-	-	7.3.1	4.9	3.0	1.90
3.8.1 (a)	21.3	18.4	2.90	7.4.1 (a)	89.7	55.2	1.62
3.9.1 (a)	28.8	29.3	-0.50	8.1.1	90.3	90.2	0.10
4.1.1 (a)	86.9	78.5	8.40	8.1.2	12.0	13.7	-1.69
4.2.1	63.0	55.0	8.00	8.1.3	19.2	19.2	0.00
4.3.1	6.2	7.6	-1.40	8.1.4 (a)	3.5	0.7	2.82
4.4.1 (a)	320.3	321.0	1.00	8.2.1 (a)	37.9	33.1	4.83
4.4.1-1	51.2	55.2	-3.99	8.2.2 (a)	145.4	121.0	1.20
4.4.2 (a)	0.7	0.7	1.05	8.2.3 (a)	50.3	43.7	6.62
4.5.1 (a)	382.6	374.7	1.02	8.3.1 (a)	60.9	56.7	4.20
4.5.2	53.2	48.9	4.30	8.4.1	17.0	12.8	4.20
4.6.1	14.7	15.3	-0.60	8.5.1 (a)	41.1	25.9	1.59
4.7.1	81.6	81.0	0.61	8.5.2	100.0	100.0	0.00
4.7.2	60.5	60.1	0.40	8.5.3	21.0	12.7	8.36
4.7.3	7.0	9.4	-2.40	8.6.1 (a)	24.1	25.4	-1.33
5.1.1	-	-	-	8.6.2 (a)	59.0	60.2	-1.20
5.2.1 (a)	0.1	0.1	0.04	8.6.3 (a)	1.1	7.6	-6.50

(continuation)

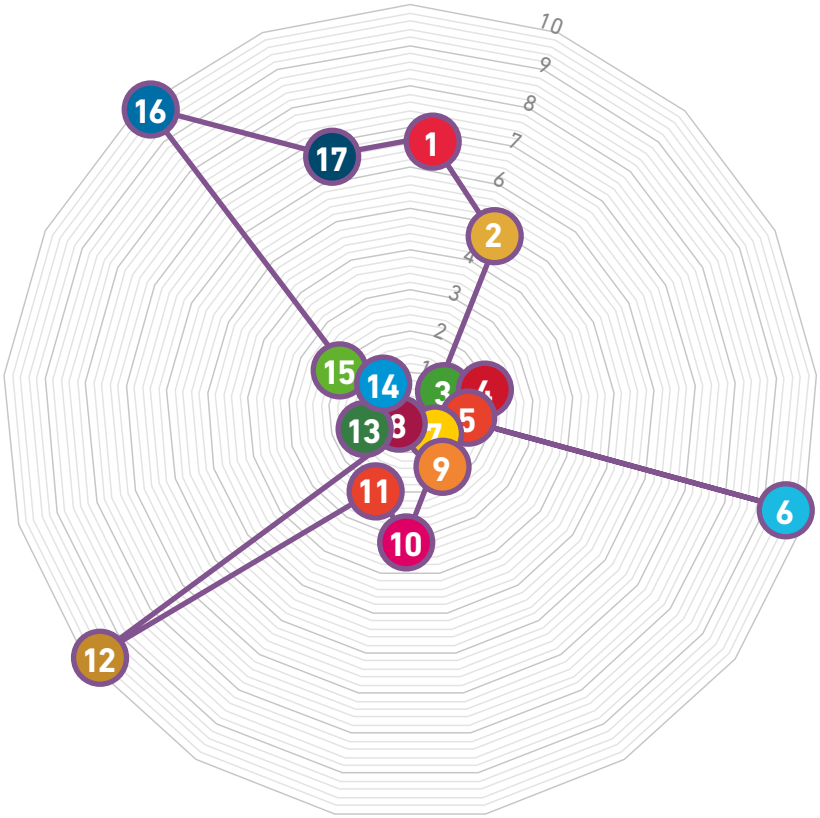
Table of values of indicators which measure the SDG in Dnipropetrovsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	0.9	10.7	-9.87	12.4.2	31.5	30.0	1.50
9.1.2	103.7	1474.0	0.07	13.1.1 (a)	22.7	4.7	4.79
9.1.3 (a)	1.3	1.4	0.91	14.1.1 (a)	-	17.8	-
9.2.1 (a)	50.0	35.3	14.79	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	7.4	2.4	4.98	15.1.1	3.8	1769.1	0.00
9.4.2 (a)	18.4	10.0	8.37	15.1.2	0.1	2.9	-2.80
9.4.3	11.7	21.0	-9.34	15.1.3	-	22.4	-
9.5.1	0.6	0.6	0.02	15.2.1	6.0	17.6	-11.60
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	-	3.5	-
9.6.1	31.1	39.0	0.80	15.3.1 (a)	247.2	25.5	9.68
9.7.1 (a)	45.4	37.4	8.00	15.3.2	2082.6	31131.0	0.07
10.1.1 (a)	4.4	4.5	-0.10	15.3.3	65.2	51.6	13.60
10.1.2	-	15.0	-	15.3.4 (a)	13.4	441.8	0.03
10.2.1	-	9.0	-	15.3.5	332.5	7840.5	0.04
10.3.1 (a)	26.3	27.0	-0.70	15.3.6	10.4	13.0	-2.57
10.3.2 (a)	7.9	8.3	-0.40	15.4.1	-	669.0	-
10.3.3 (a)	14.4	11.2	3.13	15.4.2	-	1.1	-
10.4.1	2.8	2.7	1.04	16.1.1 (a)	5.0	5.0	1.00
10.5.1	31.0	37.7	-6.70	16.1.2 (a)	11.0	10.0	1.10
11.1.1 (a)	41.2	37.8	3.41	16.1.3 (a)	0.8	1.8	0.45
11.1.2 (a)	24.3	22.9	1.06	16.2.1 (a)	0.3	0.5	0.62
11.2.1	-	0.0	-	16.2.2 (a)	269.5	199.3	1.35
11.3.1	-	6.0	-	16.2.3 (a)	5.5	5.3	1.04
11.3.2 (a)	0.8	1.4	0.55	16.3.1 (a)	8.0	9.0	-1.00
11.3.2-1	59.5	12.6	4.74	16.3.2 (a)	14.0	11.0	1.27
11.3.3	0.1	2.9	-2.80	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	11.7	8.4	1.39
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1320.4	556.5	2.37
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	12.8	15.0	0.85
11.5.4 (a)	27.5	7.8	3.53	16.6.1 (a)	50.0	50.0	0.00
11.5.4-1	876.5	4521.3	0.19	16.7.1	34.0	38.0	-4.00
11.6.1 (a)	2.2	4.9	0.45	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.1	2.1	0.00	16.8.3	-	-	-
12.2.2 (a)	22.5	17.1	5.45	16.9.1	6.5	6.7	-0.20
12.3.1 (a)	7113.2	501.9	14.17	17.1.1	0.2	0.4	-0.16
12.3.1-1	24.0	220.0	0.11	17.1.2 (a)	33.7	102.5	0.33
12.3.2	-	-	-	17.3.1	5.0	97.0	0.05
12.4.1 (a)	6495.6	993.7	6.54				

4.4. Donetsk oblast

Some indicators' readings for this oblast have inbuilt deviations, since the statistical data for most of indicators is collected excluding some of the occupied territories and the frontline. Also, the population size is still being measured inclusive of the occupied territories' population. Donetsk oblast is one of the most industrially developed regions of Ukraine, and the one severely damaged in the course of occupation and further counter-terrorist operation. By the end of 2015 the GRP physical volumes drop (8.1.1) was significantly higher than in general across Ukraine (61.3% against 90.2%), but by the level of GRP per one employed person (8.2.2. (a)) it still ranks 3rd (151.33 thousand UAH against national average of 120.96). However, its production is the most energy-intensive (7.4.1. (a)) in the country (almost three times higher than the average, constituting 187.72 tons of oil equivalent per UAH million by GRP against national average of 55.23) and the least high-tech (the share of sold products of the high-tech sector (9.4.1. (a)) is only 0.2% against national average of 2.42%, while the share of high-tech exports (8.1.3) is only 5.16% against national average of 19.2%). The region is featured with low investment attractiveness; the share of capital investment in GRP (8.1.2) constitutes only 7.22% against national average of 13.73%, while the share of bank loans in the capital investment structure (8.6.3. (a)) is only 1.5% against national average of 7.6%, and foreign direct investment (17.1.2. (a)) is scanty. Relatively high baseline indicators are registered within Goals 1, 4 and 16. Goals 2, 3, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 17 require additional attention to be paid and appropriate measures to be taken due to the lower indicators of sustainable development in the baseline period, compared to other regions.

SDG baseline for Donetsk oblast in 2015



As for the sustainable development, Donetsk oblast has the following features[25].

1. Despite the high level of industrial production, the region remains to be poor. The share of population whose average per capita equivalent monthly money income is lower than the subsistence actual minimum (1.1.1. (a)) is bigger than national average (65.5% against 62.6%). The consumption pattern reflects this situation, as the share of food expenditure (1.3.2) is also significantly bigger than the national average (60.1% against 53.1%). At the same time, the perception of the quality of life by the population (1.3.1. (a)) differed for the better: only 65.1% of households reported themselves poor (by 5.6% less than across Ukraine).
2. Against the background of the general positive data on morbidity (3.3.1, 3.3.2) and mortality (3.4.1, 3.4.2, 3.4.3, 3.4.4), there are negative trends in the number of cases of maternal (3.1.1) and infant mortality (3.1.2) (higher by 8% and 1.5%, respectively against national average). The share of smokers (3.8.1. (a)) is also bigger than across Ukraine in general (22.4% against 18.4%).
3. The occupation of part of the oblast together with the oblast's capital predetermines the insufficient offer of educational services on behalf of higher educational institutions of III-IV accreditation grade (4.4.2. (a)) and, accordingly, brings to a small share of higher education institutions students (4.5.1. (a)) (accurate statistical data unfit to be compared). Internet accessibility (4.7.1) and software availability (4.7.2) in secondary schools outperforms the national average even in rural areas (82.1% against 80.99%, and 76% against 60.1%, respectively).
4. There is still a challenge with gender equality in the oblast. The ratio of wages for women and men (5.6.1) is much lower than the national average (58.9% against 74.9%); the situation with the share of men among school teachers (4.6.1) remains challenging (11% against 15.3%).
5. Ensuring access to safe drinking water is a serious problem here. In a situation when the share of population with access to centralized water supply (6.1.5, 6.1.6) (60.9% against 24.2% for rural and 100% against 89.4% for urban population) is considerably higher than the national average, the compliance of this water with health and safety regulations (6.1.1, 6.1.3) is very low (5.5% against 7.6% for rural and 3.4% against 4.6% for communal). This is quite accountable given a quarter of the total Ukraine's discharges of contaminated wastewater into water objects made here (6.3.1) (264 million cubic meters against 875), and their share in the total volume of discharges (6.3.2) constitutes almost one third of all discharges and twice exceeds national average indicator (31.27% against 16.38%).
6. The environmental situation in this oblast is far from perfect as well. Aside from sewage water pollution, rate of emissions of pollutants into the atmosphere per square kilometer of the area (11.5.4. (a)) is 5.5 times higher than the average across Ukraine (36.8 against 7.8, respectively)
7. Lack of monuments of national and local importance, territories of the nature reserve fund (11.3.1, 11.3.2, 11.3.2-1, 11.3.3) creates a significant gap for the oblast in tourism development, where the number of jobs (11.6.1. (a)) is several times less than average across Ukraine (0.3 per 10,000 employed persons against 4.92)

[25] Detailed data of indicators of region are available by link

Table of values of indicators which measure the SDG in Donetsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	65.5	62.6	2.90	5.2.2 (a)	0.0	2.7	0.00
1.2.1 (a)	100.0	56.3	43.70	5.3.1	-	-	-
1.3.1 (a)	65.1	70.7	-5.60	5.4.2	10.8	-	-
1.3.2	60.1	53.1	7.00	5.4.3 (a)	86.6	77.1	9.50
2.1.1 (a)	53.3	50.9	1.05	5.5.1 (a)	26.8	44.5	0.60
2.1.2 (a)	171.2	209.9	0.82	5.5.2	-	27.3	-
2.1.3 (a)	40.9	50.9	0.80	5.6.1	58.9	74.9	-16.00
2.2.1	179.7	223.3	0.80	5.6.2 (a)	63.3	56.2	7.10
2.2.2	64.9	95.2	-30.30	5.6.3 (a)	-	71.9	-
2.3.1	41.2	89.3	-48.10	6.1.1 (a)	5.5	7.6	-2.10
2.3.2	2.4	38.2	-35.80	6.1.2 (a)	25.6	29.6	0.86
2.3.3 (a)	1.7	2.5	-0.80	6.1.3 (a)	3.4	4.6	-1.20
2.4.1	145.4	141.5	3.90	6.1.4	-	90.0	-
3.1.1	23.7	15.3	1.55	6.1.5	60.9	24.2	36.70
3.2.1	11.2	9.7	1.16	6.1.6	100.0	89.4	10.60
3.3.1	-	37.2	-	6.2.1 (a)	13.8	4.1	9.70
3.3.2	-	56.0	-	6.2.2	43.1	73.0	-29.90
3.4.1	52.4	61.1	0.86	6.3.1	264.0	875.0	0.30
3.4.2	22.9	27.6	0.83	6.3.2	31.3	16.4	14.89
3.4.3	12.9	24.0	0.54	6.4.1	13.5	4.9	2.76
3.4.4	6.9	11.1	0.62	6.4.2	100.0	100.0	0.00
3.5.1 (a)	-	52.2	-	6.5.1	0.0	0.0	0.00
3.5.2 (a)	-	62.0	-	7.1.1	21749.0	163682.0	-
3.6.1	4.4	11.2	0.40	7.1.2	15.1	11.7	3.40
3.6.2 (a)	100.0	100.0	1.00	7.1.3	2.5	18.8	-
3.7.1	-	-	-	7.3.1	2.3	3.0	-0.70
3.8.1 (a)	22.4	18.4	4.00	7.4.1 (a)	187.7	55.2	3.40
3.9.1 (a)	30.2	29.3	0.90	8.1.1	61.3	90.2	-28.90
4.1.1 (a)	35.9	78.5	-42.60	8.1.2	7.2	13.7	-6.51
4.2.1	...	55.0	-	8.1.3	5.2	19.2	-14.04
4.3.1	4.6	7.6	-3.00	8.1.4 (a)	0.7	0.7	0.02
4.4.1 (a)	43.2	321.0	0.13	8.2.1 (a)	44.2	33.1	11.12
4.4.1-1	51.1	55.2	-4.08	8.2.2 (a)	151.3	121.0	1.25
4.4.2 (a)	0.1	0.7	0.21	8.2.3 (a)	56.9	43.7	13.22
4.5.1 (a)	55.2	374.7	0.15	8.3.1 (a)	50.3	56.7	-6.40
4.5.2	51.1	48.9	2.20	8.4.1	18.8	12.8	-
4.6.1	11.0	15.3	-4.30	8.5.1 (a)	112.7	25.9	4.35
4.7.1	82.1	81.0	1.11	8.5.2	100.0	100.0	0.00
4.7.2	76.0	60.1	15.90	8.5.3	29.0	12.7	16.27
4.7.3	2.5	9.4	-6.90	8.6.1 (a)	26.4	25.4	1.02
5.1.1	1.0	-	-	8.6.2 (a)	31.6	60.2	-28.60
5.2.1 (a)	0.0	0.1	-0.07	8.6.3 (a)	1.5	7.6	-6.10

(continuation)

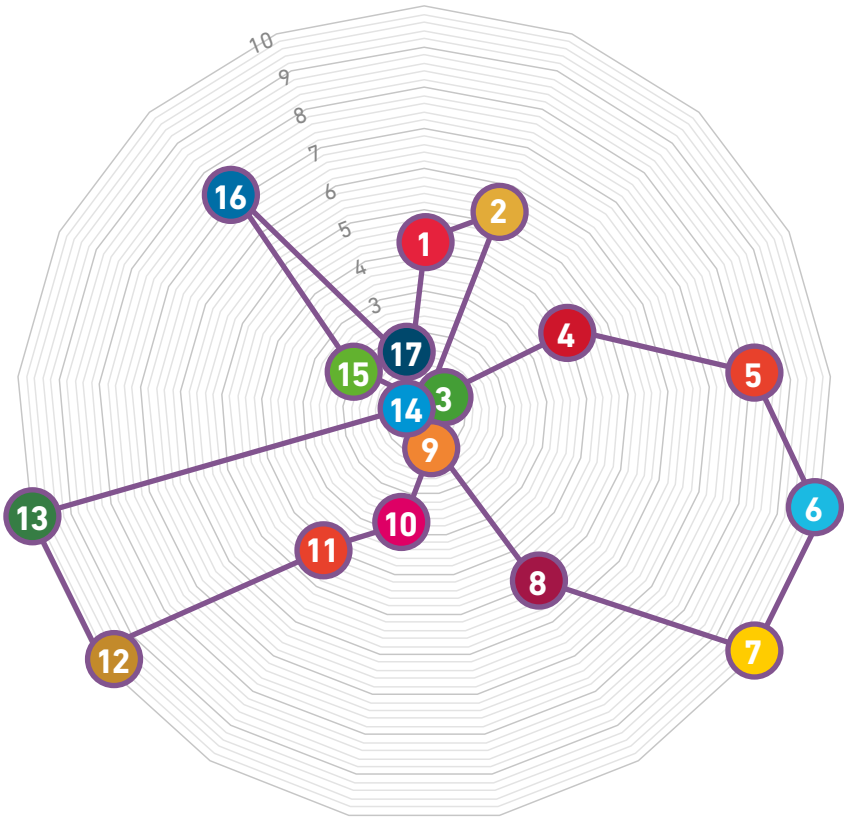
Table of values of indicators which measure the SDG in Donetsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	19.4	10.7	8.61	12.4.2	16.2	30.0	-13.80
9.1.2	146.7	1474.0	0.10	13.1.1 (a)	34.6	4.7	7.31
9.1.3 (a)	0.7	1.4	0.49	14.1.1 (a)	31.3	17.8	13.46
9.2.1 (a)	48.8	35.3	13.58	14.2.1	0.0	0.0	0.00
9.3.1	-	0.0	-	14.2.2	2.4	4.3	-1.86
9.3.2 (a)	98.8	97.8	0.97	14.2.3	0.0	585.6	0.00
9.3.3	-	15.0	-	14.3.1 (a)	2.4	4.1	0.58
9.4.1 (a)	0.2	2.4	-2.22	15.1.1	64.3	1769.1	0.04
9.4.2 (a)	5.1	10.0	-4.86	15.1.2	2.4	2.9	-0.50
9.4.3	14.4	21.0	-6.59	15.1.3	-	22.4	-
9.5.1	0.1	0.6	-0.47	15.2.1	10.3	17.6	-7.30
9.5.2	0.3	0.4	-0.10	15.2.2 (a)	0.4	3.5	0.12
9.6.1	26.7	39.0	0.68	15.3.1 (a)	31.5	25.5	1.23
9.7.1 (a)	44.6	37.4	7.20	15.3.2	1561.0	31131.0	0.05
10.1.1 (a)	4.6	4.5	0.10	15.3.3	58.9	51.6	7.30
10.1.2	-	15.0	-	15.3.4 (a)	11.1	441.8	0.03
10.2.1	-	9.0	-	15.3.5	329.8	7840.5	0.04
10.3.1 (a)	17.6	27.0	-9.43	15.3.6	12.4	13.0	-0.55
10.3.2 (a)	77.6	8.3	-	15.4.1	-	669.0	-
10.3.3 (a)	16.0	11.2	4.73	15.4.2	-	1.1	
10.4.1	2.8	2.7	1.04	16.1.1 (a)	4.0	5.0	0.80
10.5.1	37.4	37.7	-0.26	16.1.2 (a)	6.0	10.0	0.60
11.1.1 (a)	33.3	37.8	-4.55	16.1.3 (a)	0.4	1.8	0.23
11.1.2 (a)	23.6	22.9	1.03	16.2.1 (a)	0.2	0.5	0.48
11.2.1	-	0.0	-	16.2.2 (a)	110.0	199.3	0.55
11.3.1	-	6.0		16.2.3 (a)	0.0	5.3	0.00
11.3.2 (a)	0.5	1.4	0.39	16.3.1 (a)	10.0	9.0	1.00
11.3.2-1	2.8	12.6	0.23	16.3.2 (a)	7.0	11.0	0.64
11.3.3	2.4	2.9	-0.50	16.4.1 (a)	-	12.0	-
11.5.1	100.0	100.0	0.00	16.5.1 (a)	4.7	8.4	0.56
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1109.5	556.5	1.99
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	0.0	15.0	0.00
11.5.4 (a)	36.8	7.8	4.72	16.6.1 (a)	49.0	50.0	-1.00
11.5.4-1	974.7	4521.3	0.22	16.7.1	40.0	38.0	2.00
11.6.1 (a)	0.3	4.9	0.06	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-9.2	-	-
12.2.1 (a)	5.0	2.1	2.90	16.8.3	-	-	-
12.2.2 (a)	11.6	17.1	-5.53	16.9.1	7.0	6.7	0.30
12.3.1 (a)	640.2	501.9	1.28	17.1.1	0.0	0.4	-0.39
12.3.1-1	31.0	220.0	0.14	17.1.2 (a)	0.6	102.5	0.01
12.3.2	-	-	-	17.3.1	9.0	97.0	0.09
12.4.1 (a)	710.4	993.7	0.71				

4.5. Zhytomyr oblast

In 2015 Zhytomyr oblast ranked 16th nationally in terms of GRP per capita (the city of Kyiv exclusive). In 2015 it headed the list of three oblasts showing an increase in industrial production (9.8%), primarily owing to the dynamic growth of the mining industry (about 10% of industrial production), metallurgy and machine building. A share of food industry production, which previously accounted for more than a quarter of total GRP, decreased by 1.5%. Commodity exports dropped by 33.6%, with half of the loss at the expense of exports to the Russian Federation. Agricultural production decreased by 7.9%. The area is relatively attractive for foreign investors; the volume of foreign direct investment ($51.6 per person) is only two times less than the average Ukrainian indicator.

SDG baseline for Zhytomyr oblast in 2015



As for the sustainable development, Zhytomyr oblast has the following features[26].

1. The oblast has one of the highest in Ukraine share of the population whose average per capita equivalent monetary income is lower than the real subsistence level (1.1.1. (a)). By the wages rate, the oblast ranks 4th from the bottom, the average wages constituted 79% of the total Ukrainian rate in 2015. Accordingly, this leads to lower consumption of meat (2.1.1. (a)) and fruits (2.1.3. (a)), whereas consumption of milk and processed milk (2.1.2. (a)) is higher, which reflects the effect of compensation. The low income corresponds to significantly lower than average labor productivity in the agricultural sector (2.2.1). At the same time, the share of households who report themselves poor (1.3.1. (a)) is immediately by 20% less than the average across Ukraine.
2. Although a significant part of the oblast belongs to the area of exposure in the aftermath of Chernobyl accident, health indicators are relatively positive. The general Ukrainian indicator was exceeded only in cerebrovascular diseases (3.4.1-3.4.2), as well as in malignant cervical tumors (3.4.4). Otherwise, the level of

[26] Detailed data of indicators of region are available by link

maternal mortality (3.1.1) is twice lower than the average across Ukraine. Such indicators might speak of a better organization of medical examinations. Moreover, the share of households any member of which failed to get medical care (3.9.1. (a)) is by one third less than national average.

3. A lack of universities is noticeable, as the share of students (4.4.1. (a)) is twice less than the average in the country, the share of universities themselves is 1.6 times less (4.4.2. (a)).
4. The region is featured with poor accessibility of rural schools to the Internet (4.7.1), constituting only 49.5% against 81.0% across Ukraine, and with significant lagging of computerization of education (4.7.2).
5. Negative trends are observed as concerns family issues. The number of victims of domestic violence (5.2.2. (a)) is 1.9 times bigger than the average across Ukraine. The number of abortions (5.5.1. (a)) is 1.4 times bigger. The average Ukrainian fertility rate at the age of 20 years was exceeded by 23% (5.5.2). These indicators correlate with the very low employment rate of women (5.6.3. (a)), which is 52.6% against the national average of 71.9%.
6. The situation with water supply is desperately bad. The use of fresh water (6.1.2. (a)) lags 1.8 times behind the national average, 16.1% of the rural population have access to centralized water supply (6.1.5) and 2.4% have access to water drain system (6.2.1. (a)) (in Ukraine - 24.2% and 4.1%, respectively).
7. The region shows a high rate of renewable energy use (7.3.1), which constitutes 31.1%, yet its own electricity generation is negligible.
8. The oblast has a high level of development of small and medium-sized enterprises (the share of sold products (8.6.2. (a)) is 78.6% against 60.2% across Ukraine), while the share of employed persons in SMEs (8.6.1. (a)) is 5% lower than the national average, 63% of entrepreneurs report no obstacles from the public authorities (16.6.1. (a)) (50% across Ukraine).
9. There is a significant infrastructure challenge of poor road network: 55% of the rural population live farther than 3 km from the paved roads (9.1.1) (10.7% across Ukraine).
10. The number of monuments of local importance (11.3.2-1) (1.8 per 100 thousand ha of area) is small, partly due to the low population density.
11. Environmental indicators demonstrate positive trend (11.5.4-1, 13.1.1), showing indicators that are sometimes lower than the average Ukrainian indicators. The forested territory is twice as big (15.2.1). The area of arable lands (35.3%) is one and a half times smaller than national average..

Table of values of indicators which measure the SDG in Zhytomyr oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	73.7	62.6	11.10	5.2.2 (a)	5.1	2.7	1.87
1.2.1 (a)	71.5	56.3	15.20	5.3.1	-	-	-
1.3.1 (a)	50.1	70.7	-20.60	5.4.2	7.8	-	-
1.3.2	54.2	53.1	1.10	5.4.3 (a)	75.6	77.1	-1.50
2.1.1 (a)	48.7	50.9	0.96	5.5.1 (a)	63.1	44.5	1.42
2.1.2 (a)	230.8	209.9	1.10	5.5.2	33.6	27.3	1.23
2.1.3 (a)	47.2	50.9	0.93	5.6.1	80.1	74.9	5.20
2.2.1	204.4	223.3	0.92	5.6.2 (a)	58.7	56.2	2.50
2.2.2	91.2	95.2	-4.00	5.6.3 (a)	52.6	71.9	-19.30
2.3.1	98.5	89.3	9.20	6.1.1 (a)	8.3	7.6	0.70
2.3.2	24.0	38.2	-14.20	6.1.2 (a)	16.9	29.6	0.57
2.3.3 (a)	2.8	2.5	0.30	6.1.3 (a)	2.8	4.6	-1.80
2.4.1	138.7	141.5	-2.80	6.1.4	-	90.0	-
3.1.1	7.3	15.3	0.48	6.1.5	16.1	24.2	-8.10
3.2.1	9.3	9.7	0.97	6.1.6	85.2	89.4	-4.20
3.3.1	36.9	37.2	0.99	6.2.1 (a)	2.4	4.1	-1.70
3.3.2	66.3	56.0	1.18	6.2.2	60.0	73.0	-13.00
3.4.1	64.4	61.1	1.05	6.3.1	3.0	875.0	0.00
3.4.2	31.1	27.6	1.13	6.3.2	4.4	16.4	-11.97
3.4.3	20.9	24.0	0.87	6.4.1	2.9	4.9	0.60
3.4.4	21.2	11.1	1.91	6.4.2	100.0	100.0	0.00
3.5.1 (a)	49.7	52.2	0.95	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.3	62.0	0.99	7.1.1	19.0	163682.0	-
3.6.1	16.7	11.2	1.49	7.1.2	13.8	11.7	2.08
3.6.2 (a)	100.0	100.0	1.00	7.1.3	23.2	18.8	4.38
3.7.1	-	-	-	7.3.1	31.1	3.0	28.05
3.8.1 (a)	16.9	18.4	-1.50	7.4.1 (a)	34.7	55.2	0.63
3.9.1 (a)	20.0	29.3	-9.30	8.1.1	98.1	90.2	7.90
4.1.1 (a)	83.6	78.5	5.10	8.1.2	10.5	13.7	-3.21
4.2.1	66.0	55.0	11.00	8.1.3	22.1	19.2	2.86
4.3.1	3.7	7.6	-3.90	8.1.4 (a)	0.1	0.7	-0.61
4.4.1 (a)	166.0	321.0	0.52	8.2.1 (a)	35.1	33.1	2.04
4.4.1-1	58.7	55.2	3.45	8.2.2 (a)	75.3	121.0	0.62
4.4.2 (a)	0.4	0.7	0.59	8.2.3 (a)	79.3	43.7	35.52
4.5.1 (a)	249.6	374.7	0.67	8.3.1 (a)	55.5	56.7	-1.20
4.5.2	42.0	48.9	-6.90	8.4.1	-	12.8	-
4.6.1	18.7	15.3	3.40	8.5.1 (a)	20.1	25.9	0.78
4.7.1	49.5	81.0	-31.49	8.5.2	100.0	100.0	0.00
4.7.2	39.6	60.1	-20.50	8.5.3	9.6	12.7	-3.09
4.7.3	1.5	9.4	-7.90	8.6.1 (a)	20.5	25.4	-4.89
5.1.1	0.0	-	-	8.6.2 (a)	78.6	60.2	18.37
5.2.1 (a)	0.0	0.1	-0.02	8.6.3 (a)	3.8	7.6	-3.80

(continuation)

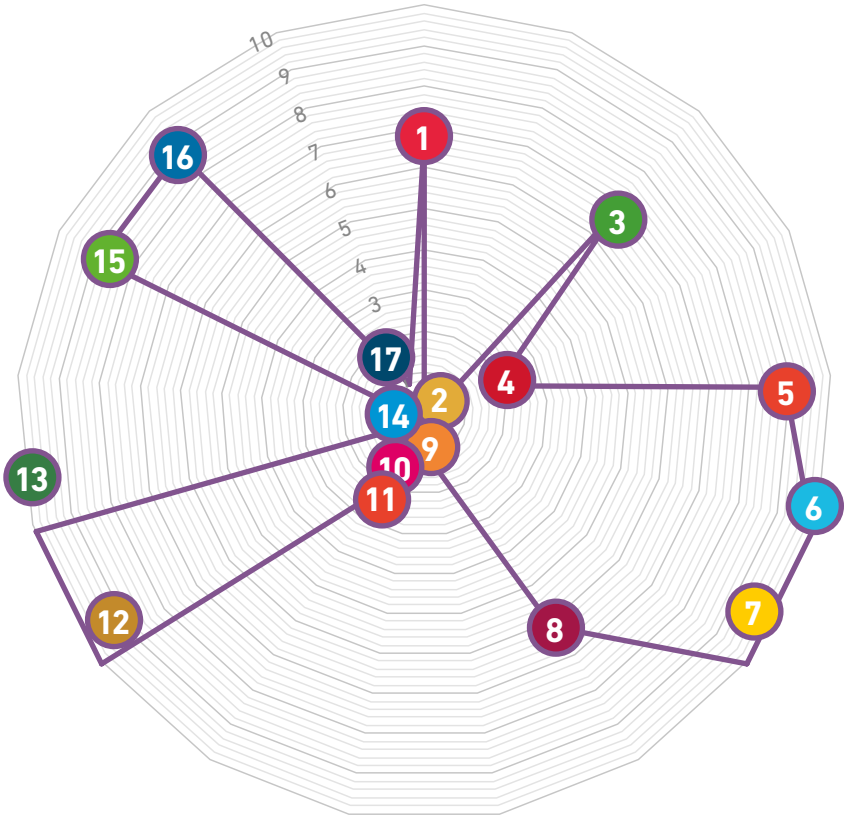
Table of values of indicators which measure the SDG in Zhytomyr oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	55.4	10.7	44.66	12.4.2	19.7	30.0	-10.30
9.1.2	68.2	1474.0	0.05	13.1.1 (a)	0.3	4.7	0.06
9.1.3 (a)	4.6	1.4	3.25	14.1.1 (a)	-	17.8	-
9.2.1 (a)	36.0	35.3	0.75	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	97.6	97.8	-0.14	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.3	2.4	-2.16	15.1.1	51.0	1769.1	0.03
9.4.2 (a)	7.6	10.0	-2.42	15.1.2	1.7	2.9	-1.20
9.4.3	11.7	21.0	-9.31	15.1.3	61.6	22.4	39.20
9.5.1	0.0	0.6	-0.57	15.2.1	37.7	17.6	20.10
9.5.2	3.5	0.4	3.10	15.2.2 (a)	4.6	3.5	1.32
9.6.1	36.8	39.0	0.94	15.3.1 (a)	0.1	25.5	0.00
9.7.1 (a)	38.2	37.4	0.80	15.3.2	1053.4	31131.0	0.03
10.1.1 (a)	4.6	4.5	0.10	15.3.3	35.3	51.6	-16.30
10.1.2	-	15.0	-	15.3.4 (a)	17.3	441.8	0.04
10.2.1	-	9.0	-	15.3.5	311.9	7840.5	0.04
10.3.1 (a)	16.7	27.0	-10.30	15.3.6	10.5	13.0	-2.53
10.3.2 (a)	8.5	8.3	0.16	15.4.1	-	669.0	-
10.3.3 (a)	12.2	11.2	0.97	15.4.2	-	1.1	-
10.4.1	2.8	2.7	1.04	16.1.1 (a)	4.0	5.0	0.80
10.5.1	43.9	37.7	6.20	16.1.2 (a)	9.0	10.0	0.90
11.1.1 (a)	36.9	37.8	-0.99	16.1.3 (a)	9.9	1.8	5.38
11.1.2 (a)	27.0	22.9	1.18	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	1183.0	199.3	5.93
11.3.1	-	6.0	-	16.2.3 (a)	7.3	5.3	1.38
11.3.2 (a)	0.5	1.4	0.39	16.3.1 (a)	10.0	9.0	1.00
11.3.2-1	1.8	12.6	0.14	16.3.2 (a)	8.0	11.0	0.73
11.3.3	1.7	2.9	-1.20	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	34.4	8.4	4.09
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1267.2	556.5	2.28
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	64.8	15.0	4.33
11.5.4 (a)	2.3	7.8	0.29	16.6.1 (a)	63.0	50.0	13.00
11.5.4-1	69.7	4521.3	0.02	16.7.1	37.0	38.0	-1.00
11.6.1 (a)	0.9	4.9	0.18	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.2	2.1	-0.92	16.8.3	-	-	-
12.2.2 (a)	20.5	17.1	3.43	16.9.1	6.1	6.7	-0.60
12.3.1 (a)	17.4	501.9	0.03	17.1.1	0.4	0.4	0.03
12.3.1-1	6.0	220.0	0.03	17.1.2 (a)	51.6	102.5	0.50
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	87.8	993.7	0.09				

4.6. Zakarpattia oblast

In 2015 Zakarpattia oblast ranked 22nd in terms of GRP per capita (the city of Kyiv exclusive). Wood harvesting and processing, food and consumer goods industry, mechanical engineering, recreational and resort services and tourism, agricultural production are the leading branches of the oblast's economy.

SDG baseline for Zakarpattia oblast in 2015



As for the sustainable development, Zakarpattia oblast has the following features[27].

1. The population of the region in its vast majority reports itself poor (1.3.1. (a)), 100% of the polled respondents share this point. However, this does not correspond to objective indicators, namely the level of household incomes (1.1.1. (a)) and the share of food expenditure in total household expenses (1.3.2), which exceed the corresponding average Ukrainian indicators. 22.2% of the oblast's population suffer from the lack of funds necessary for a member of the family to get vocational education. This indicates the great importance of non-monetary factors that affect the self-attribution of people to poor. In this case, the impact of the demonstration effect created by adjacent borderland is obvious.
2. Given the fairly high rates in agricultural production (2.2.2) and food production (2.3.1), the oblast has the worst indicator in terms of labor productivity in agricultural enterprises constituting 103.4 thousand UAH per 1 employed person, which is twice less than the average Ukrainian indicator. The oblast, accordingly, exports a small share of food products and processed agricultural raw materials (2.3.2), namely 5.7%, which is 32.5% below the average Ukrainian rate.
3. The unsatisfactory level of the health care system in the oblast is evidenced by its accessibility rates received through the questionnaire survey and the high mortality rate of children under the age of 5. The region has the highest infant mortality in Ukraine (3.2.1) - 13.5 cases per 1000 live births. In addition,

[27] Detailed data of indicators of region are available by link

the share of households any member of which failed to get medical care, buy medicines and medical devices in the last 12 months in total number of households in which any member requested such medical care, medicines and medical devices (3.9.1. (a)) is quite high (94.3%).

4. The level of population coverage with education is one of the lowest in the country. Thus, the number of persons who attended educational institutions (I-IV accreditation grade) is twice less than the average Ukrainian(4.5.1. (a)). At the same time, there is a small number of universities (4.4.2. (a)) and students (4.4.1. (a)) respectively, as well as insufficient number of pre-school institutions (4.2.1). As the consequence, there is a big share of youth not in employment, education or professional training (8.4.1.), which constitutes 26.9% and is twice bigger than the average Ukrainian (12.8%).
5. The ratio of wages of women and men in the oblast (5.6.1) are above the average in Ukraine - 83.6%, while the employment rate of women is 20.6% lower (5.6.3. (a)).
6. Fertility rate among women aged under 20, per 1,000 women aged 15-19 is the worst in Ukraine (5.5.2) and constitutes 52.8, which is twice higher than the average across Ukraine (27.3).
7. This oblast enjoys relatively good environmental condition and high nature and recreation capacity. In particular the oblast is featured with vast forested territory (15.2.1) and low volumes of pollutant emissions into the atmosphere (13.1.1. (a)) and discharges into surface waters of contaminated wastewater, which is confirmed by the best indicators of water content of GRP (6.4.1), and the actual minimal discharges of contaminated wastewater into the water bodies of the oblast (6.3.1, 6.3.2). At the same time, the issues of the centralized water supply accessibility for rural population (6.1. 5) and drainage system accessibility (11.6.1. (a)), as well as the development of the tourism sector (four times less jobs in this area than on average across Ukraine) (11.6.1. (a)) require more attention to be paid.
8. Share of exports of goods, which require technologies of high and medium high level in their production, in total exports of goods (8.1.3) in the oblast is the biggest among other regions and is 15% higher than the average Ukrainian indicator for 2030. At the same time, production is not innovative, namely it shows very low indicators of the share on innovation costs in GRP (0.08%) (8.1.4. (a)), and the expenditure on scientific and technical work in GRP (0.17%) (9.5.1). Comparative analysis of the low rate of employment in SMEs (8.6.1. (a)) and high volumes of goods produced by these enterprises (8.6.2. (a)) demonstrates higher productivity of such enterprises located in this oblast against the national average. All above mentioned data dictates the need to focus on encouraging entrepreneurship in the region.
9. The oblast has low rate of investment attraction, the share of FDI per capita ($12,8) is 8 times smaller than the national average (17.1.2. (a)). In order to boost investment, the local authorities must address the poor condition of oblast's infrastructure, in particular, roads (9.1.1 - 18.3% of the rural population live farther than 3 km from the paved roads), broadband Internet (9.6.1), waste management system (12.4.2) and public-private partnerships in the region (17.3.1)

Table of values of indicators which measure the SDG in Zakarpattia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	61.1	62.6	-1.50	5.2.2 (a)	9.1	2.7	3.31
1.2.1 (a)	73.3	56.3	17.00	5.3.1	-	-	-
1.3.1 (a)	100.0	70.7	29.30	5.4.2	14.0	-	-
1.3.2	49.0	53.1	-4.10	5.4.3 (a)	68.8	77.1	-8.30
2.1.1 (a)	45.7	50.9	0.90	5.5.1 (a)	37.5	44.5	0.84
2.1.2 (a)	223.0	209.9	1.06	5.5.2	52.8	27.3	1.93
2.1.3 (a)	48.9	50.9	0.96	5.6.1	83.6	74.9	8.70
2.2.1	103.4	223.3	0.46	5.6.2 (a)	54.7	56.2	-1.50
2.2.2	95.1	95.2	-0.10	5.6.3 (a)	51.3	71.9	-20.60
2.3.1	83.6	89.3	-5.70	6.1.1 (a)	6.9	7.6	-0.70
2.3.2	5.7	38.2	-32.50	6.1.2 (a)	11.5	29.6	0.39
2.3.3 (a)	0.7	2.5	-1.80	6.1.3 (a)	6.5	4.6	1.90
2.4.1	145.0	141.5	3.50	6.1.4	-	90.0	-
3.1.1	11.9	15.3	0.78	6.1.5	14.5	24.2	-9.70
3.2.1	13.5	9.7	1.40	6.1.6	85.6	89.4	-3.80
3.3.1	5.7	37.2	0.15	6.2.1 (a)	1.0	4.1	-3.10
3.3.2	59.6	56.0	1.06	6.2.2	80.0	73.0	7.00
3.4.1	44.2	61.1	0.72	6.3.1	2.0	875.0	0.00
3.4.2	26.2	27.6	0.95	6.3.2	6.5	16.4	-9.93
3.4.3	22.1	24.0	0.92	6.4.1	1.2	4.9	0.25
3.4.4	10.7	11.1	0.96	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.8	52.2	1.01	6.5.1	0.0	0.0	0.00
3.5.2 (a)	60.6	62.0	0.98	7.1.1	132.0	163682.0	-
3.6.1	11.9	11.2	1.06	7.1.2	17.7	11.7	5.95
3.6.2 (a)	100.0	100.0	1.00	7.1.3	0.0	18.8	-18.82
3.7.1	-	-	-	7.3.1	24.8	3.0	21.77
3.8.1 (a)	17.8	18.4	-0.60	7.4.1 (a)	33.6	55.2	0.61
3.9.1 (a)	94.3	29.3	65.00	8.1.1	93.5	90.2	3.30
4.1.1 (a)	86.4	78.5	7.90	8.1.2	13.0	13.7	-0.69
4.2.1	53.0	55.0	-2.00	8.1.3	64.2	19.2	45.00
4.3.1	22.2	7.6	14.60	8.1.4 (a)	0.1	0.7	-0.62
4.4.1 (a)	148.4	321.0	0.46	8.2.1 (a)	20.4	33.1	-12.70
4.4.1-1	56.2	55.2	0.99	8.2.2 (a)	55.7	121.0	0.46
4.4.2 (a)	0.4	0.7	0.59	8.2.3 (a)	60.4	43.7	16.70
4.5.1 (a)	174.5	374.7	0.47	8.3.1 (a)	56.2	56.7	-0.50
4.5.2	51.8	48.9	2.90	8.4.1	26.9	12.8	14.13
4.6.1	14.3	15.3	-1.00	8.5.1 (a)	7.1	25.9	0.28
4.7.1	71.1	81.0	-9.89	8.5.2	100.0	100.0	0.00
4.7.2	43.3	60.1	-16.80	8.5.3	7.9	12.7	-4.81
4.7.3	12.3	9.4	2.90	8.6.1 (a)	14.2	25.4	-11.19
5.1.1	1.0	-	-	8.6.2 (a)	91.6	60.2	31.37
5.2.1 (a)	0.0	0.1	-0.03	8.6.3 (a)	1.4	7.6	-6.20

(continuation)

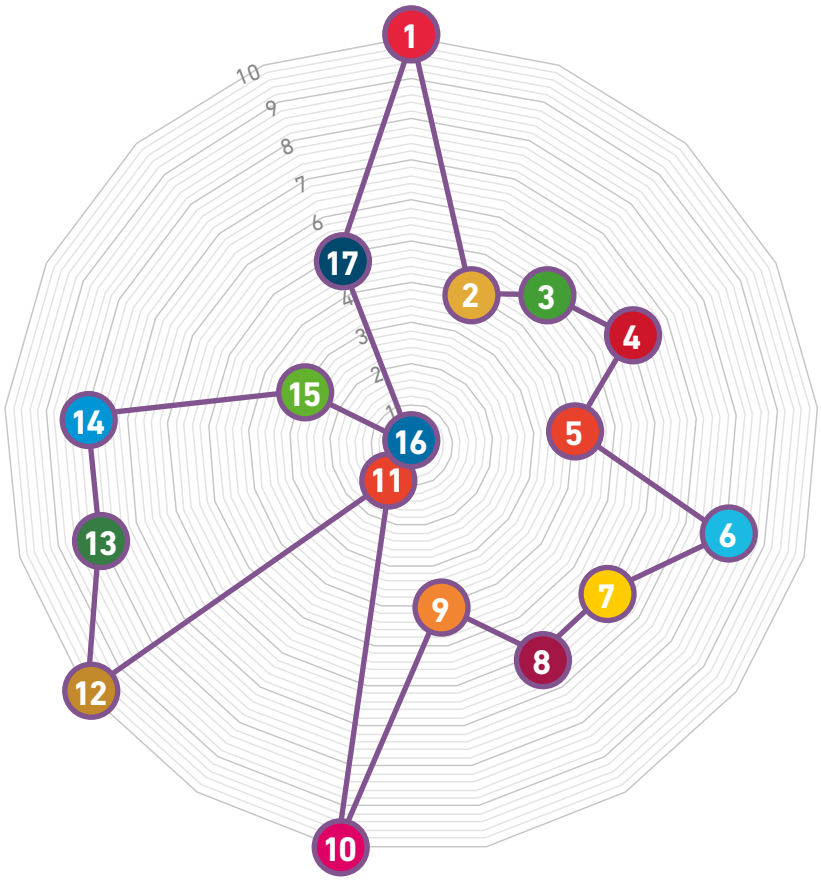
Table of values of indicators which measure the SDG in Zakarpattia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	18.3	10.7	7.56	12.4.2	5.1	30.0	-24.90
9.1.2	10.8	1474.0	0.01	13.1.1 (a)	0.3	4.7	0.07
9.1.3 (a)	0.4	1.4	0.29	14.1.1 (a)	-	17.8	-
9.2.1 (a)	-	35.3	-	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	3.4	2.4	1.02	15.1.1	146.0	1769.1	-
9.4.2 (a)	13.6	10.0	3.65	15.1.2	11.4	2.9	8.50
9.4.3	39.1	21.0	18.02	15.1.3	77.1	22.4	54.70
9.5.1	0.2	0.6	-0.45	15.2.1	56.8	17.6	39.20
9.5.2	–	0.4	-	15.2.2 (a)	12.7	3.5	3.64
9.6.1	23.5	39.0	0.60	15.3.1 (a)	0.6	25.5	0.03
9.7.1 (a)	35.6	37.4	-1.80	15.3.2	192.5	31131.0	0.01
10.1.1 (a)	5.5	4.5	1.00	15.3.3	15.1	51.6	-36.50
10.1.2	-	15.0	-	15.3.4 (a)	0.1	441.8	0.00
10.2.1	-	9.0	-	15.3.5	223.5	7840.5	0.03
10.3.1 (a)	0.0	27.0	-26.97	15.3.6	17.5	13.0	4.54
10.3.2 (a)	3.6	8.3	-4.72	15.4.1	182.2	669.0	0.27
10.3.3 (a)	96.4	11.2	85.14	15.4.2	14.3	1.1	-
10.4.1	3.0	2.7	1.11	16.1.1 (a)	3.0	5.0	0.60
10.5.1	43.2	37.7	5.54	16.1.2 (a)	6.0	10.0	0.60
11.1.1 (a)	46.2	37.8	8.40	16.1.3 (a)	0.3	1.8	0.17
11.1.2 (a)	24.2	22.9	1.06	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	182.7	199.3	0.92
11.3.1	2.0	6.0	-	16.2.3 (a)	0.0	5.3	0.00
11.3.2 (a)	1.2	1.4	0.86	16.3.1 (a)	5.0	9.0	-4.00
11.3.2-1	3.4	12.6	0.27	16.3.2 (a)	11.0	11.0	1.00
11.3.3	11.4	2.9	8.50	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	-	16.5.1 (a)	1.3	8.4	0.15
11.5.2 (a)	100.0	100.0	-	16.5.2 (a)	28.7	556.5	0.05
11.5.3 (a)	100.0	100.0	-	16.5.3 (a)	1.7	15.0	0.12
11.5.4 (a)	4.2	7.8	0.54	16.6.1 (a)	60.0	50.0	10.00
11.5.4-1	54.2	4521.3	0.01	16.7.1	41.0	38.0	3.00
11.6.1 (a)	1.2	4.9	0.25	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.2	2.1	0.11	16.8.3	-	-	-
12.2.2 (a)	11.0	17.1	-6.10	16.9.1	6.6	6.7	-0.10
12.3.1 (a)	10.5	501.9	0.02	17.1.1	1.0	0.4	0.57
12.3.1-1	2.0	220.0	0.01	17.1.2 (a)	12.8	102.5	0.12
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	28.0	993.7	0.03				

4.7. Zaporizhzhia oblast

In 2015 Zaporizhzhia oblast ranked 4th in the rating of GRP per person (excluding the city of Kyiv). The oblast is highly urbanized and industrially developed. The level of urbanization exceeds 77%, which is higher than the average across Ukraine. By volume of industrial production per capita it comes nationally second, next to Dnipropetrovsk oblast. Mining, metallurgy, machine-building, and chemical industries are the leading industries here. Furthermore, electricity is being generated from almost all types of sources, nuclear inclusive, on its territory. The oblast has a developed agricultural industry. Zaporizhzhia oblast is washed by the waters of the Sea of Azov from the south, with the coastal line on the territory of the oblast exceeding 300 km. Relatively high baseline indicators of the oblast are registered within Goals 1, 6, 8, 10, 12 and 14. Due to lower sustainable development indicators in baseline period, Goals 2, 5, 9, 11, 15 and 16 require additional attention to be paid and appropriate measures to be taken. All remaining goals were reported to have reasonably average readings of their indicators.

SDG baseline for Zaporizhzhia oblast in 2015



As for the sustainable development, Zaporizhzhia oblast has the following features[28].

1. Owing to the developed industrial complex which maintains high wages, the oblast can be classified as relatively socially sound. Share of the population whose average per capita equivalent total income is lower than the minimum subsistence level (1.1.1. (a)) in the baseline year was lower than the national average on 12,1%. Again, the share of food expenditure in total household spending (1.3.2) constituted only 46.5% compared to the average of 53.1%. The level of coverage of the population with social care services is also high. This index reading exceeds 90% against the average Ukrainian one constituting 53%.
2. Social well-being is also consistent with the high performance of Goal 10 concerning inequality

[28] Detailed data of indicators of region are available by link

reduction. Thus, according to the income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income (10.1.1. (a)), the situation in the oblast was significantly better than in Ukraine in general (2.6% against 4.5%), and the share of population with monthly per capita parity income lower than subsistence minimum in total population (1.1.1.) was almost twice lower than the national indicator.

3. We should also note the rewarding condition of educational system in the baseline year. The key indicators of educational services coverage were as follows: the share of attendants of secondary education institutions in total permanent population aged 6-17 (4.1.1. (a)), the net pre-primary education institutions coverage for number of children of relevant age (4.2.1) and the number of persons who attended educational institutions (I-IV accreditation grade), per 10 thousand of population (4.5.1.). At the same time, the indicator that determines the basis for the future development of the oblast, namely the share of youth not in employment, education or professional training in the total number of population aged 15–24 (8.4.1) was threateningly high and constituted 31.5%, which is 2.5 times higher than the national average. This means that a significant share of young people receiving appropriate knowledge neither finds nor seeks a job corresponding to their education.
4. In the deep economic crisis of 2015, Zaporizhzhia oblast managed to maintain the GRP actual volume index (8.1.1.) at a relatively acceptable level due to the comparatively high share of exported goods produced with high and medium-level technologies in the total export of goods (8.1.3) and to the share of investment into machinery, equipment and inventory in the structure of asset investment (8.2.1.). Respective readings for these indicators shall be as follows: 11.5% and 17.7% above the average Ukrainian. At the same time, attention should be paid to the small share of innovation costs in GRP (8.1.4.), which constitutes almost twice lower reading than the national one, and to the high rate of occupational injuries (8.5.1. (a)).

About 30% of industrial employees in the oblast work for the enterprises of high and medium-high-tech sectors of the processing industry (9.4.3), however the share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (9.4.1.) constitutes less than 1% against 2.4% across Ukraine. Similarly, the share of enterprises producing medium-high-tech products in the processing industry is almost three times smaller than the average share across Ukraine (9.4.1.).

Therefore, the oblast's GRP is relatively high both in terms of physical volume and growth rates, but this is mainly due to the use of significant material, natural and human resources. For example, the energy intensity of GRP (losses of energy-yielding materials and petro-chemical products) tons of oil equivalent per UAH million by GRP (7.4.1.) in the baseline year was almost twice higher than the average across Ukraine (106 against 55), water intensity of GRP (6.4.1) was reported as almost three times higher, GRP per one employed person (8.2.2. (a)) dropped below the national level, and the share of intermediate consumption in sold region's product (8.2.3.) constituted more than 70%.

5. Oblast's crime rates attract peculiar attention. Indicator 16.1.1. 'Number of revealed serious crimes and extremely serious crimes in oblasts, cases per 1,000 persons' in the baseline year was 1.8 times higher than the national average, and Indicator 16.1.2. 'Number of killed and injured victims of crimes in oblast, cases per 1,000 persons', was 2 times higher than the national average.

So, both regional and local authorities face the following key challenges of in the context of the SDGs achievement: consolidation of positive processes where readings of indicators are higher than the average Ukrainian ones, and allocation of financial and institutional resources for the improvement of indicators which lag behind the national ones.

Table of values of indicators which measure the SDG in Zaporizhzhia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	50.5	62.6	-12.10	5.2.2 (a)	1.3	2.7	0.48
1.2.1 (a)	91.0	56.3	34.66	5.3.1	-	-	-
1.3.1 (a)	85.9	70.7	15.20	5.4.2	16.7	-	-
1.3.2	46.5	53.1	-6.60	5.4.3 (a)	80.8	77.1	3.70
2.1.1 (a)	51.6	50.9	1.01	5.5.1 (a)	49.6	44.5	1.11
2.1.2 (a)	186.4	209.9	0.89	5.5.2	26.4	27.3	0.97
2.1.3 (a)	46.5	50.9	0.91	5.6.1	68.7	74.9	-6.20
2.2.1	172.0	223.3	0.77	5.6.2 (a)	55.9	56.2	-0.30
2.2.2	109.3	95.2	14.10	5.6.3 (a)	71.0	71.9	-0.90
2.3.1	94.8	89.3	5.50	6.1.1 (a)	2.3	7.6	-5.30
2.3.2	13.0	38.2	-25.20	6.1.2 (a)	40.0	29.6	1.35
2.3.3 (a)	0.4	2.5	-2.10	6.1.3 (a)	1.9	4.6	-2.70
2.4.1	139.7	141.5	-1.80	6.1.4	-	90.0	-
3.1.1	42.2	15.3	2.76	6.1.5	55.0	24.2	30.80
3.2.1	9.5	9.7	0.98	6.1.6	90.9	89.4	1.50
3.3.1	32.6	37.2	0.88	6.2.1 (a)	1.4	4.1	-2.70
3.3.2	61.7	56.0	1.10	6.2.2	63.9	73.0	-9.10
3.4.1	76.3	61.1	1.25	6.3.1	70.0	875.0	0.08
3.4.2	36.4	27.6	1.32	6.3.2	7.5	16.4	-8.87
3.4.3	33.5	24.0	1.39	6.4.1	13.3	4.9	2.72
3.4.4	11.2	11.1	1.00	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.7	52.2	0.99	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.8	62.0	1.00	7.1.1	47706.0	163682.0	-
3.6.1	12.3	11.2	1.10	7.1.2	8.5	11.7	-3.22
3.6.2 (a)	100.0	100.0	1.00	7.1.3	17.5	18.8	-1.32
3.7.1	-	-	-	7.3.1	4.8	3.0	1.77
3.8.1 (a)	24.1	18.4	5.70	7.4.1 (a)	106.1	55.2	1.92
3.9.1 (a)	37.4	29.3	8.10	8.1.1	94.7	90.2	4.50
4.1.1 (a)	85.8	78.5	7.30	8.1.2	8.8	13.7	-4.98
4.2.1	64.0	55.0	9.00	8.1.3	30.7	19.2	11.53
4.3.1	9.2	7.6	1.60	8.1.4 (a)	0.4	0.7	-0.33
4.4.1 (a)	358.5	321.0	1.12	8.2.1 (a)	50.8	33.1	17.67
4.4.1-1	54.3	55.2	-0.93	8.2.2 (a)	118.7	121.0	0.98
4.4.2 (a)	0.6	0.7	0.85	8.2.3 (a)	70.3	43.7	26.52
4.5.1 (a)	405.9	374.7	1.08	8.3.1 (a)	56.4	56.7	-0.30
4.5.2	54.8	48.9	5.90	8.4.1	31.5	12.8	18.70
4.6.1	15.1	15.3	-0.20	8.5.1 (a)	38.2	25.9	1.48
4.7.1	100.0	81.0	19.01	8.5.2	100.0	100.0	0.00
4.7.2	100.0	60.1	39.90	8.5.3	20.2	12.7	7.49
4.7.3	7.6	9.4	-1.81	8.6.1 (a)	25.1	25.4	-0.31
5.1.1	1.0	-	-	8.6.2 (a)	47.7	60.2	-12.51
5.2.1 (a)	0.0	0.1	-0.03	8.6.3 (a)	2.6	7.6	-5.00

(continuation)

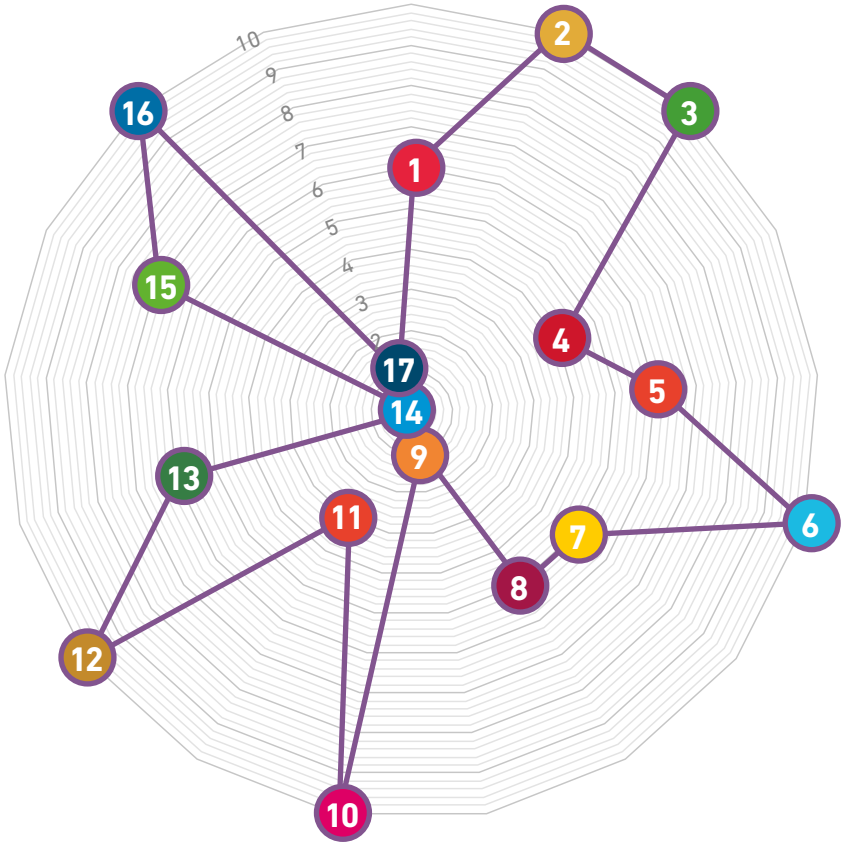
Table of values of indicators which measure the SDG in Zaporizhzhia oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	5.6	10.7	-5.12	12.4.2	50.1	30.0	20.10
9.1.2	18.0	1474.0	0.01	13.1.1 (a)	7.1	4.7	1.51
9.1.3 (a)	0.8	1.4	0.59	14.1.1 (a)	7.3	17.8	-10.47
9.2.1 (a)	42.1	35.3	6.83	14.2.1	0.0	0.0	0.00
9.3.1	-	0.0	-	14.2.2	3.5	4.3	-0.76
9.3.2 (a)	97.1	97.8	-0.65	14.2.3	97.8	585.6	0.17
9.3.3	-	15.0	-	14.3.1 (a)	8.3	4.1	2.01
9.4.1 (a)	0.9	2.4	-1.51	15.1.1	95.0	1769.1	0.05
9.4.2 (a)	3.5	10.0	-6.51	15.1.2	3.5	2.9	0.60
9.4.3	30.1	21.0	9.08	15.1.3	-	22.4	-
9.5.1	0.6	0.6	-0.05	15.2.1	4.4	17.6	-13.20
9.5.2	0.5	0.4	0.10	15.2.2 (a)	0.0	3.5	0.01
9.6.1	34.6	39.0	0.89	15.3.1 (a)	129.5	25.5	5.07
9.7.1 (a)	37.6	37.4	0.20	15.3.2	1880.9	31131.0	0.06
10.1.1 (a)	2.6	4.5	-1.90	15.3.3	69.2	51.6	17.60
10.1.2	-	15.0	-	15.3.4 (a)	4.5	441.8	0.01
10.2.1	-	9.0	-	15.3.5	299.4	7840.5	0.04
10.3.1 (a)	40.9	27.0	13.92	15.3.6	11.0	13.0	-1.98
10.3.2 (a)	27.0	8.3	18.68	15.4.1	-	669.0	-
10.3.3 (a)	28.4	11.2	17.22	15.4.2	-	1.1	-
10.4.1	2.6	2.7	0.96	16.1.1 (a)	9.0	5.0	1.80
10.5.1	42.1	37.7	4.39	16.1.2 (a)	20.0	10.0	2.00
11.1.1 (a)	39.3	37.8	1.45	16.1.3 (a)	0.3	1.8	0.15
11.1.2 (a)	23.4	22.9	1.02	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	215.4	199.3	1.08
11.3.1	-	6.0	-	16.2.3 (a)	0.0	5.3	0.00
11.3.2 (a)	0.4	1.4	0.32	16.3.1 (a)	7.0	9.0	-2.00
11.3.2-1	14.8	12.6	1.18	16.3.2 (a)	18.0	11.0	1.64
11.3.3	3.5	2.9	0.60	16.4.1 (a)	50.0	12.0	38.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	8.7	8.4	1.03
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	247.4	556.5	0.44
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	11.4	15.0	0.76
11.5.4 (a)	9.9	7.8	1.27	16.6.1 (a)	37.0	50.0	-13.00
11.5.4-1	270.4	4521.3	0.06	16.7.1	36.0	38.0	-2.00
11.6.1 (a)	2.5	4.9	0.50	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.7	2.1	-0.48	16.8.3	-	-	-
12.2.2 (a)	8.7	17.1	-8.38	16.9.1	6.8	6.7	0.10
12.3.1 (a)	3.9	501.9	0.01	17.1.1	0.4	0.4	-0.02
12.3.1-1	16.0	220.0	0.07	17.1.2 (a)	12.3	102.5	0.12
12.3.2	-	-	-	17.3.1	7.0	97.0	0.70
12.4.1 (a)	418.2	993.7	0.42				

4.8. Ivano-Frankivsk oblast

In 2015 Ivano-Frankivsk oblast ranked 14th in terms of GRP per capita (the city of Kyiv exclusive). One third of the oblast's area is mountainous. Forests occupy about 41% of the area, 150 mineral deposits have been explored. The oblast's economy is of mixed industrial and agrarian nature. The industrial sector is supplemented with powerful fuel and energy and wood processing clusters. Machine-building, chemical and food industries, construction materials production are yet other important branches of oblast's economy. Relatively high baseline indicators for the oblast are registered within Goals 1, 2, 3, 6, 10, 12, 15 and 16. Goals 4, 5, 7, 8, 9, 11, 13 and 17 require additional attention to be paid and appropriate measures to be taken, due to the lower indicators of sustainable development in the base period, compared to other regions.

SDG baseline for Ivano-Frankivsk oblast in 2015



As for the sustainable development, Ivano-Frankivsk oblast has the following features[29].

1. This oblast ranked top position in the baseline period within Goal 10 indicators (reduction of inequality). Similar to the neighboring oblasts, non-monetary factors are important for self-attribution of the population to poor; 90.6% of all questioned respondents (1.3.1. (a)) report poor.
2. The oblast pays insufficient attention to the development of foodstuff production (2.3.1) and agricultural raw materials processing (2.3.2), the latter is 17% lower than the average across Ukraine. A higher level of labor productivity in agricultural enterprises (2.2.1) and lower post-harvest losses (12.2.1 and 12.2.2) speak for a high potential for production with higher added value, as well as for prospects of attracting investment in these areas and subsequent export of products to the border regions.
3. Given a sufficiently high baseline indicators of the health care system in the oblast (Goal 3), attention should be paid to the prevention

[29] Detailed data of indicators of region are available by link

and treatment of cerebrovascular diseases in women (3.4.2), as the rate of mortality caused by mentioned diseases twice outperforms the national average.

4. In the field of education special attention should be paid to the availability of pre-school institutions (4.2.1), where this oblast reports the worst indicator among all oblasts (40%), as well as to issues of inclusive education arrangement (4.7.3) and computerization of rural schools (4.7.2). In general, the level of coverage of population with education services is unsatisfactory. Thus, the number of persons who attended educational institutions (I-IV accreditation grade) is 1.3 times less than the average across Ukraine (4.5.1. (a)). At the same time, there are few universities (4.4.2. (a)) and not many students (4.4.1. (a)) respectively in this oblast.
5. Also, it is necessary to address gender issues. Thus, local acts should be amended with the view of ensuring equal rights and opportunities for women and men (5.1.1); wider presence of women in the local council must be ensured (5.4.2) in order to improve the baseline indicator constituting 7,9%; development of women's employment and entrepreneurship possessing great capacities should be supported. For example, the ratio of wages of women and men in the oblast (5.6.1) are above the national average and constitute 75.4%, while the employment rate of women is 24.7% lower (5.6.3. (a)).
6. The oblast enjoys relatively good environmental conditions and high nature and recreation capacity, 356 natural objects (11.3.2, 11.3.3, 15.1.2, 15.1.3, 15.4.1, 15.4.2) are protected by national law. This oblast is characterized by low volumes of discharges into surface waters of contaminated wastewater, which is supported with the best indicators of water content of GRP (6.4.1) and the actual minimal discharges of contaminated wastewater into the water bodies of the oblast (6.3.1, 6.3.2). At the same time, the issue of centralized water supply accessibility for rural population (6.1. 5) and accessibility of drain systems remains urgent. Particular attention should be paid to reducing the emission of pollutants into the atmosphere (13.1.1. (a)); according to this indicator, the figure is 16.1 tons per square km area, and the oblast occupies 4th position from the bottom, the city of Kyiv inclusive.
7. Given rather high level of energy intensity of GRP (7.4.1. (a)), which is twice as high as the average Ukrainian indicator, the issues of renewable energy generation (7.3.1) and of implementation of developments and innovations in production go almost unaddressed. The oblast demonstrates very low indicators of the share on innovation costs in GRP - 0.2% (8.1.4. (a)), and the expenditure on scientific and technical work in GRP constitute 0.04% (9.5.1). The production of high-tech products also requires additional attention (9.4.1. (a)). According to the comparative analysis of the figures of employment in SMEs (8.6.1. (a)), which are 11.6% below the national average, and the high volumes of goods produced by these enterprises (8.6.2. (a)) (25.3% higher than the national average), the oblast's companies, like those located in adjacent regions, show higher productivity than average across Ukraine. The above-mentioned data dictates the need to focus on SMEs development in the oblast, as well as on fostering innovations and raw material processing.
8. The oblast sidesteps the issue of attracting investment, a share of FDI per capita ($7.9) is 13 times less than the average Ukrainian indicator. In order to stimulate investment, local authorities need to promote bank lending for capital investment (8.6.3. (a)), ensure broadband Internet coverage (9.6.1), improve public transport accessibility for rural settlements (10.3.3), ensure the cooperation between local authorities and business (16.7.1 and 16.3.1), as well facilitate public-private partnerships in the region (17.3.1).

Table of values of indicators which measure the SDG in Ivano-Frankivsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	67.6	62.6	5.00	5.2.2 (a)	2.2	2.7	0.82
1.2.1 (a)	93.0	56.3	36.70	5.3.1	-	-	-
1.3.1 (a)	90.6	70.7	19.90	5.4.2	7.9	-	-
1.3.2	50.9	53.1	-2.20	5.4.3 (a)	70.6	77.1	-6.50
2.1.1 (a)	41.7	50.9	0.82	5.5.1 (a)	30.4	44.5	0.68
2.1.2 (a)	259.3	209.9	1.24	5.5.2	30.1	27.3	1.10
2.1.3 (a)	44.2	50.9	0.87	5.6.1	75.4	74.9	0.50
2.2.1	321.3	223.3	1.44	5.6.2 (a)	51.4	56.2	-4.80
2.2.2	95.5	95.2	0.30	5.6.3 (a)	47.2	71.9	-24.70
2.3.1	58.1	89.3	-31.20	6.1.1 (a)	4.5	7.6	-3.10
2.3.2	21.2	38.2	-17.00	6.1.2 (a)	11.4	29.6	0.39
2.3.3 (a)	9.3	2.5	6.80	6.1.3 (a)	2.0	4.6	-2.60
2.4.1	142.3	141.5	0.80	6.1.4	-	90.0	-
3.1.1	12.8	15.3	0.84	6.1.5	6.1	24.2	-18.10
3.2.1	8.1	9.7	0.84	6.1.6	82.3	89.4	-7.10
3.3.1	13.0	37.2	0.35	6.2.1 (a)	0.4	4.1	-3.70
3.3.2	61.2	56.0	1.09	6.2.2	73.2	73.0	0.20
3.4.1	47.0	61.1	0.77	6.3.1	1.0	875.0	0.00
3.4.2	14.5	27.6	0.53	6.3.2	1.7	16.4	-14.66
3.4.3	24.4	24.0	1.02	6.4.1	2.0	4.9	0.41
3.4.4	10.9	11.1	0.98	6.4.2	100.0	100.0	0.00
3.5.1 (a)	54.0	52.2	1.03	6.5.1	0.0	0.0	0.00
3.5.2 (a)	63.7	62.0	1.03	7.1.1	10039.0	163682.0	-
3.6.1	10.1	11.2	0.90	7.1.2	12.3	11.7	0.51
3.6.2 (a)	100.0	100.0	1.00	7.1.3	25.0	18.8	6.18
3.7.1	-	-	-	7.3.1	24.8	3.0	21.77
3.8.1 (a)	16.0	18.4	-2.40	7.4.1 (a)	119.6	55.2	2.16
3.9.1 (a)	43.2	29.3	13.90	8.1.1	92.0	90.2	1.80
4.1.1 (a)	82.1	78.5	3.60	8.1.2	21.0	13.7	7.22
4.2.1	40.0	55.0	-15.00	8.1.3	31.0	19.2	11.85
4.3.1	5.3	7.6	-2.30	8.1.4 (a)	0.2	0.7	-0.49
4.4.1 (a)	224.1	321.0	0.70	8.2.1 (a)	22.7	33.1	-10.41
4.4.1-1	53.8	55.2	-1.43	8.2.2 (a)	81.9	121.0	0.68
4.4.2 (a)	0.4	0.7	0.54	8.2.3 (a)	89.2	43.7	45.51
4.5.1 (a)	277.4	374.7	0.74	8.3.1 (a)	54.8	56.7	-1.90
4.5.2	52.2	48.9	3.30	8.4.1	12.5	12.8	-0.28
4.6.1	17.4	15.3	2.10	8.5.1 (a)	16.1	25.9	0.62
4.7.1	78.5	81.0	-2.49	8.5.2	100.0	100.0	0.00
4.7.2	53.1	60.1	-7.00	8.5.3	8.9	12.7	-3.77
4.7.3	5.7	9.4	-3.70	8.6.1 (a)	13.8	25.4	-11.64
5.1.1	0.0	-	-	8.6.2 (a)	86.0	60.2	25.79
5.2.1 (a)	0.0	0.1	-0.05	8.6.3 (a)	2.9	7.6	-4.70

(continuation)

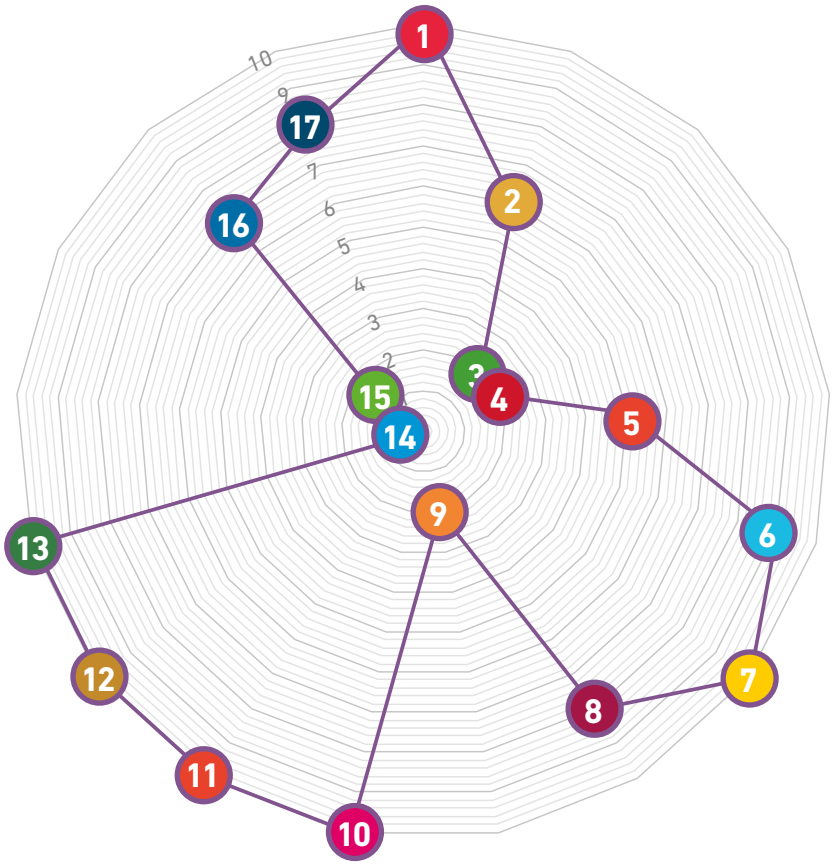
Table of values of indicators which measure the SDG in Ivano-Frankivsk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	4.8	10.7	-5.99	12.4.2	34.0	30.0	4.00
9.1.2	11.4	1474.0	0.01	13.1.1 (a)	16.1	4.7	3.40
9.1.3 (a)	0.7	1.4	0.51	14.1.1 (a)	-	17.8	-
9.2.1 (a)	14.3	35.3	-20.94	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.1	2.4	-2.32	15.1.1	125.7	1769.1	0.07
9.4.2 (a)	9.4	10.0	-0.63	15.1.2	9.0	2.9	6.10
9.4.3	12.9	21.0	-8.10	15.1.3	68.0	22.4	45.60
9.5.1	0.0	0.6	-0.58	15.2.1	45.6	17.6	28.00
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	11.2	3.5	3.22
9.6.1	23.4	39.0	0.60	15.3.1 (a)	16.9	25.5	0.66
9.7.1 (a)	47.0	37.4	9.60	15.3.2	377.7	31131.0	-
10.1.1 (a)	2.5	4.5	-2.00	15.3.3	27.1	51.6	-24.50
10.1.2	-	15.0	-	15.3.4 (a)	13.5	441.8	0.03
10.2.1	-	9.0	-	15.3.5	210.2	7840.5	0.03
10.3.1 (a)	9.3	27.0	-17.72	15.3.6	15.1	13.0	2.10
10.3.2 (a)	3.7	8.3	-4.68	15.4.1	218.8	669.0	0.33
10.3.3 (a)	8.8	11.2	-2.47	15.4.2	15.7	1.1	-
10.4.1	2.0	2.7	0.74	16.1.1 (a)	2.0	5.0	0.40
10.5.1	41.7	37.7	3.96	16.1.2 (a)	5.0	10.0	0.50
11.1.1 (a)	30.9	37.8	-6.93	16.1.3 (a)	0.4	1.8	0.24
11.1.2 (a)	25.7	22.9	1.12	16.2.1 (a)	0.7	0.5	1.48
11.2.1	-	0.0	-	16.2.2 (a)	109.6	199.3	0.55
11.3.1	-	6.0	-	16.2.3 (a)	3.6	5.3	0.68
11.3.2 (a)	2.2	1.4	1.64	16.3.1 (a)	7.0	9.0	-2.00
11.3.2-1	2.4	12.6	0.19	16.3.2 (a)	4.0	11.0	0.36
11.3.3	9.0	2.9	6.10	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	6.0	8.4	0.71
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	258.5	556.5	0.46
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	4.8	15.0	0.32
11.5.4 (a)	19.2	7.8	2.46	16.6.1 (a)	59.0	50.0	9.00
11.5.4-1	266.4	4521.3	0.06	16.7.1	26.0	38.0	-12.00
11.6.1 (a)	8.7	4.9	1.77	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.1	2.1	-0.06	16.8.3	-	-	-
12.2.2 (a)	7.2	17.1	-9.85	16.9.1	6.4	6.7	-0.30
12.3.1 (a)	152.6	501.9	0.30	17.1.1	0.6	0.4	0.16
12.3.1-1	4.0	220.0	0.02	17.1.2 (a)	7.9	102.5	0.08
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	285.1	993.7	0.29				

4.9. Kyiv oblast

Kyiv oblast belongs to regions ranking top positions by economic development rate. High rate of economic development of Kyiv oblast is mainly driven with the sphere of economic attraction of the national capital. The oblast's GRP per capita ranks 3rd across Ukraine (the city of Kyiv exclusive). In 2015 industrial production decreased by 7.3%. The development of food industry, wood and paper production and printing activities has contributed greatly to the decline in industrial production. A significant decrease was registered in the production of agricultural products (10.9%). At the same time, a drop in exports appeared to be rather insignificant (8.7%) and related mostly the export to the CIS countries.

SDG baseline for Kyiv oblast in 2015



As for the sustainable development, Kyiv oblast has the following features[30].

1. All mentioned above economic peculiarities have resulted in rather high rates of income of the population. By wages rate the oblast ranked 4th (the city of Kiev exclusive), while the average salary constituted 99% of the national average. At the same time, the total income ratio of most affluent 10 percent and least well-off 10 percent of the oblasts' population (10.1.1. (a)) was twice lower than the average across Ukraine. The share of population whose income was lower than the real subsistence minimum (1.1.1. (a)) constituted only 51.3%; consumption of basic food products (2.1.3-2.1.3) significantly outperformed the average indicators (in particular, fruits (2.1.3. (a)) almost by one and a half times). Simultaneously, the population demonstrated a surprisingly pessimistic moods over the quality of their own lives, as 85% of households (1.3.1. (a)) reported themselves poor. This might be explained with a demonstration effect of the city of Kyiv, where income rates are much higher.
2. Public health indicators are quite positive. Only 5.9% of the respondents reported difficulties in receiving medical aid (3.9.1. (a)) (29.3% across

[30] Detailed data of indicators of region are available by link

Ukraine); the indicators for maternal (3.1.1) and infant mortality (3.2.1) demonstrate significantly better picture. Worse readings were reported only for mortality from malignant breast tumors (3.4.3). To some extent, higher incidence rates for HIV (3.3.1) and tuberculosis (3.3.2) might be explained with a better level of diagnosis of diseases.

3. A twice higher mortality rate caused by transport accidents (3.6.1) results from heavy transport burden in the area of capital.
4. The oblast has a high education rate among children aged 6-17 (4.1.1. (a)) (96.1% against 78.5% across Ukraine). The quality of education in village schools is noticeable, as all rural schools have access to Internet (4.7.1), 36% of rural schools (9% across Ukraine) practice inclusive education (4.7.3). According to statistical data, the share of students of higher education institutions is 2.4 times smaller than the national indicator (4.4.1. (a)), but this should be rather regarded as an artefact, since the city of Kyiv is excluded from calculations.
5. The number of abortions (5.5.1. (a)) is one and a half times bigger than the national average. At the same time, domestic violence rate (5.2.2. (a)) is the lowest (0.35 per 100 thousand of population), which, however, may be caused by the peculiarities of such crimes identifying and recording.
6. High rate of access to centralized water supply is one of the components of the quality of life in rural areas (6.1.5) (61%). At the same time, coverage with paved roads remains far from perfect, as 29.1% of the population live farther than 3 km from paved roads (9.1.1).
7. A fairly high rate of labor productivity (8.2.2. (a)) (GRP per one employed person consisted 140.6 thousand UAH against 121.0 thousand UAH across Ukraine) is recorded partially owing to the existence of high-tech industries. Contrary to some other oblasts, both the share of sold products of SMEs (8.6.2. (a)) and the share of employed in SMEs (8.6.1. (a)) exceed the average Ukrainian indicator, which speaks for a significant diversification of this sector.
8. The oblast demonstrates high environmental performance: moderate emissions (11.5.4. (a)), significant share of forested area (15.2.1), smaller than average share of arable land (15.3.3), and a significant share of the area of the environmental network (15.1.3). It should be accounted that part of the oblast's territory belongs to the Chernobyl exclusion zone. Due to this, the development of nature reserves and national parks (15.1.2) is insufficient, as they make up only 0.6% of the oblast's territory.
9. Capital region's peculiarities have an obvious impact on the crime rate. Serious crimes rate (16.1.1. (a)) is 20% higher than the average and the rate of crimes related to sexual exploitation (16.2.3. (a)) exceed average by 12.2 times. At the same time, the rate of crime against sexual freedom and sexual integrity (16.1.3. (a)) is statistically the lowest recorded, which triggers a question over the reliability of available reported data.

Table of values of indicators which measure the SDG in Kyiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	51.3	62.6	-11.30	5.2.2 (a)	0.3	2.7	0.13
1.2.1 (a)	82.3	56.3	26.00	5.3.1	-	-	-
1.3.1 (a)	85.0	70.7	14.30	5.4.2	14.3	-	-
1.3.2	53.4	53.1	0.30	5.4.3 (a)	78.9	77.1	1.80
2.1.1 (a)	63.3	50.9	1.24	5.5.1 (a)	65.8	44.5	1.48
2.1.2 (a)	222.8	209.9	1.06	5.5.2	28.5	27.3	1.04
2.1.3 (a)	72.1	50.9	1.42	5.6.1	73.4	74.9	-1.50
2.2.1	226.9	223.3	1.02	5.6.2 (a)	58.2	56.2	2.00
2.2.2	89.2	95.2	-6.00	5.6.3 (a)	72.6	71.9	0.70
2.3.1	93.7	89.3	4.40	6.1.1 (a)	10.4	7.6	2.80
2.3.2	66.3	38.2	28.10	6.1.2 (a)	24.1	29.6	0.81
2.3.3 (a)	7.3	2.5	4.80	6.1.3 (a)	5.8	4.6	1.20
2.4.1	137.3	141.5	-4.20	6.1.4	-	90.0	-
3.1.1	9.9	15.3	0.65	6.1.5	61.0	24.2	36.80
3.2.1	7.6	9.7	0.78	6.1.6	100.0	89.4	10.60
3.3.1	56.4	37.2	1.52	6.2.1 (a)	9.1	4.1	5.00
3.3.2	69.2	56.0	1.24	6.2.2	98.0	73.0	25.00
3.4.1	66.9	61.1	1.10	6.3.1	4.0	875.0	0.00
3.4.2	27.4	27.6	0.99	6.3.2	0.6	16.4	-15.78
3.4.3	31.5	24.0	1.31	6.4.1	6.9	4.9	1.42
3.4.4	11.8	11.1	1.06	6.4.2	100.0	100.0	0.00
3.5.1 (a)	50.3	52.2	0.96	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.1	62.0	0.98	7.1.1	4263.0	163682.0	-
3.6.1	21.6	11.2	1.93	7.1.2	16.9	11.7	5.18
3.6.2 (a)	100.0	100.0	1.00	7.1.3	14.7	18.8	-4.15
3.7.1	-	-	-	7.3.1	0.0	3.0	-3.00
3.8.1 (a)	13.6	18.4	-4.80	7.4.1 (a)	39.4	55.2	0.71
3.9.1 (a)	5.9	29.3	-23.40	8.1.1	94.0	90.2	3.80
4.1.1 (a)	96.1	78.5	17.60	8.1.2	23.4	13.7	9.68
4.2.1	67.0	55.0	12.00	8.1.3	16.4	19.2	-2.75
4.3.1	3.3	7.6	-4.30	8.1.4 (a)	0.1	0.7	-0.56
4.4.1 (a)	132.3	321.0	0.41	8.2.1 (a)	26.1	33.1	-6.99
4.4.1-1	55.6	55.2	0.34	8.2.2 (a)	140.6	121.0	1.16
4.4.2 (a)	0.3	0.7	0.52	8.2.3 (a)	41.2	43.7	-2.55
4.5.1 (a)	173.7	374.7	0.46	8.3.1 (a)	58.1	56.7	1.40
4.5.2	46.5	48.9	-2.40	8.4.1	-	12.8	-
4.6.1	13.7	15.3	-1.60	8.5.1 (a)	22.6	25.9	0.87
4.7.1	100.0	81.0	19.01	8.5.2	100.0	100.0	0.00
4.7.2	89.4	60.1	29.30	8.5.3	11.9	12.7	-0.79
4.7.3	35.6	9.4	26.20	8.6.1 (a)	32.4	25.4	7.02
5.1.1	2.0	-	-	8.6.2 (a)	65.1	60.2	4.91
5.2.1 (a)	0.0	0.1	-0.02	8.6.3 (a)	3.2	7.6	-4.40

(continuation)

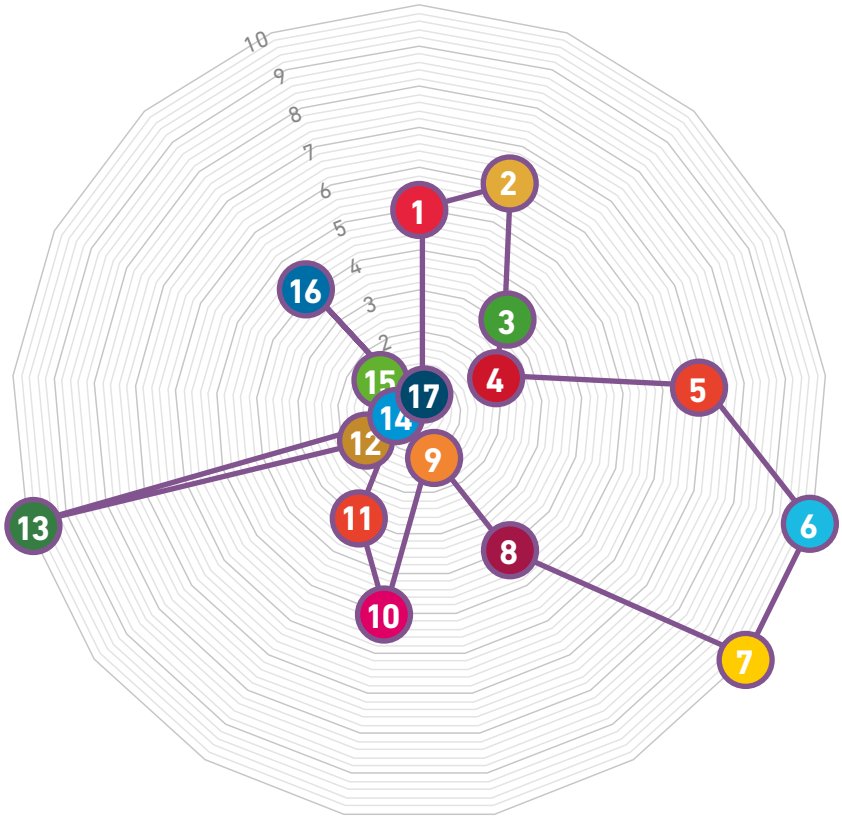
Table of values of indicators which measure the SDG in Kyiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	29.1	10.7	18.33	12.4.2	8.9	30.0	-21.10
9.1.2	52.1	1474.0	0.04	13.1.1 (a)	2.8	4.7	0.59
9.1.3 (a)	0.8	1.4	0.57	14.1.1 (a)	-	17.8	-
9.2.1 (a)	6.2	35.3	-29.06	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	2.3	2.4	-0.10	15.1.1	17.2	1769.1	0.01
9.4.2 (a)	9.2	10.0	-0.76	15.1.2	0.6	2.9	-2.30
9.4.3	12.1	21.0	-8.93	15.1.3	46.1	22.4	23.70
9.5.1	0.2	0.6	-0.40	15.2.1	23.1	17.6	5.50
9.5.2	0.3	0.4	-0.10	15.2.2 (a)	5.5	3.5	1.58
9.6.1	41.8	39.0	1.07	15.3.1 (a)	0.6	25.5	0.02
9.7.1 (a)	39.9	37.4	2.50	15.3.2	1280.2	31131.0	0.04
10.1.1 (a)	2.6	4.5	-1.90	15.3.3	45.5	51.6	-6.10
10.1.2	-	15.0	-	15.3.4 (a)	62.6	441.8	0.14
10.2.1	-	9.0	-	15.3.5	251.6	7840.5	0.03
10.3.1 (a)	14.6	27.0	-12.36	15.3.6	8.9	13.0	-4.04
10.3.2 (a)	1.0	8.3	-7.38	15.4.1	-	669.0	-
10.3.3 (a)	2.2	11.2	-9.02	15.4.2	-	1.1	-
10.4.1	2.6	2.7	0.96	16.1.1 (a)	6.0	5.0	1.20
10.5.1	34.8	37.7	-2.90	16.1.2 (a)	9.0	10.0	0.90
11.1.1 (a)	35.3	37.8	-2.57	16.1.3 (a)	0.1	1.8	0.03
11.1.2 (a)	36.1	22.9	1.58	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	206.0	199.3	1.03
11.3.1	-	6.0	-	16.2.3 (a)	65.3	5.3	12.29
11.3.2 (a)	1.4	1.4	0.99	16.3.1 (a)	10.0	9.0	1.00
11.3.2-1	7.0	12.6	0.56	16.3.2 (a)	11.0	11.0	1.00
11.3.3	0.6	2.9	-2.30	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	3.5	8.4	0.41
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	466.4	556.5	0.84
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	10.5	15.0	0.70
11.5.4 (a)	7.2	7.8	0.92	16.6.1 (a)	50.0	50.0	0.00
11.5.4-1	203.6	4521.3	0.05	16.7.1	33.0	38.0	-5.00
11.6.1 (a)	1.2	4.9	0.25	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.1	2.1	-0.08	16.8.3	-	-	-
12.2.2 (a)	12.8	17.1	-4.27	16.9.1	6.3	6.7	-0.40
12.3.1 (a)	59.0	501.9	0.12	17.1.1	0.1	0.4	-0.26
12.3.1-1	16.0	220.0	0.07	17.1.2 (a)	43.0	102.5	0.42
12.3.2	-	-	-	17.3.1	13.0	97.0	0.13
12.4.1 (a)	105.4	993.7	0.11				

4.10. Kirovohrad oblast

By the majority of social and economic development indicators Kirovohrad oblast sits in the middle of the list of Ukrainian regions. As of 2015, it ranked 7th by GRP per 1 employed person (8.2.2. (a)) (the city of Kyiv exclusive). It belongs to agricultural oblasts; its agrarian production makes up about 40% of the oblast's GRP. The share of arable land in the total territory of the oblast (15.3.3) is much bigger than the national average (70.4% against 51.6%). The oblast's investment attractiveness is very low, rate of direct foreign investment per capita (8.1.2) is among the lowest across Ukraine ($1.02). The share of bank lending in the structure of capital investment (8.6.3. (a)) is more than twice smaller than the national average (3.1% against 7.6%). Relatively high baseline indicators are registered for Goals 1, 4, 7, 10, 13 and 17. Goals 3, 5, 9, 11, 15 and 16 require additional attention to be paid and appropriate measures to be taken, due to the lower sustainable development indicators in the baseline period, compared to other oblasts.

SDG baseline for Kirovohrad oblast in 2015



As for the sustainable development, Kirovohrad oblast has the following features[31].

1. The share of people with money incomes below the actual subsistence minimum (1.1.1. (a)) exceeds the national average (68.2% against 62.6%). At the same time, the perception of the quality of life of population (1.3.1. (a)) is much better, only 15.6% of households report themselves poor, which is 4.5 times less than in Ukraine in general. The population reporting being distressed is almost fully covered by social care services (1.2.1. (a)), while the share of such population is almost twice bigger than the national average (99.7% against 56.3%).
2. Almost all forms of morbidity and mortality rates are much higher than the average Ukrainian; negative trends are observed in infant mortality (3.2.1). HIV incidence rate (3.3.1) is almost one third higher than the national average (53.48 against 37.2 per 100,000 population), similar situation is registered with tuberculosis incidence rate (3.3.2) (77 against 56). A far from

[31] Detailed data of indicators of region are available by link

pleasant situation is found in the field of family planning, with an extremely high fertility rate under the age of 20 (5.5.2) constituting 41.5 per 1,000 women (27.3 across Ukraine). This indicator correlates with rather high abortion rate (5.5.1. (a)) (55.97 per 10,000 women against 44.5 of national average). The share of smokers (3.8.1. (a)) outperforms the national average (19.9% against 18.4%). This results to lower expected lifespan for both women (3.5.2) and men (3.5.1. (a)), which is almost one year shorter than the national average.

3. The offer of higher educational institutions of III-IV accreditation grades is insufficient, as the share of students (4.4.1. (a)) is three times smaller than the national average. Similar situation is registered with higher education institutions of I-IV accreditation grades (4.5.1. (a)), where this share is twice less than national average. The situation with secondary schooling is much better, due to Internet and training software full availability in all schools, rural inclusive (4.7.1, 4.7.2).
4. The situation with water supply is complicated. The use of fresh water for drinking and health and sanitary purposes, m^3 per 1 person (6.1.2. (a)) is 1.6 times less than across Ukraine, only 21.7% of rural (6.1.5) and 73,8% of urban population (6.1.6) have access to centralized water supply (24.2 and 89.4% across Ukraine, respectively). The rural population is mostly deprived of access to centralized drain system (6.2.1. (a)). The situation with the polluted water discharges is much better (6.3.1), due to the minimal volumes of such discharges, although the indicators of water compliance with sanitary and hygienic standards (6.1, 6.1.3) are extremely low and drop lower than national average (in rural areas constituting 4.9% against 7.6%, in communal sources being 3.3% against 4.6%).
5. The agricultural profile of the oblast provides for the sufficiently low rate of energy intensity of GRP (7.4.1. (a)) constituting 30,6 tons of oil equivalent per UAH million (the average Ukrainian rate constitutes 55.23). This oblast is unique for covering almost all final energy consumption from the renewable energy sources (7.3.1).
6. This oblast suffers from the small number of national and local monuments, nature reserves and national parks (11.3.1, 11.3.2, 11.3.2-1, 11.3.3), which leads to a low touristic attractiveness of the oblast and a small number of jobs in tourism (11.6.1. (a)), namely 0.7 per 10,000 employed persons (4.92 at average across Ukraine).
7. The oblast's crime rate is higher than the national average virtually in all categories (the number of serious and especially severe crimes per 1,000 people (16.1.1. (a)) is 7 against 5, the number of injured and killed (16.1.2. (a)) is 14 against 10), while the number crimes associated with weapons (16.5.3. (a)) is much smaller.

Table of values of indicators which measure the SDG in Kirovohrad oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	68.2	62.6	5.60	5.2.2 (a)	2.1	2.7	0.79
1.2.1 (a)	99.7	56.3	43.40	5.3.1	-	-	-
1.3.1 (a)	15.6	70.7	-55.10	5.4.2	17.2	-	-
1.3.2	53.2	53.1	0.10	5.4.3 (a)	77.2	77.1	0.10
2.1.1 (a)	53.2	50.9	1.05	5.5.1 (a)	56.0	44.5	1.26
2.1.2 (a)	207.8	209.9	0.99	5.5.2	41.5	27.3	1.52
2.1.3 (a)	45.4	50.9	0.89	5.6.1	78.8	74.9	3.90
2.2.1	215.6	223.3	0.97	5.6.2 (a)	54.0	56.2	-2.20
2.2.2	97.7	95.2	2.50	5.6.3 (a)	70.3	71.9	-1.63
2.3.1	65.2	89.3	-24.10	6.1.1 (a)	4.9	7.6	-2.70
2.3.2	74.6	38.2	36.40	6.1.2 (a)	19.0	29.6	0.64
2.3.3 (a)	0.3	2.5	-2.20	6.1.3 (a)	3.3	4.6	-1.30
2.4.1	140.2	141.5	-1.30	6.1.4	-	90.0	-
3.1.1	10.5	15.3	0.69	6.1.5	21.7	24.2	-2.50
3.2.1	11.4	9.7	1.18	6.1.6	73.8	89.4	-15.60
3.3.1	53.5	37.2	1.44	6.2.1 (a)	0.8	4.1	-3.30
3.3.2	77.0	56.0	1.38	6.2.2	74.3	73.0	1.30
3.4.1	77.0	61.1	1.26	6.3.1	0.0	875.0	0.00
3.4.2	33.1	27.6	1.20	6.3.2	0.0	16.4	-16.38
3.4.3	28.5	24.0	1.19	6.4.1	5.5	4.9	1.13
3.4.4	14.2	11.1	1.28	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.0	52.2	0.98	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.4	62.0	0.99	7.1.1	761.0	163682.0	-
3.6.1	12.5	11.2	1.11	7.1.2	12.2	11.7	0.49
3.6.2 (a)	100.0	100.0	1.00	7.1.3	16.9	18.8	-1.91
3.7.1	-	-	-	7.3.1	95.6	3.0	92.64
3.8.1 (a)	19.9	18.4	1.50	7.4.1 (a)	30.6	55.2	0.55
3.9.1 (a)	12.6	29.3	-16.70	8.1.1	91.7	90.2	1.50
4.1.1 (a)	84.3	78.5	5.80	8.1.2	10.6	13.7	-3.18
4.2.1	62.0	55.0	7.00	8.1.3	20.2	19.2	0.98
4.3.1	7.7	7.6	0.10	8.1.4 (a)	0.3	0.7	-0.36
4.4.1 (a)	98.7	321.0	0.31	8.2.1 (a)	52.3	33.1	19.24
4.4.1-1	59.5	55.2	4.25	8.2.2 (a)	98.6	121.0	0.82
4.4.2 (a)	0.4	0.7	0.61	8.2.3 (a)	62.9	43.7	19.12
4.5.1 (a)	165.7	374.7	0.44	8.3.1 (a)	54.0	56.7	-2.70
4.5.2	43.4	48.9	-5.50	8.4.1	17.7	12.8	4.88
4.6.1	16.2	15.3	0.92	8.5.1 (a)	81.4	25.9	3.14
4.7.1	100.0	81.0	19.01	8.5.2	100.0	100.0	0.00
4.7.2	100.0	60.1	39.90	8.5.3	10.4	12.7	-2.31
4.7.3	10.7	9.4	1.29	8.6.1 (a)	23.3	25.4	-2.15
5.1.1	0.0	-	-	8.6.2 (a)	88.1	60.2	27.91
5.2.1 (a)	0.0	0.1	-0.03	8.6.3 (a)	3.1	7.6	-4.50

(continuation)

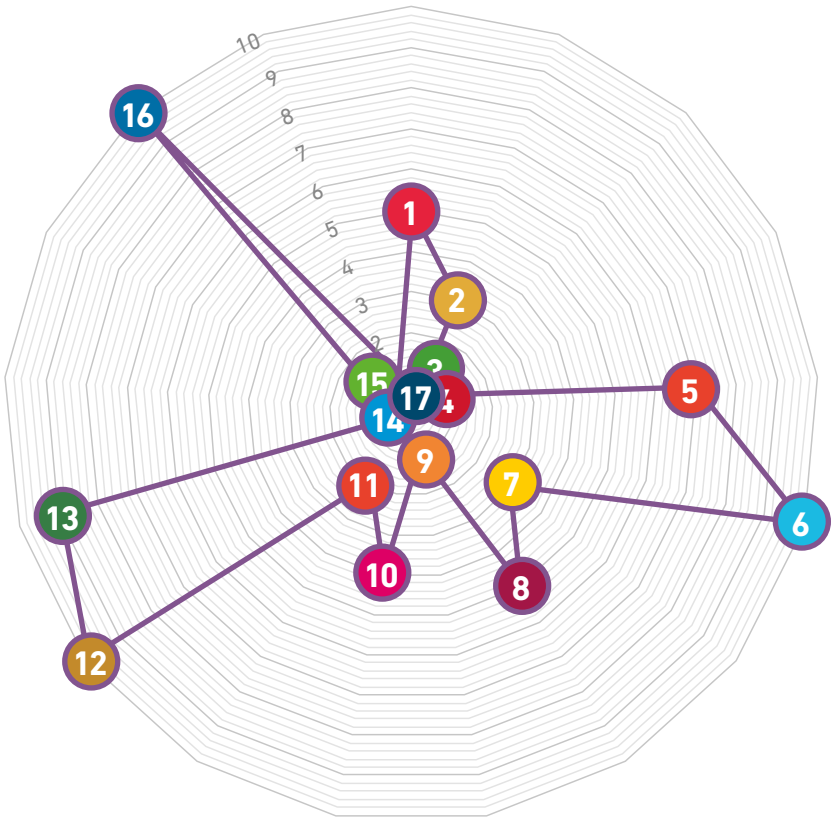
Table of values of indicators which measure the SDG in Kirovohrad oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	11.0	10.7	0.21	12.4.2	25.9	30.0	-4.10
9.1.2	10.7	1474.0	0.01	13.1.1 (a)	0.6	4.7	0.12
9.1.3 (a)	0.6	1.4	0.42	14.1.1 (a)	-	17.8	-
9.2.1 (a)	15.1	35.3	-20.17	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	98.4	97.8	0.62	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.1	2.4	-2.30	15.1.1	-	1769.1	-
9.4.2 (a)	11.5	10.0	1.50	15.1.2	-	2.9	-
9.4.3	16.0	21.0	-5.07	15.1.3	27.0	22.4	4.60
9.5.1	0.2	0.6	-0.46	15.2.1	7.7	17.6	-9.90
9.5.2	0.3	0.4	-0.10	15.2.2 (a)	0.8	3.5	0.23
9.6.1	22.7	39.0	0.58	15.3.1 (a)	1.1	25.5	0.04
9.7.1 (a)	55.1	37.4	17.70	15.3.2	1730.3	31131.0	0.06
10.1.1 (a)	4.0	4.5	-0.50	15.3.3	70.4	51.6	18.80
10.1.2	-	15.0	-	15.3.4 (a)	3.4	441.8	0.01
10.2.1	-	9.0	-	15.3.5	242.2	7840.5	0.03
10.3.1 (a)	25.0	27.0	-2.00	15.3.6	9.9	13.0	-3.14
10.3.2 (a)	6.3	8.3	-2.04	15.4.1	-	669.0	-
10.3.3 (a)	12.9	11.2	1.69	15.4.2	-	1.1	-
10.4.1	2.4	2.7	0.89	16.1.1 (a)	7.0	5.0	1.40
10.5.1	43.6	37.7	5.90	16.1.2 (a)	14.0	10.0	1.40
11.1.1 (a)	23.6	37.8	-14.28	16.1.3 (a)	2.8	1.8	1.50
11.1.2 (a)	25.7	22.9	1.12	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	319.6	199.3	1.60
11.3.1	-	6.0	-	16.2.3 (a)	1.0	5.3	0.19
11.3.2 (a)	0.2	1.4	0.18	16.3.1 (a)	13.0	9.0	4.00
11.3.2-1	2.2	12.6	0.18	16.3.2 (a)	14.0	11.0	1.27
11.3.3	–	2.9	-	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	4.9	8.4	0.58
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	241.7	556.5	0.43
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	11.5	15.0	0.77
11.5.4 (a)	2.5	7.8	0.32	16.6.1 (a)	47.0	50.0	-3.00
11.5.4-1	61.7	4521.3	0.01	16.7.1	31.0	38.0	-7.00
11.6.1 (a)	0.7	4.9	0.14	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.1	2.1	-0.02	16.8.3	-	-	-
12.2.2 (a)	8.4	17.1	-8.71	16.9.1	6.7	6.7	0.00
12.3.1 (a)	1356.1	501.9	2.70	17.1.1	0.5	0.4	0.11
12.3.1-1	6.0	220.0	0.03	17.1.2 (a)	1.0	102.5	0.01
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	5855.4	993.7	5.89				

4.11. Luhansk oblast

The situation in Luhansk oblast in the baseline 2015 was significantly influenced by the armed conflict and ensuing anti-terrorist operation, with territory temporarily divided into c ontrolled and uncontrolled by Ukrainian authorities areas. Resulting to hostilities in the oblast, the transport, industrial and social infrastructure, as well as communications were partially damaged and, in some areas, destroyed. More than half of all industrial enterprises remain within uncontrolled territory, in particular all metallurgical enterprises of the region. The index of industrial production in 2015 constituted only 34% of the previous year rate. As a result, in 2015 Luhansk oblast fell out of the group of top five leaders in economic potential and moved to 25th rank of Ukraine's oblasts rating by the GRP per capita. By 'Sales of industrial products per capita' it occupied 21st position (the city of Kyiv exclusive), by share of agricultural products it ranked 23rd.

SDG baseline for Luhansk oblast in 2015



As for the sustainable development, Luhansk oblast has the following features[32].

1. The prevailing conditions in the oblast complicate the performance of statistical indicators analysis both because of their data incompleteness and difficulty of calculation, triggered by the divided area and population of the oblast and constant both intra- and extra-regional migration. Subject to this, the SDGs achievement indicators in the oblast in the baseline 2015 were mostly very low. Therefore, we present only a selective analysis, owing to 2020 Luhansk Oblast Development Strategy, updated in 2017 with the view of providing for region-level SDGs achievement.
2. As of 2015 the region lagged substantially behind the average Ukrainian in terms of income of population. Thus, the share of the population whose average per capita equivalent money income is lower than the minimum real subsistence level (1.1.1. (a)) constituted 68.9%, which is 6,3% lower than the average Ukrainian.

[32] Detailed data of indicators of region are available by link

The food costs accounted for only 48% of total household expenditures, while the share of households reporting themselves as poor during self-assessment of their material well-being (1.3.1.) is 75%, which is above the national average, but lower than in many other regions with better economic performance. This can be partially explained by a more significant level of population stratification by income in this oblast. Thus, the ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population (10.4.1.) in the oblast is 3.3 times, and 2.7 generally across the country. Ratio of average pension to average wage (10.5.1.) in the oblast is 51%, while it makes only 37.7% across the country.

3. The state of income of the population is determined by the economic situation. In 2015 the GRP per employed worker (8.2.2. (a)) was registered as only 64% of the national average, and the employment rate of the population aged 15-70 (8.3.1.) constituted only 54%.
4. Armed conflict, low income of population and destroyed infrastructure have affected the provision of educational and health care services. Thus, the indicators of maternal and infant mortality are significantly higher than the average (3.1.1., 3.1.2.), while other indicators relating to mortality are simultaneously lower than the average Ukrainian. As for education, almost all indicators bear lower readings than the basic ones in Ukraine.
5. To a large extent resulting from the hostilities, the achievement indicators of Goal 6 'Access to clean water and sanitation' are also lower than the average across Ukraine. The same applies to infrastructure issues (Goal 9). Achieving both Goals requires substantial capital investment. However, in 2015 the Indicator 8.1.2. 'Share of capital investment to GRP, %' constituted only 8.6%, which is 5% lower than the average Ukrainian. For example, the volume of capital investment and current expenses aimed at protection and restoration of soil, ground and surface waters, UAH per 1 hectare of the region's territory (15.3.1.) was less than 1 hryvnia, with the average reading of 25 hryvnias.
6. Attraction of foreign direct investment in oblast (17.1.2.) and the implementation of projects of public–private partnership as the tools are underused due to the situation prevailing in the oblast.

Table of values of indicators which measure the SDG in Luhansk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	68.9	62.6	6.30	5.2.2 (a)	4.2	2.7	1.52
1.2.1 (a)	83.8	56.3	27.50	5.3.1	-	-	-
1.3.1 (a)	75.4	70.7	4.70	5.4.2	-	-	-
1.3.2	48.0	53.1	-5.10	5.4.3 (a)	79.3	77.1	2.20
2.1.1 (a)	37.5	50.9	0.74	5.5.1 (a)	14.5	44.5	0.33
2.1.2 (a)	144.8	209.9	0.69	5.5.2	...	27.3	-
2.1.3 (a)	36.7	50.9	0.72	5.6.1	77.7	74.9	2.80
2.2.1	160.4	223.3	0.72	5.6.2 (a)	60.0	56.2	3.80
2.2.2	77.8	95.2	-17.40	5.6.3 (a)	-	71.9	-
2.3.1	-	89.3	-	6.1.1 (a)	3.9	7.6	-3.70
2.3.2	3.3	38.2	-34.90	6.1.2 (a)	6.4	29.6	0.22
2.3.3 (a)	1.5	2.5	-1.00	6.1.3 (a)	3.5	4.6	-1.10
2.4.1	139.1	141.5	-2.40	6.1.4	-	90.0	-
3.1.1	37.7	15.3	2.47	6.1.5	29.0	24.2	4.80
3.2.1	12.8	9.7	1.33	6.1.6	89.4	89.4	0.00
3.3.1	-	37.2	-	6.2.1 (a)	2.0	4.1	-2.10
3.3.2	-	56.0	-	6.2.2	100.0	73.0	27.00
3.4.1	31.6	61.1	0.52	6.3.1	72.0	875.0	0.08
3.4.2	16.3	27.6	0.59	6.3.2	87.8	16.4	71.43
3.4.3	9.1	24.0	0.38	6.4.1	5.6	4.9	1.14
3.4.4	3.2	11.1	0.29	6.4.2	100.0	100.0	0.00
3.5.1 (a)	-	52.2	-	6.5.1	0.0	0.0	0.00
3.5.2 (a)	-	62.0	-	7.1.1	3099.0	163682.0	-
3.6.1	2.3	11.2	0.20	7.1.2	15.8	11.7	4.01
3.6.2 (a)	100.0	100.0	1.00	7.1.3	14.7	18.8	-4.15
3.7.1	-	-	-	7.3.1	-	3.0	-
3.8.1 (a)	16.0	18.4	-2.40	7.4.1 (a)	140.0	55.2	2.53
3.9.1 (a)	9.6	29.3	-19.70	8.1.1	47.7	90.2	-42.50
4.1.1 (a)	24.6	78.5	-53.90	8.1.2	8.6	13.7	-5.10
4.2.1	-	55.0	-	8.1.3	12.5	19.2	-6.71
4.3.1	8.7	7.6	1.10	8.1.4 (a)	0.1	0.7	-0.59
4.4.1 (a)	77.9	321.0	0.24	8.2.1 (a)	38.7	33.1	5.57
4.4.1-1	50.3	55.2	-4.89	8.2.2 (a)	76.9	121.0	0.64
4.4.2 (a)	0.2	0.7	0.27	8.2.3 (a)	82.7	43.7	39.01
4.5.1 (a)	89.6	374.7	0.24	8.3.1 (a)	54.6	56.7	-2.10
4.5.2	41.0	48.9	-7.90	8.4.1	-	12.8	-
4.6.1	16.4	15.3	1.10	8.5.1 (a)	16.7	25.9	0.64
4.7.1	92.0	81.0	11.01	8.5.2	100.0	100.0	0.00
4.7.2	89.4	60.1	29.30	8.5.3	17.9	12.7	5.24
4.7.3	35.6	9.4	26.20	8.6.1 (a)	19.6	25.4	-5.83
5.1.1	2.0	-	-	8.6.2 (a)	57.0	60.2	-3.22
5.2.1 (a)	0.0	0.1	-0.05	8.6.3 (a)	2.1	7.6	-5.50

(continuation)

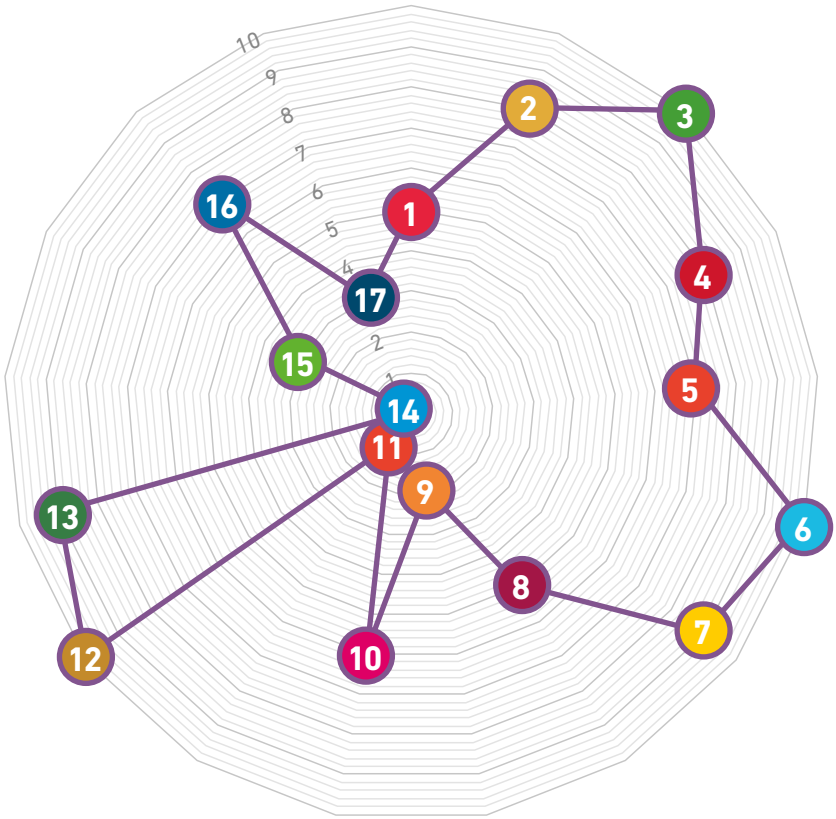
Table of values of indicators which measure the SDG in Luhansk oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	18.8	10.7	8.01	12.4.2	11.3	30.0	-18.70
9.1.2	27.3	1474.0	0.02	13.1.1 (a)	4.3	4.7	0.91
9.1.3 (a)	0.9	1.4	0.62	14.1.1 (a)	-	17.8	-
9.2.1 (a)	61.7	35.3	26.49	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	98.3	97.8	0.51	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	-	2.4	-	15.1.1	12.4	1769.1	0.01
9.4.2 (a)	-	10.0	-	15.1.2	0.5	2.9	-2.40
9.4.3	20.3	21.0	-0.69	15.1.3	-	22.4	-
9.5.1	0.1	0.6	-0.50	15.2.1	13.4	17.6	-4.20
9.5.2	1.6	0.4	1.20	15.2.2 (a)	1.0	3.5	0.30
9.6.1	20.9	39.0	0.53	15.3.1 (a)	0.9	25.5	0.04
9.7.1 (a)	41.9	37.4	4.50	15.3.2	1227.3	31131.0	0.04
10.1.1 (a)	4.3	4.5	-0.20	15.3.3	46.0	51.6	-5.60
10.1.2	-	15.0	-	15.3.4 (a)	8.8	441.8	0.02
10.2.1	-	9.0	-	15.3.5	555.0	7840.5	0.07
10.3.1 (a)	41.3	27.0	14.30	15.3.6	20.8	13.0	7.81
10.3.2 (a)	15.3	8.3	7.00	15.4.1	-	669.0	-
10.3.3 (a)	11.7	11.2	0.46	15.4.2	-	1.1	
10.4.1	3.3	2.7	1.22	16.1.1 (a)	3.0	5.0	0.60
10.5.1	51.1	37.7	13.43	16.1.2 (a)	4.0	10.0	0.40
11.1.1 (a)	28.6	37.8	-9.19	16.1.3 (a)	1.3	1.8	0.72
11.1.2 (a)	24.1	22.9	1.05	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	271.1	199.3	1.36
11.3.1	-	6.0		16.2.3 (a)	3.8	5.3	0.71
11.3.2 (a)	0.7	1.4	0.52	16.3.1 (a)	11.0	9.0	2.00
11.3.2-1	17.9	12.6	1.43	16.3.2 (a)	10.0	11.0	0.91
11.3.3	0.5	2.9	-2.40	16.4.1 (a)	100.0	12.0	88.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	14.6	8.4	1.73
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	3196.9	556.5	5.74
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	20.3	15.0	1.35
11.5.4 (a)	5.0	7.8	0.64	16.6.1 (a)	46.0	50.0	-4.00
11.5.4-1	133.0	4521.3	0.03	16.7.1	43.0	38.0	5.00
11.6.1 (a)	0.4	4.9	0.08	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-5.6	-	
12.2.1 (a)	3.9	2.1	1.81	16.8.3	-	-	
12.2.2 (a)	66.3	17.1	49.25	16.9.1	6.8	6.7	0.10
12.3.1 (a)	0.0	501.9	0.00	17.1.1	0.5	0.4	0.15
12.3.1-1	11.0	220.0	0.05	17.1.2 (a)	0.4	102.5	0.00
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	409.9	993.7	0.41				

4.12. Lviv oblast

By the majority of social and economic development indicators Lviv oblast sits in the middle of the list of Ukrainian regions. Owing to a well-diversified structure of its economy, this oblast dodged that deep fall in GRP (8.1.1) which affected many oblasts and the country in whole (95.2% against 90.20%), although by the rate of GDP per 1 employed person (8.2.2. (a)) it is far from being a leader (91.05 thousand UAH against 120.96 national average). Its production is high-tech enough (the share of high-tech and medium-tech exports (8.1.4. (a)) is 30.33% against the national average constituting 19.2%) and demonstrates low energy intensity (7.4.1. (a)) (44.07 tons per 1 UAH million, GRP against 55.23 of the national average), although the share of innovative products in the industrial volume (8.1.4. (a)) is negligible and twice lower than the national average (0.2% against 0.4%). The share of capital investment in GRP (8.1.2) constitutes 14.14% against 13.73% across the country. This oblast can boast with a relatively high labor productivity rate in agriculture per one employed person (2.2.1), which is 261.78 against 223.31 of the national average. Relatively high baseline indicators for the oblast are registered within Goals 1, 3, 5, 10, 12 and 13. Goals 4, 6, 9, 14, 16 and 17 require additional attention to be paid and appropriate measures to be taken, due to the lower sustainable development indicators in the base period, compared to other regions.

SDG baseline for Lviv oblast in 2015



As for the sustainable development, Lviv oblast has the following features[33].

1. Poverty rates are rather high, still they are below the national average (the share of population whose average per capita equivalent of the total monthly money income is higher than the subsistence actual minimum (1.1.1. (a)) constitutes 70.0% against 62.6%, 64% of households report themselves poor (1.3.1. (a)), which is 5.3% less than it is recorded across Ukraine in general). This is also reflected in the consumption pattern with a significant share of food expenditure (1.3.2), which is higher than the national average (57.2% against 53.1%). Meanwhile, the consumption of meat, fruits and berries per person remains low (2.1.1, 2.1.3).

[33] Detailed data of indicators of region are available by link

2. The general situation with morbidity and mortality (3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.4) is better than average. Almost all indicators are lower than the national average, with zero maternal mortality recorded (3.1.1). The share of smokers (3.8.1. (a)) is almost 3% bigger (22.4% against 18.4%). System of health care services (3.9.1. (a)) is well-developed. The number of abortions is much smaller than the national average (5.5.1. (a)) per 10,000 women (35.52 against 44.53). This results in the longest average expected lifespan of women (3.5.2) among all oblasts of the country (constitutes 63.88) and allows Lviv oblast to rank 2nd by the average expected lifespan of men (3.5.1. (a)) (makes 54.27).
3. The region reports very good performance in the field of education. Almost all rates outperform the national average. By the number of students of higher education institutions of III-IV accreditation grades per 100,000 population (4.4.2. (a)) Lviv oblast ranks 3rd following Kyiv and Kharkiv. At the same time, the Internet and software availability rate for rural schools (4.7.1, 4.7.2) is twice lower compared to national average (48.6% against 80.99% and 30.4% against 60.1%, respectively).
4. Centralized water supply and drain systems in rural areas are almost absent (6.1.5, 6.2.1). This poses particular danger in the event of significant share of polluted water discharges into water bodies in total volume of discharges (6.3.2), which exceeds the national average (21.64% against 16.38%).
5. Lviv oblast demonstrates a very low renewable electricity consumption rate (7.3.1) and high losses in power transmission (7.1.2) (0.69% against 3% and 13.34% against 11.74%, respectively).
6. As for the family issues, various trends are registered here. The number of victims of domestic violence (5.2.2. (a)) is twice as big as the national average, while the total number of orphans and children deprived of parental care (16.2.2. (a)) is twice smaller than the national average.
7. The region is one of the most forested in Ukraine (15.2.1) (31.80% against 7.6% of the national average) and possesses large wood stock (15.2.2. (a)) (7.16 thousand cubic meters per 100 ha of the region against 3.48).
8. The oblast hosts a whole lot of monuments of national and local importance, areas of the nature reserve fund (11.3.1, 11.3.2, 11.3.2-1, 11.3.3) which allow to encourage a tourism development. The number of jobs in touristic industry (11.6.1. (a)) outperforms the national average (5.63 per 10,000 employed persons against 4.92).

Table of values of indicators which measure the SDG in Lviv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	70.0	62.6	7.40	5.2.2 (a)	4.6	2.7	1.67
1.2.1 (a)	74.1	56.3	17.80	5.3.1	-	-	-
1.3.1 (a)	64.0	70.7	-6.70	5.4.2	16.7	-	-
1.3.2	57.2	53.1	4.10	5.4.3 (a)	72.8	77.1	-4.30
2.1.1 (a)	47.0	50.9	0.92	5.5.1 (a)	35.5	44.5	0.80
2.1.2 (a)	235.5	209.9	1.12	5.5.2	18.7	27.3	0.68
2.1.3 (a)	48.4	50.9	0.95	5.6.1	77.2	74.9	2.30
2.2.1	261.8	223.3	1.17	5.6.2 (a)	53.8	56.2	-2.40
2.2.2	97.1	95.2	1.90	5.6.3 (a)	71.1	71.9	-0.83
2.3.1	93.3	89.3	4.00	6.1.1 (a)	9.0	7.6	1.40
2.3.2	26.7	38.2	-11.50	6.1.2 (a)	22.0	29.6	0.74
2.3.3 (a)	3.2	2.5	0.70	6.1.3 (a)	5.5	4.6	0.90
2.4.1	141.6	141.5	0.10	6.1.4	-	90.0	-
3.1.1	0.0	15.3	0.00	6.1.5	0.0	24.2	-24.20
3.2.1	9.5	9.7	0.99	6.1.6	96.9	89.4	7.50
3.3.1	18.0	37.2	0.48	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	59.9	56.0	1.07	6.2.2	93.1	73.0	20.10
3.4.1	55.4	61.1	0.91	6.3.1	45.0	875.0	0.05
3.4.2	21.0	27.6	0.76	6.3.2	21.6	16.4	5.26
3.4.3	22.4	24.0	0.93	6.4.1	1.9	4.9	0.39
3.4.4	11.3	11.1	1.01	6.4.2	100.0	100.0	0.00
3.5.1 (a)	54.3	52.2	1.04	6.5.1	0.0	0.0	0.00
3.5.2 (a)	63.9	62.0	1.03	7.1.1	2929.0	163682.0	-
3.6.1	12.4	11.2	1.11	7.1.2	13.3	11.7	1.60
3.6.2 (a)	100.0	100.0	1.00	7.1.3	12.9	18.8	-5.94
3.7.1	-	-	-	7.3.1	0.7	3.0	-2.31
3.8.1 (a)	15.7	18.4	-2.70	7.4.1 (a)	44.1	55.2	0.80
3.9.1 (a)	6.2	29.3	-23.10	8.1.1	95.2	90.2	5.00
4.1.1 (a)	84.3	78.5	5.80	8.1.2	14.1	13.7	0.40
4.2.1	49.0	55.0	-6.00	8.1.3	30.3	19.2	11.13
4.3.1	2.0	7.6	-5.60	8.1.4 (a)	0.3	0.7	-0.40
4.4.1 (a)	437.7	321.0	1.36	8.2.1 (a)	25.4	33.1	-7.68
4.4.1-1	55.4	55.2	0.14	8.2.2 (a)	91.0	121.0	0.75
4.4.2 (a)	0.8	0.7	1.23	8.2.3 (a)	52.2	43.7	8.51
4.5.1 (a)	494.3	374.7	1.32	8.3.1 (a)	55.5	56.7	-1.20
4.5.2	44.6	48.9	-4.30	8.4.1	12.9	12.8	0.07
4.6.1	14.9	15.3	-0.40	8.5.1 (a)	10.4	25.9	0.40
4.7.1	48.6	81.0	-32.39	8.5.2	100.0	100.0	0.00
4.7.2	30.4	60.1	-29.70	8.5.3	10.4	12.7	-2.26
4.7.3	3.8	9.4	-5.60	8.6.1 (a)	23.0	25.4	-2.42
5.1.1	2.0	-	-	8.6.2 (a)	66.7	60.2	6.52
5.2.1 (a)	0.1	0.1	-0.01	8.6.3 (a)	6.4	7.6	-1.20

(continuation)

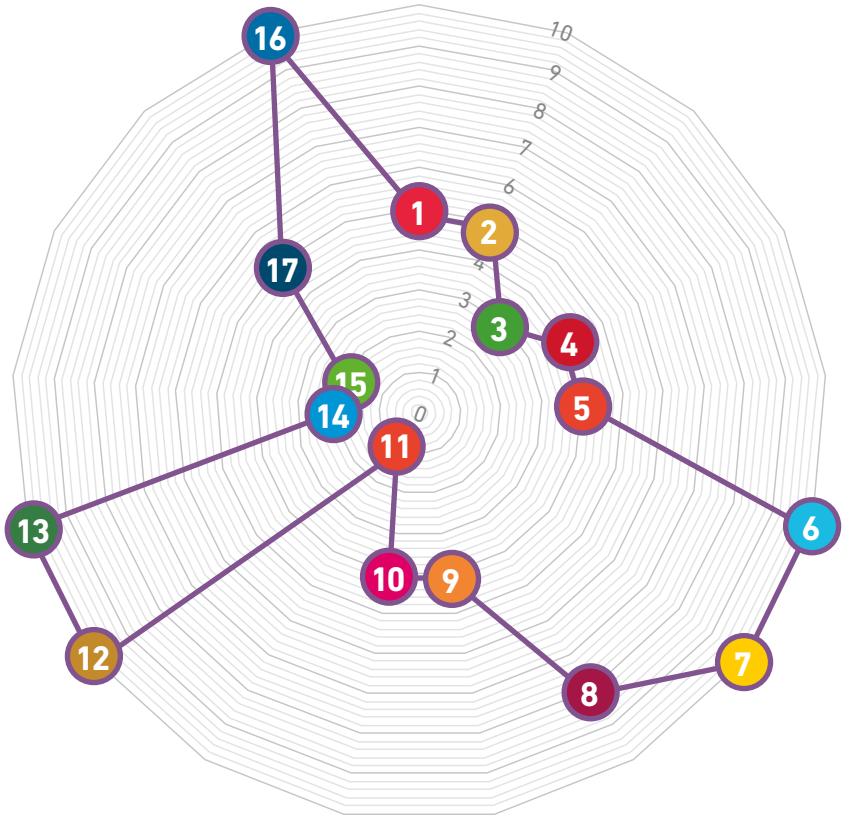
Table of values of indicators which measure the SDG in Lviv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	13.9	10.7	3.16	12.4.2	12.7	30.0	-17.30
9.1.2	24.4	1474.0	0.02	13.1.1 (a)	4.7	4.7	0.99
9.1.3 (a)	1.1	1.4	0.79	14.1.1 (a)	-	17.8	-
9.2.1 (a)	32.7	35.3	-2.58	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	97.6	97.8	-0.17	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	-	2.4	-	15.1.1	60.4	1769.1	0.03
9.4.2 (a)	2.8	10.0	-7.24	15.1.2	2.8	2.9	-0.10
9.4.3	20.4	21.0	-0.62	15.1.3	6.8	22.4	-15.60
9.5.1	0.3	0.6	-0.33	15.2.1	31.8	17.6	14.20
9.5.2	0.2	0.4	-0.20	15.2.2 (a)	7.2	3.5	2.06
9.6.1	43.1	39.0	1.11	15.3.1 (a)	25.1	25.5	0.98
9.7.1 (a)	34.3	37.4	-3.10	15.3.2	719.0	31131.0	0.02
10.1.1 (a)	3.9	4.5	-0.60	15.3.3	32.9	51.6	-18.70
10.1.2	-	15.0	-	15.3.4 (a)	9.6	441.8	0.02
10.2.1	-	9.0	-	15.3.5	443.5	7840.5	0.06
10.3.1 (a)	33.5	27.0	6.46	15.3.6	20.3	13.0	7.33
10.3.2 (a)	-	8.3	-	15.4.1	157.4	669.0	0.24
10.3.3 (a)	13.1	11.2	1.85	15.4.2	7.2	1.1	-
10.4.1	2.3	2.7	0.85	16.1.1 (a)	3.0	5.0	0.60
10.5.1	40.0	37.7	2.35	16.1.2 (a)	10.0	10.0	1.00
11.1.1 (a)	33.0	37.8	-4.82	16.1.3 (a)	1.3	1.8	0.73
11.1.2 (a)	22.8	22.9	1.00	16.2.1 (a)	1.2	0.5	2.41
11.2.1	-	0.0	-	16.2.2 (a)	100.3	199.3	0.50
11.3.1	1.0	6.0	-	16.2.3 (a)	4.3	5.3	0.82
11.3.2 (a)	1.8	1.4	1.31	16.3.1 (a)	7.0	9.0	-2.00
11.3.2-1	3.0	12.6	0.24	16.3.2 (a)	8.0	11.0	0.73
11.3.3	2.8	2.9	-0.10	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	2.9	8.4	0.35
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	96.0	556.5	0.17
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	12.3	15.0	0.82
11.5.4 (a)	9.3	7.8	1.19	16.6.1 (a)	47.0	50.0	-3.00
11.5.4-1	203.1	4521.3	0.04	16.7.1	41.0	38.0	3.00
11.6.1 (a)	5.6	4.9	1.15	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.6	2.1	-0.56	16.8.3	-	-	-
12.2.2 (a)	11.0	17.1	-6.06	16.9.1	6.2	6.7	-0.50
12.3.1 (a)	135.3	501.9	0.27	17.1.1	0.4	0.4	-0.02
12.3.1-1	8.0	220.0	0.04	17.1.2 (a)	10.9	102.5	0.11
12.3.2	-	-	-	17.3.1	4.0	97.0	0.04
12.4.1 (a)	204.5	993.7	0.21				

4.13. Mykolayiv oblast

The economy of Mykolaiv oblast is based on a combination of developed industry and agrarian sector. By GRP per capita in 2015 it ranked 7th across Ukraine (the city of Kyiv exclusive). The decline in industry (by 8.9%) has severely damaged this oblast. Despite the decline in the food industry by 9.6%, its agrarian production indicator was positive (2.2%). The decrease in exports was lower (12.8%) against national average. In 2015 Mykolaiv oblast belonged to those few oblasts demonstrating the capital investment growth (by 16.5%) owing to significant investment into transport logistics system. However, the rate of attraction of foreign direct investment is insignificant and constitutes $13.9 per capita.

SDG baseline for Mykolayiv oblast in 2015



As for the sustainable development, Mykolaiv oblast has the following features[34].

1. By wages rate this oblast ranked 5th across Ukraine (95.0% of the national average). At the same time, 91% of the population reported themselves poor (1.3.1. (a)), while 70.7% of population have money income lower than the real subsistence minimum (1.1.1. (a)). This is an outcome of significant discrepancy of salaries in high-income (industry and transport) and low-income (agrarian sector, public sector) sectors of economy. In particular, the level of wages in the agrarian sector is affected by the rate of labor productivity in agricultural enterprises (2.2.1), which is 16% lower than the national average. Consumption patterns correspond thereof and show considerably lower consumption of meat (2.1.1. (a)) (44.2 kg against 50.9 kg per year across Ukraine) and milk (2.1.2. (a)) (206.8 and 209.9 kg, respectively). Only fruit consumption rate (2.1.3. (a)) is higher, due to the peculiarities of southern region.
2. Poorly developed health care sector explains why 48.8% of respondents reported difficulties in obtaining medical aid (3.9.1. (a)). This might be one of the causes of high maternal mortality

[34] Detailed data of indicators of region are available by link

rate (3.1.1) (26.1 per 100,000 people against 15.3 across Ukraine). HIV (3.3.1) (twice as national average) and tuberculosis incidence rates (3.3.2) are also extremely high.

3. Oblast's indicators of the number of students of higher education institutions (4.4.1. (a)) are relatively high (234.5 per 10,000 population constitutes 73% of the general Ukrainian indicator) similar to the number of universities (4.4.2. (a)). The rates of computerization (4.7.2) and Internet availability in rural schools (4.7.1) outperform the national average.
4. A quarter bigger than the average number of abortions (5.5.1. (a)) together with significantly higher (by 31%) share of early births (5.5.2) draw attention. Simultaneously, reported domestic violence rate (5.2.2. (a)) is twice lower than the national average.
5. The oblast demonstrates high rates of provision of rural population with centralized water supply (6.1.5) with the share of such households acceding national average by 2.4 times across Ukraine; yet this infrastructure has been created due to the low availability of high-quality groundwater sources; in general, the rate of fresh water use (6.1.2. (a)) almost equals the national average.
6. A significant share of the less productive agricultural sector results in the lower level of GRP per 1 employed person (8.2.2. (a)) (94.5 thousand UAH at 121.0 thousand UAH across Ukraine), although the share of medium-high-tech industries is significant (9.4.2. (a)) and implies higher salaries. Only 18% of employees are engaged by SMEs (8.6.1. (a)), although the share of SMEs products constitutes 66% (8.6.2. (a)) (25 and 60%, respectively, across Ukraine). Given a significant recreational capacity, this data indicates the underdevelopment of the business infrastructure in resort areas together with significant shadowing of sector.
7. Only 1.7% of the population live farther than 3 km from paved roads (9.1.1), which is more likely to result from resettlement peculiarities, rather than the road network condition.
8. The monuments of local importance (11.3.2-1) are scarce here, considering recreational profile of area, therefore touristic capacity is hampered.
9. The peculiarities of the oblast's natural landscapes bring to much lower than average forestry rate (15.2.1) and bigger share of arable land (15.3.3) (67%). At the same time, the share of the environmental network (15.1.3) almost equals national average, which speaks for active environmental policy.
10. This oblast's reported serious crime rate is 20% higher than national average (16.1.1. (a)), rates of crime against sexual freedom and integrity (16.1.3. (a)) and illegal use of weapons (16.5.3. (a)) are 30% higher than national average. The effectiveness of combating crime can be described by the relatively high rate of trust in the judiciary (16.3.1. (a)) (17% of businessmen trusted judiciary against 9% across Ukraine).
11. The significant development of public-private partnership (17.3.1) is noteworthy, as the oblast accounts for 30% of all projects registered in Ukraine.

Table of values of indicators which measure the SDG in Mykolayiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	70.7	62.6	8.10	5.2.2 (a)	1.3	2.7	0.47
1.2.1 (a)	96.3	56.3	40.00	5.3.1	-	-	-
1.3.1 (a)	91.0	70.7	20.30	5.4.2	15.6	-	-
1.3.2	52.8	53.1	-0.30	5.4.3 (a)	80.2	77.1	3.10
2.1.1 (a)	44.2	50.9	0.87	5.5.1 (a)	55.9	44.5	1.26
2.1.2 (a)	206.8	209.9	0.99	5.5.2	35.8	27.3	1.31
2.1.3 (a)	51.1	50.9	1.00	5.6.1	69.7	74.9	-5.20
2.2.1	192.0	223.3	0.86	5.6.2 (a)	57.7	56.2	1.50
2.2.2	102.1	95.2	6.90	5.6.3 (a)	76.9	71.9	5.00
2.3.1	90.4	89.3	1.10	6.1.1 (a)	7.8	7.6	0.20
2.3.2	59.8	38.2	21.60	6.1.2 (a)	26.7	29.6	0.90
2.3.3 (a)	0.5	2.5	-2.00	6.1.3 (a)	3.8	4.6	-0.80
2.4.1	142.4	141.5	0.90	6.1.4	-	90.0	-
3.1.1	26.1	15.3	1.71	6.1.5	57.0	24.2	32.80
3.2.1	8.6	9.7	0.89	6.1.6	100.0	89.4	10.60
3.3.1	74.4	37.2	2.00	6.2.1 (a)	3.0	4.1	-1.10
3.3.2	69.2	56.0	1.24	6.2.2	100.0	73.0	27.00
3.4.1	61.3	61.1	1.00	6.3.1	0.0	875.0	0.00
3.4.2	28.1	27.6	1.02	6.3.2	0.0	16.4	-16.38
3.4.3	27.7	24.0	1.15	6.4.1	4.8	4.9	0.99
3.4.4	11.6	11.1	1.04	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.1	52.2	0.98	6.5.1	0.0	0.0	0.00
3.5.2 (a)	60.9	62.0	0.98	7.1.1	16527.0	163682.0	-
3.6.1	10.8	11.2	0.96	7.1.2	13.6	11.7	1.82
3.6.2 (a)	100.0	100.0	1.00	7.1.3	14.5	18.8	-4.35
3.7.1	-	-	-	7.3.1	2.4	3.0	-0.64
3.8.1 (a)	20.6	18.4	2.20	7.4.1 (a)	33.8	55.2	0.61
3.9.1 (a)	48.8	29.3	19.50	8.1.1	95.3	90.2	5.10
4.1.1 (a)	83.0	78.5	4.50	8.1.2	12.4	13.7	-1.31
4.2.1	68.0	55.0	13.00	8.1.3	37.0	19.2	17.77
4.3.1	13.3	7.6	5.70	8.1.4 (a)	0.6	0.7	-0.09
4.4.1 (a)	234.5	321.0	0.73	8.2.1 (a)	32.4	33.1	-0.68
4.4.1-1	49.8	55.2	-5.38	8.2.2 (a)	94.5	121.0	0.78
4.4.2 (a)	0.4	0.7	0.64	8.2.3 (a)	57.2	43.7	13.45
4.5.1 (a)	285.8	374.7	0.76	8.3.1 (a)	58.4	56.7	1.70
4.5.2	56.8	48.9	7.90	8.4.1	7.7	12.8	-5.10
4.6.1	14.0	15.3	-1.30	8.5.1 (a)	44.0	25.9	1.70
4.7.1	91.1	81.0	10.11	8.5.2	100.0	100.0	0.00
4.7.2	91.0	60.1	30.90	8.5.3	10.3	12.7	-2.39
4.7.3	3.0	9.4	-6.40	8.6.1 (a)	18.2	25.4	-7.27
5.1.1	0.0	-	-	8.6.2 (a)	66.2	60.2	6.00
5.2.1 (a)	0.1	0.1	0.03	8.6.3 (a)	23.4	7.6	15.80

(continuation)

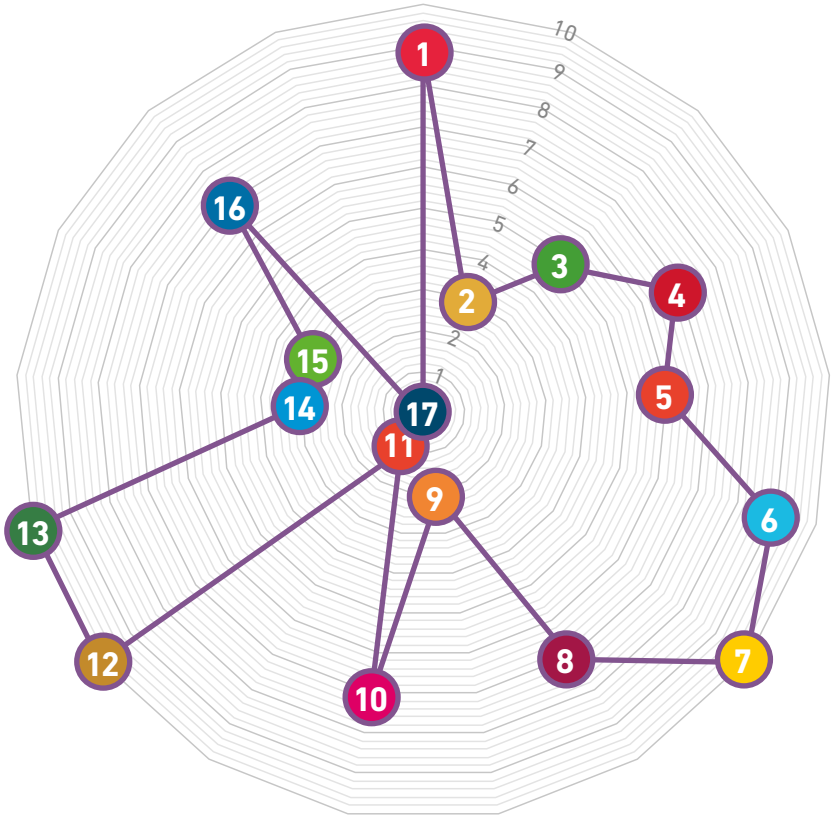
Table of values of indicators which measure the SDG in Mykolayiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	1.7	10.7	-9.04	12.4.2	4.4	30.0	-25.60
9.1.2	25.2	1474.0	0.02	13.1.1 (a)	0.6	4.7	0.14
9.1.3 (a)	1.2	1.4	0.85	14.1.1 (a)	27.2	17.8	9.37
9.2.1 (a)	38.0	35.3	2.70	14.2.1	0.0	0.0	0.00
9.3.1	-	0.0	-	14.2.2	1.9	4.3	-2.36
9.3.2 (a)	100.0	97.8	2.21	14.2.3	127.9	585.6	0.22
9.3.3	-	15.0	-	14.3.1 (a)	0.8	4.1	0.19
9.4.1 (a)	0.3	2.4	-2.14	15.1.1	45.8	1769.1	0.03
9.4.2 (a)	14.0	10.0	4.01	15.1.2	1.9	2.9	-1.00
9.4.3	31.0	21.0	9.96	15.1.3	18.2	22.4	-4.20
9.5.1	0.6	0.6	0.00	15.2.1	5.1	17.6	-12.50
9.5.2	0.0	0.4	-0.40	15.2.2 (a)	1.0	3.5	0.28
9.6.1	43.6	39.0	1.12	15.3.1 (a)	8.8	25.5	0.34
9.7.1 (a)	32.9	37.4	-4.50	15.3.2	1646.8	31131.0	0.05
10.1.1 (a)	4.4	4.5	-0.10	15.3.3	67.0	51.6	15.40
10.1.2	-	15.0	-	15.3.4 (a)	4.5	441.8	0.01
10.2.1	-	9.0	-	15.3.5	268.0	7840.5	0.03
10.3.1 (a)	33.4	27.0	6.45	15.3.6	10.9	13.0	-2.09
10.3.2 (a)	9.3	8.3	0.92	15.4.1	-	669.0	-
10.3.3 (a)	10.3	11.2	-0.95	15.4.2	-	1.1	-
10.4.1	2.5	2.7	0.93	16.1.1 (a)	6.0	5.0	1.20
10.5.1	37.7	37.7	0.01	16.1.2 (a)	12.0	10.0	1.20
11.1.1 (a)	35.4	37.8	-2.39	16.1.3 (a)	2.4	1.8	1.31
11.1.2 (a)	22.3	22.9	0.97	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	294.4	199.3	1.48
11.3.1	-	6.0	-	16.2.3 (a)	0.9	5.3	0.16
11.3.2 (a)	1.2	1.4	0.90	16.3.1 (a)	17.0	9.0	8.00
11.3.2-1	0.1	12.6	0.01	16.3.2 (a)	17.0	11.0	1.55
11.3.3	1.9	2.9	-1.00	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	14.0	8.4	1.67
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	819.4	556.5	1.47
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	19.5	15.0	1.30
11.5.4 (a)	2.6	7.8	0.33	16.6.1 (a)	47.0	50.0	-3.00
11.5.4-1	63.5	4521.3	0.01	16.7.1	38.0	38.0	0.00
11.6.1 (a)	1.2	4.9	0.24	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.8	2.1	-0.34	16.8.3	-	-	-
12.2.2 (a)	6.2	17.1	-10.85	16.9.1	7.6	6.7	0.90
12.3.1 (a)	93.8	501.9	0.19	17.1.1	0.4	0.4	-0.04
12.3.1-1	12.0	220.0	0.05	17.1.2 (a)	13.9	102.5	0.14
12.3.2	-	-	-	17.3.1	17.0	97.0	0.18
12.4.1 (a)	328.9	993.7	0.33				

4.14. Odesa oblast

In 2015 Odesa oblast ranked 6th by GRP per capita (the city of Kyiv exclusive). Territorially it is the largest oblast in Ukraine, washed by the Black Sea in the south and south-east, featured as an international logistic, touristic and recreation center in the south of Ukraine, and has a developed services industry. The production of food products, chemicals and chemical products and machine building are the main types of economic activity forming the structure of industrial production. Relatively high baseline indicators for the oblast are registered within Goals 2, 4, 6, 7, 8, 10, 12 and 13. Goals 1, 3, 5, 9, 14, 15 and 17 require additional attention to be paid and relevant measures to be taken, due to the lower sustainable development indicators in the base period. compared to other oblasts.

SDG baseline for Odesa oblast in 2015



As for the sustainable development, Odesa oblast has the following features[35].

1. The share of food expenditure in total household expenses (1.3.2) accedes the national average (57.5% against 53.9%). Accordingly, the population predominantly feels poor, 83.4% of respondents (1.3.1. (a)) share this opinion. In addition, 19.6% of households report themselves as suffering from any kind of inability of any member of the household to get vocational training (4.3.1).
2. The oblast has a comparatively low rate of labor productivity in agricultural enterprises (2.2.1) constituting 160.2 against 223.3 thousand UAH per 1 employed in agricultural production across Ukraine and small area under organic amendment (2.3.3 and 15.3.4). Oblast possesses of high capacity for the production of higher value-added products with higher productivity rates in the oblast, owing to the share of agricultural land in the total area of the region constituting 79.8%, to the high rates of production of agricultural (2.2.2) and food products (2.3.1), to the big share of food products and processing of agricultural raw materials in exports (2.3.2) and to the low rates of post-harvest losses (12.2.1 and 12.2.2).

[35] Detailed data of indicators of region are available by link

3. As for the health care system, special attention should be paid to threateningly high HIV incidence rates (3.3.1), which is three times higher than the national average, as well as to tuberculosis incidence rates (3.3.2), which is twice as national average. In addition, the oblast reports the lowest average expected lifespan of women in Ukraine (3.5.2) which is 1.5 years less than the national average, as well as high maternity mortality and infant mortality among children under 5 (3.1.1 and 3.2.1), and mortality from cerebrovascular diseases in men (3.4.1).
4. The oblast's educational system has relatively high rates within Goal 4 indicators. At the same time, attention should be paid to gender equality among teachers (4.6.1), as well as to the inclusive education (4.7.3), ensuring Internet (4.7 .1) and software (4.7.2) in rural secondary schools, encouraging young scientists to teach in the oblast's universities (9.7.1. (a)).
5. Gender challenges should also be addressed, in particular high level of female victims of sexual violence (5.2.1. (a)), reduction of abortion (5.5.1. (a)), amendment of local acts aimed at ensuring equal rights and opportunities for women and men (5.1.1), fostering wider representation of women in local councils (5.4.2) compared to baseline indicator of only 8.3%. In addition, there is a high level of crime against sexual freedom and integrity (16.1.3. (a)), which is 6.3 times higher than the national average. The development of women's employment and entrepreneurship of high capacity should be encouraged more actively. Thus, the ratio of wages of women and men in the oblast (5.6.1) is 1.5% higher than the national average in Ukraine and amounts to 76.4%, while the employment rate of women is 10.4% lower (5.6.2. (a)), with the level of economic activity (5.6.2. (a)) constituting 4.4% lower than the national average.
6. The oblast reports satisfactory environmental condition, yet environmental issues should be given the highest priority due to the high nature and recreation capacity. The oblast keeps high share of discharges of wastewater in surface water (14.1.1. (a)) which is 5.91% higher than average across coastal regions. Share of forested area of the oblast (15.2.1) is 10.9% below national average, and the total area of nature reserve funds (14.2.2 and 15.1.2) is 1.3% less than the national average. At the same time, insufficient funds are allocated for the protection and rehabilitation of soil, underground and surface waters (15.3.1. (a)), namely, almost 10 times less than at average across Ukraine per 1 ha of area. The small share of incinerated and recycled waste in the total volume of generated waste (12.4.2) requires relevant actions to be taken, due to the indicator's reading of only 4.7% against 30% of the national average.
7. With relatively low rate of energy intensity of GRP (7.4.1. (a)), which is one and half times lower than the national average, and high rate of renewable energy generation (7.3.1) which is 2.1% higher than the national average, little attention is paid to fostering production development and innovation. In particular, the oblast shows very low indicators as follows: share on innovation costs in GRP constituting 0.05% (8.1.4. (a)), expenditure on scientific and technical work in GRP constituting 0.2% (9.5.1), share of products new for the market constituting 0.04% of the total volume (9.5.2) and high-tech production (9.4.1. (a)).
8. The ratio of capital investment to GRP is only 10% (8.1.2), the share of FDI per capita (51.8 dollars (17.1.2. (a)) is two times less than the national average (17.1.2. (a)). To foster investment the local authorities should focus on roads improvement (9.3.2. (a)), on promotion of local autorities' interaction with business (16.6.1 and 16.3.1), as well on boosting the public-private partnerships in oblast (17.3.1).

Table of values of indicators which measure the SDG in Odesa oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	55.3	62.6	-7.30	5.2.2 (a)	3.2	2.7	1.17
1.2.1 (a)	94.5	56.3	38.20	5.3.1	-	-	-
1.3.1 (a)	83.4	70.7	12.70	5.4.2	8.3	-	-
1.3.2	57.5	53.1	4.40	5.4.3 (a)	77.7	77.1	0.60
2.1.1 (a)	48.0	50.9	0.94	5.5.1 (a)	49.4	44.5	1.11
2.1.2 (a)	194.5	209.9	0.93	5.5.2	30.0	27.3	1.10
2.1.3 (a)	60.2	50.9	1.18	5.6.1	76.4	74.9	1.50
2.2.1	160.2	223.3	0.72	5.6.2 (a)	51.8	56.2	-4.40
2.2.2	96.2	95.2	1.00	5.6.3 (a)	61.5	71.9	-10.40
2.3.1	100.1	89.3	10.80	6.1.1 (a)	8.9	7.6	1.30
2.3.2	60.1	38.2	21.90	6.1.2 (a)	35.0	29.6	1.18
2.3.3 (a)	0.3	2.5	-2.20	6.1.3 (a)	7.0	4.6	2.40
2.4.1	142.9	141.5	1.40	6.1.4	-	90.0	-
3.1.1	29.2	15.3	1.91	6.1.5	35.4	24.2	11.20
3.2.1	10.1	9.7	1.04	6.1.6	95.3	89.4	5.90
3.3.1	100.1	37.2	2.69	6.2.1 (a)	19.0	4.1	14.90
3.3.2	102.7	56.0	1.83	6.2.2	85.0	73.0	12.01
3.4.1	73.2	61.1	1.20	6.3.1	44.0	875.0	0.05
3.4.2	38.1	27.6	1.38	6.3.2	25.0	16.4	8.62
3.4.3	29.3	24.0	1.22	6.4.1	7.6	4.9	1.56
3.4.4	14.8	11.1	1.33	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.8	52.2	0.99	6.5.1	0.0	0.0	0.00
3.5.2 (a)	60.5	62.0	0.98	7.1.1	464.0	163682.0	-
3.6.1	11.4	11.2	1.02	7.1.2	13.8	11.7	2.07
3.6.2 (a)	100.0	100.0	1.00	7.1.3	-	18.8	-
3.7.1	-	-	-	7.3.1	84.9	3.0	81.90
3.8.1 (a)	18.2	18.4	-0.20	7.4.1 (a)	36.1	55.2	0.65
3.9.1 (a)	14.3	29.3	-15.00	8.1.1	95.8	90.2	5.60
4.1.1 (a)	87.2	78.5	8.70	8.1.2	10.0	13.7	-3.73
4.2.1	54.0	55.0	-1.00	8.1.3	33.0	19.2	13.80
4.3.1	19.6	7.6	12.00	8.1.4 (a)	0.0	0.7	-0.64
4.4.1 (a)	409.0	321.0	1.27	8.2.1 (a)	34.8	33.1	1.66
4.4.1-1	54.1	55.2	-1.11	8.2.2 (a)	98.2	121.0	0.81
4.4.2 (a)	0.9	0.7	1.31	8.2.3 (a)	51.1	43.7	7.34
4.5.1 (a)	469.9	374.7	1.25	8.3.1 (a)	57.3	56.7	0.60
4.5.2	45.4	48.9	-3.50	8.4.1	3.1	12.8	-9.73
4.6.1	11.0	15.3	-4.30	8.5.1 (a)	6.5	25.9	0.25
4.7.1	71.0	81.0	-9.99	8.5.2	100.0	100.0	0.00
4.7.2	49.0	60.1	-11.10	8.5.3	9.0	12.7	-3.72
4.7.3	4.7	9.4	-4.70	8.6.1 (a)	23.1	25.4	-2.31
5.1.1	0.0	-	-	8.6.2 (a)	76.0	60.2	15.78
5.2.1 (a)	0.1	0.1	0.07	8.6.3 (a)	12.3	7.6	4.70

(continuation)

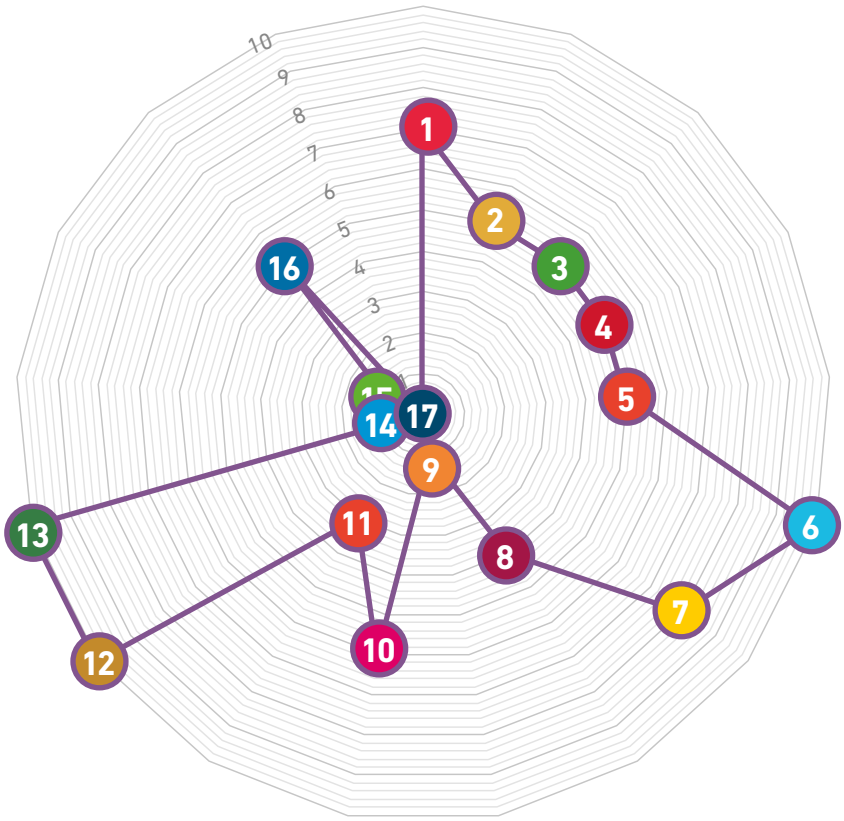
Table of values of indicators which measure the SDG in Odesa oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	-	10.7	-	12.4.2	4.7	30.0	-25.30
9.1.2	54.0	1474.0	0.04	13.1.1 (a)	0.8	4.7	0.17
9.1.3 (a)	6.5	1.4	4.64	14.1.1 (a)	23.7	17.8	5.91
9.2.1 (a)	51.8	35.3	16.56	14.2.1	0.0	0.0	0.00
9.3.1	-	0.0	-	14.2.2	3.0	4.3	-1.26
9.3.2 (a)	97.6	97.8	-0.20	14.2.3	115.8	585.6	0.20
9.3.3	-	15.0	-	14.3.1 (a)	6.7	4.1	1.62
9.4.1 (a)	1.8	2.4	-0.61	15.1.1	100.7	1769.1	0.06
9.4.2 (a)	26.5	10.0	16.47	15.1.2	3.0	2.9	0.10
9.4.3	18.1	21.0	-2.96	15.1.3	28.4	22.4	6.00
9.5.1	0.2	0.6	-0.41	15.2.1	6.7	17.6	-10.90
9.5.2	0.4	0.4	0.00	15.2.2 (a)	0.5	3.5	0.14
9.6.1	94.7	39.0	2.43	15.3.1 (a)	2.5	25.5	0.10
9.7.1 (a)	33.9	37.4	-3.50	15.3.2	1961.8	31131.0	0.06
10.1.1 (a)	3.4	4.5	-1.10	15.3.3	58.9	51.6	7.30
10.1.2	-	15.0	-	15.3.4 (a)	3.5	441.8	0.01
10.2.1	-	9.0	-	15.3.5	402.5	7840.5	0.05
10.3.1 (a)	-	27.0	-	15.3.6	12.1	13.0	-0.91
10.3.2 (a)	-	8.3	-	15.4.1	-	669.0	-
10.3.3 (a)	-	11.2	-	15.4.2	-	1.1	-
10.4.1	3.4	2.7	1.26	16.1.1 (a)	6.0	5.0	1.20
10.5.1	39.2	37.7	1.53	16.1.2 (a)	10.0	10.0	1.00
11.1.1 (a)	57.3	37.8	19.41	16.1.3 (a)	11.6	1.8	6.33
11.1.2 (a)	22.5	22.9	0.98	16.2.1 (a)	9.4	0.5	19.16
11.2.1	-	0.0	-	16.2.2 (a)	1092.1	199.3	5.48
11.3.1	-	6.0	-	16.2.3 (a)	39.4	5.3	7.43
11.3.2 (a)	0.8	1.4	0.57	16.3.1 (a)	14.0	9.0	5.00
11.3.2-1	30.7	12.6	2.44	16.3.2 (a)	15.0	11.0	1.36
11.3.3	3.0	2.9	0.10	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	25.5	8.4	3.04
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	4008.5	556.5	7.20
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	41.5	15.0	2.77
11.5.4 (a)	3.9	7.8	0.50	16.6.1 (a)	45.0	50.0	-5.00
11.5.4-1	129.7	4521.3	0.03	16.7.1	32.0	38.0	-6.00
11.6.1 (a)	5.8	4.9	1.19	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.8	2.1	-0.30	16.8.3	-	-	-
12.2.2 (a)	8.6	17.1	-8.46	16.9.1	6.5	6.7	-0.20
12.3.1 (a)	18.1	501.9	0.04	17.1.1	0.4	0.4	-0.02
12.3.1-1	14.0	220.0	0.06	17.1.2 (a)	51.8	102.5	0.51
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	40.6	993.7	0.04				

4.15. Poltava oblast

Poltava oblast belongs to a group of highly industrialized oblasts with a developed agricultural business. In 2015 it ranked 2nd by GRP per capita (the city of Kyiv exclusive). By volume of industrial production per capita, it ranked 3rd nationally, next to Dnipropetrovsk and Zaporizhzhia oblasts. The industry of Poltava oblast is represented by a wide spectrum of branches from mineral extraction to high-tech globally competitive products. Oil and gas extraction together with oil refining industries contribute oblast's economy greatly. The cities of Kremenchuk and Poltava are its industrial forefronts. Relatively high baseline indicators of the oblast are registered within Goals 1, 2, 3, 7, 10 and 13. Due to lower sustainable development indicators in baseline period, Goals 4, 5, 6, 11, 16 and 17 require additional attention to be paid and relevant measures to be taken. Given data incompleteness and both positive and negative trends in individual indicators, it is difficult to label the rest of the goals explicitly.

SDG baseline for Poltava oblast in 2015



As for sustainable development, Poltava oblast has the following features[36].

1. In the baseline 2015 the level of GRP per one employed person (8.2.2.) outperformed the average across Ukraine and created conditions for reaching relatively high level of income of oblast's population and local budget revenues. This influenced positively all SDGs relating to social soundness. In particular, the oblast has relatively high indicators for the achievement of Goal 1. Thus, the share of the population whose average per capita equivalent money total income is lower than the actual minimum subsistence level (1.1.1. (a)) in the oblast constituted 63,9% with an average of 62.6% across Ukraine. Those oblast's citizen who report themselves as distressed are one hundred percent covered with social care services. And the share of households which report themselves poor while assessing their material well-being (1.3.1.) is only 49.9%, with an average of 70.7% in the country.
2. Such welfare figures are also confirmed by Goal 2 indicators, in particular, by regarding of

[36] Detailed data of indicators of region are available by link

the consumption of basic food products by the population. Consumption of meat and processed meat per capita (2.1.1.) in the oblast is at the average Ukrainian level, and consumption of milk and dairy products (2.1.2.) and fruits, berries and grapes (2.1.3.) is higher than the average Ukrainian rate. This food consumption rate is ensured by the relatively good developed agricultural production and food industry, as registered in the baseline year and gained momentum in subsequent years.

3. The oblast has created a relatively effective health care system: in baseline year it outperformed the average Ukrainian rates of health care system development and health conditions of population according to data on maternal and infant mortality and the vulnerability of the population to dangerous infectious diseases (3.1. 1. -3.3.2.). At the same time, mortality from cerebrovascular diseases and malignant neoplasms in women (3.4.1.-3.4.4.) remained high, which negatively affected the average expected lifespan in the oblast (3.5.1.-3.5.2.).
4. Against the backdrop of significant efforts made to combat poverty, the oblast demonstrates progress in achieving equality (Goal 10). Indicators of the income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income (10.1.1.) and the share of population with monthly per capita parity income lower than subsistence minimum in total population (1.1.1.) outperformed national average in the baseline year. The same applies to Indicator 10.5.1. 'Ratio of average pension to average wage', which amounted to 40.7% against national average constituting 37.7%.
5. As for some relatively negative trends revealed in the baseline period, attention should be paid to Goals associated with education, science, innovation and security. As for Goal 4 in the baseline period, the oblast overrode average rate in covering children with the pre-school and secondary schooling (4.1.1.-4.1.2.), but lagged behind its neighboring industrialized oblasts by the higher education rates. To a certain extent, this is due to the accessibility of university and scientific centers like Kyiv, Kharkiv, and Dnipropetrovsk for the oblast's residents both in terms of distance and transport connection. Ensuring schools with access to the Internet and computer training programs is yet another necessary measure to be taken.
6. Higher education and educational innovations bottlenecks influenced science and innovation fields, to a certain extent. For example, a share on innovation costs in GRP (8.1.4.) constituted only 0.13% against the national average reading of 0.69. Accordingly, a share of sales of innovative products which is new for the market in industrial scope (9.5.2.) is twice smaller than the average, and a share of expenditure on scientific and technical work in GRP (9.5.1.) is only 0.04% against the national average of 0.61. Population coverage with Internet services (subscribers per 100 persons) (9.6.1.) was reported to be significantly below the average and constituted 27% against 39% across Ukraine.
7. Despite the significant industrial burden on the oblast's environment, the volume of emissions of air pollutants from stationary sources (13.1.1.) is noteworthy 2.5 times smaller than the average indicator. In general, in the baseline year, no environmentally threatening reading was recorded within selected indicators for this oblast.
8. The more complicated picture was shown in combating violence and in the rate of confidence with state and local authorities, described by indicators of Goal 16. In particular, the level of satisfaction of the population and entrepreneurs with the services of local authorities dropped below the national.

Table of values of indicators which measure the SDG in Poltava oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	63.9	62.6	1.30	5.2.2 (a)	2.6	2.7	0.96
1.2.1 (a)	100.0	56.3	43.70	5.3.1	-	-	-
1.3.1 (a)	49.9	70.7	-20.80	5.4.2	11.9	-	-
1.3.2	50.0	53.1	-3.10	5.4.3 (a)	76.9	77.1	-0.20
2.1.1 (a)	49.6	50.9	0.97	5.5.1 (a)	53.6	44.5	1.20
2.1.2 (a)	223.6	209.9	1.07	5.5.2	26.0	27.3	0.95
2.1.3 (a)	52.6	50.9	1.03	5.6.1	72.2	74.9	-2.70
2.2.1	209.8	223.3	0.94	5.6.2 (a)	55.8	56.2	-0.40
2.2.2	107.3	95.2	12.10	5.6.3 (a)	49.2	71.9	-22.70
2.3.1	96.7	89.3	7.40	6.1.1 (a)	32.9	7.6	25.30
2.3.2	22.4	38.2	-15.80	6.1.2 (a)	34.3	29.6	1.16
2.3.3 (a)	5.7	2.5	3.20	6.1.3 (a)	3.0	4.6	-1.60
2.4.1	141.7	141.5	0.20	6.1.4	-	90.0	-
3.1.1	14.8	15.3	0.97	6.1.5	33.8	24.2	9.64
3.2.1	7.4	9.7	0.77	6.1.6	82.2	89.4	-7.23
3.3.1	31.3	37.2	0.84	6.2.1 (a)	7.0	4.1	2.90
3.3.2	54.9	56.0	0.98	6.2.2	65.9	73.0	-7.10
3.4.1	74.4	61.1	1.22	6.3.1	0.0	875.0	0.00
3.4.2	37.4	27.6	1.36	6.3.2	0.0	16.4	-16.38
3.4.3	28.0	24.0	1.17	6.4.1	1.3	4.9	0.26
3.4.4	16.9	11.1	1.52	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.8	52.2	0.99	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.8	62.0	1.00	7.1.1	849.0	163682.0	-
3.6.1	14.3	11.2	1.27	7.1.2	8.4	11.7	-3.39
3.6.2 (a)	100.0	100.0	1.00	7.1.3	-	18.8	-
3.7.1	-	-	-	7.3.1	11.0	3.0	8.02
3.8.1 (a)	22.2	18.4	3.80	7.4.1 (a)	70.1	55.2	1.27
3.9.1 (a)	16.1	29.3	-13.20	8.1.1	93.8	90.2	3.60
4.1.1 (a)	85.2	78.5	6.70	8.1.2	8.7	13.7	-5.04
4.2.1	69.0	55.0	14.00	8.1.3	-	19.2	-
4.3.1	0.7	7.6	-6.90	8.1.4 (a)	0.1	0.7	-0.56
4.4.1 (a)	290.5	321.0	0.91	8.2.1 (a)	36.8	33.1	3.74
4.4.1-1	54.1	55.2	-1.16	8.2.2 (a)	165.3	121.0	1.37
4.4.2 (a)	0.5	0.7	0.72	8.2.3 (a)	57.4	43.7	13.65
4.5.1 (a)	343.0	374.7	0.92	8.3.1 (a)	54.2	56.7	-2.50
4.5.2	46.9	48.9	-2.00	8.4.1	-	12.8	-
4.6.1	17.7	15.3	2.40	8.5.1 (a)	21.4	25.9	0.83
4.7.1	70.5	81.0	-10.49	8.5.2	100.0	100.0	0.00
4.7.2	70.7	60.1	10.60	8.5.3	16.9	12.7	4.25
4.7.3	11.5	9.4	2.13	8.6.1 (a)	27.4	25.4	2.00
5.1.1	1.0	-	-	8.6.2 (a)	55.3	60.2	-4.88
5.2.1 (a)	0.1	0.1	-0.01	8.6.3 (a)	4.1	7.6	-3.50

(continuation)

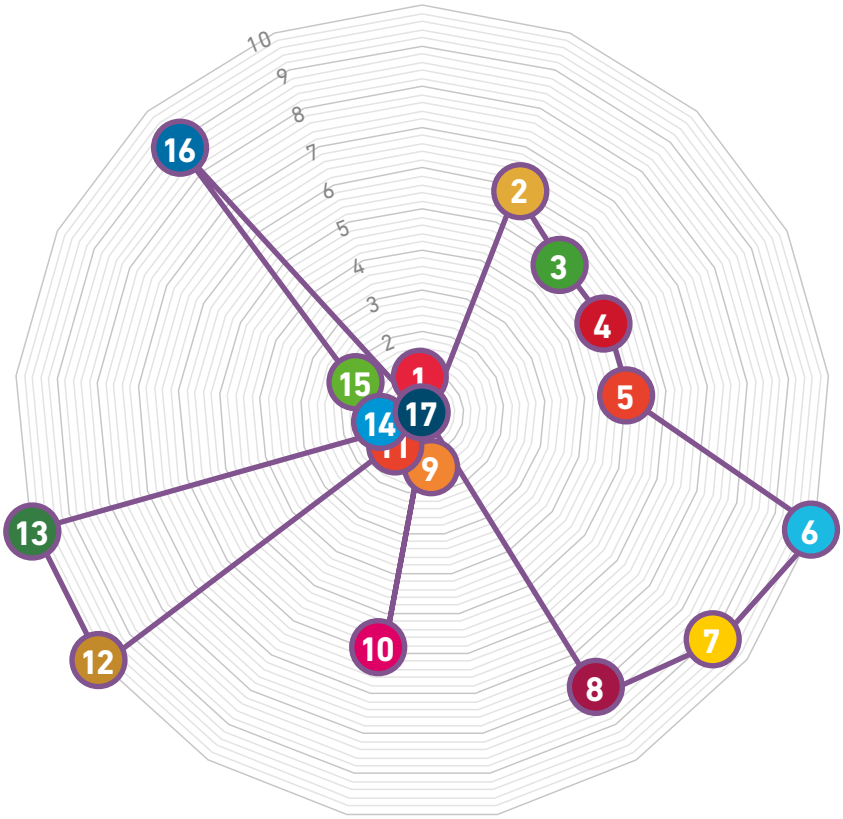
Table of values of indicators which measure the SDG in Poltava oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	-	10.7	-	12.4.2	70.0	30.0	40.00
9.1.2	21.9	1474.0	0.01	13.1.1 (a)	1.9	4.7	0.41
9.1.3 (a)	0.8	1.4	0.54	14.1.1 (a)	-	17.8	-
9.2.1 (a)	89.6	35.3	54.31	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.2	2.4	-2.22	15.1.1	22.8	1769.1	0.01
9.4.2 (a)	3.4	10.0	-6.56	15.1.2	0.8	2.9	-2.10
9.4.3	27.3	21.0	6.30	15.1.3	-	22.4	-
9.5.1	0.0	0.6	-0.57	15.2.1	9.9	17.6	-7.70
9.5.2	0.2	0.4	-0.20	15.2.2 (a)	1.8	3.5	0.53
9.6.1	27.0	39.0	0.69	15.3.1 (a)	5.0	25.5	0.20
9.7.1 (a)	46.3	37.4	8.90	15.3.2	1713.1	31131.0	0.06
10.1.1 (a)	3.9	4.5	-0.60	15.3.3	59.6	51.6	8.00
10.1.2	-	15.0	-	15.3.4 (a)	70.8	441.8	0.16
10.2.1	-	9.0	-	15.3.5	359.6	7840.5	0.05
10.3.1 (a)	-	27.0	-	15.3.6	12.5	13.0	-0.48
10.3.2 (a)	-	8.3	-	15.4.1	-	669.0	-
10.3.3 (a)	-	11.2	-	15.4.2	-	1.1	-
10.4.1	2.7	2.7	1.00	16.1.1 (a)	5.0	5.0	1.00
10.5.1	40.7	37.7	3.00	16.1.2 (a)	12.0	10.0	1.20
11.1.1 (a)	28.1	37.8	-9.70	16.1.3 (a)	0.0	1.8	0.00
11.1.2 (a)	25.4	22.9	1.11	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	162.9	199.3	0.82
11.3.1	-	6.0	-	16.2.3 (a)	13.2	5.3	2.48
11.3.2 (a)	1.1	1.4	0.82	16.3.1 (a)	8.0	9.0	-1.00
11.3.2-1	5.9	12.6	0.47	16.3.2 (a)	18.0	11.0	1.64
11.3.3	0.8	2.9	-2.10	16.4.1 (a)	100.0	12.0	88.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	0.0	8.4	0.00
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	0.0	556.5	0.00
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	16.6	15.0	1.11
11.5.4 (a)	4.9	7.8	0.63	16.6.1 (a)	47.0	50.0	-3.00
11.5.4-1	141.0	4521.3	0.03	16.7.1	29.0	38.0	-9.00
11.6.1 (a)	0.7	4.9	0.14	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.2	2.1	0.05	16.8.3	-	-	-
12.2.2 (a)	24.1	17.1	7.05	16.9.1	6.5	6.7	-0.20
12.3.1 (a)	154.1	501.9	0.31	17.1.1	0.3	0.4	-0.06
12.3.1-1	8.0	220.0	0.04	17.1.2 (a)	16.3	102.5	0.16
12.3.2	-	-	-	17.3.1	34.0	97.0	0.35
12.4.1 (a)	320.5	993.7	0.32				

4.16. Rivne oblast

By the majority of social and economic development indicators Rivne oblast sits in the middle of the list of Ukrainian regions. Owing to a well-diversified structure of its economy, this oblast dodged that deep fall in GRP (8.1.1) which affected many oblasts and the country in whole (93.4% against 90.20%), although by the rate of GDP per 1 employed person (8.2.2. (a)) it ranks bottom positions (72.24 thousand UAH against 120.96 national average). Investment attractiveness of the oblast is very low, with one of the lowest in Ukraine ($4.79) rate of direct foreign investment per capita (17.1.2. (a)). The share of bank lending in the structure of capital investment (8.6.3. (a)) is three times smaller than the average Ukrainian indicator (2.7% against 7.6%). The domestic production is of low added value, the share of intermediate consumption in sales (8.2.3. (a)) is twice as national average (88.46% against 43.73%). Relatively high baseline indicators for the oblast are registered within Goals 5, 7, 12 and 13. Goals 8, 9, 11, 16 and 17 require additional attention to be paid and appropriate measures to be taken, due to the lower sustainable development indicators in the baseline period, compared to other oblasts.

SDG baseline for Rivne oblast in 2015



As for the sustainable development, Rivne oblast has the following features[37].

1. The oblast is one of the poorest in Ukraine. The share of people with money incomes below the actual subsistence minimum (1.1.1. (a)) constitutes 85.0% against 62.6% national average. At the same time, the perception of the quality of life by the population (1.3.1. (a)) is much better: only 56.8% of households report themselves poor compared to 70.7% on average across Ukraine. The share of population reporting distressed (1.2.1. (a)) is much bigger than the national average (85.73% against 56.3%). Poverty is also reflected in the structure of food expenditures: meat consumption (2.1.1. (a)), fruits and berries consumption (2.1.3. (a)) per capita is lower than the national average U (46.1 kg against 50.5 kg, and 40.6 kg against 50.9 kg, respectively).

[37] Detailed data of indicators of region are available by link

2. Although the rates of almost all forms of morbidity and mortality (3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.4.3, 3.4.4) are close to the national average, there is a negative trend in maternal mortality. The number of maternal mortality cases per 100,000 live births (3.1.1) is twice as national average (37.27 against 15.3). The number of abortions per 10,000 women (5.5.1. (a)) is almost twice less than the national average (24.09 against 44.53). Health care services and medicines are mostly easily accessible (3.9.1. (a)).
3. Educational services offer of the higher education institutions of III-IV accreditation grades is insufficient: the number of students per 10,000 population (4.5.1. (a)) is 1.5 times less than the national average (245.70 against 320.96), similar to the number of universities per 100,000 population (4.4.2. (a)) (0.43 against 0.67). Again, even the existing universities have problems with the academic staff availability: the share of teaching and scientific staff having a scientific degree (4.4.1-1) is significantly smaller than the national average (41.82% against 55.22%). Secondary school indicators show much better picture owing to complete coverage of schools, rural inclusive, with broadband Internet and relevant training software (4.7.1, 4.7.2).
4. The situation with water supply and sanitation in rural areas is complicated (6.1.5, 6.2.1). Only 14.4% of the rural population (24.2% across Ukraine) has access to centralized water supply, and only 2.9% (against 4.1%) have access to water drain systems. The situation with discharges of wastewater (6.3.2) is much better, the share of which is 10.17% against 16.38% across Ukraine. Although the rates of water compliance with health and safety regulations (6.1.1, 6.1.3) are low, they still outperform national average by more than three times in rural areas and by two times as for communal sources, respectively (in rural areas - 23.3% against 7.6%, communal sources - 10.5% against 4.6%).
5. The oblast shows high rates of development of small and medium-sized enterprises. The share of volumes of sold products of SMEs in % to the total volume of sales (8.6.2. (a)) is much bigger compared to national average (80.77% against 60.2%), although high and medium-tech enterprises make up a very small share of the oblast's economy. The share of those employed in such enterprises (9.4.3) is almost twice smaller than the national average (13.29% against 21.03%), and the share of innovated products sold (9.5.2) is four times smaller.
6. The local environmental condition is far better across other regions of Ukraine. Volume of emissions of air pollutants from stationary sources, tones per sq.km. of the region's area (11.5.4. (a)) is eight times smaller than the national average Ukrainian, and the amount of generated waste (12.3.1. (a)) is more than ten times smaller.

Table of values of indicators which measure the SDG in Rivne oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	85.0	62.6	22.40	5.2.2 (a)	4.9	2.7	1.79
1.2.1 (a)	85.7	56.3	29.43	5.3.1	-	-	-
1.3.1 (a)	56.8	70.7	-13.90	5.4.2	12.5	-	-
1.3.2	58.4	53.1	5.30	5.4.3 (a)	72.6	77.1	-4.50
2.1.1 (a)	46.1	50.9	0.91	5.5.1 (a)	24.1	44.5	0.54
2.1.2 (a)	213.1	209.9	1.02	5.5.2	26.2	27.3	0.96
2.1.3 (a)	40.6	50.9	0.80	5.6.1	72.7	74.9	-2.20
2.2.1	229.8	223.3	1.03	5.6.2 (a)	61.6	56.2	5.40
2.2.2	92.8	95.2	-2.40	5.6.3 (a)	66.8	71.9	-5.10
2.3.1	113.4	89.3	24.10	6.1.1 (a)	23.3	7.6	15.70
2.3.2	17.0	38.2	-21.20	6.1.2 (a)	15.8	29.6	0.53
2.3.3 (a)	5.9	2.5	3.40	6.1.3 (a)	10.5	4.6	5.90
2.4.1	143.4	141.5	1.90	6.1.4	-	90.0	-
3.1.1	37.3	15.3	2.44	6.1.5	14.4	24.2	-9.80
3.2.1	10.1	9.7	1.04	6.1.6	98.1	89.4	8.70
3.3.1	21.5	37.2	0.58	6.2.1 (a)	2.9	4.1	-1.20
3.3.2	54.8	56.0	0.98	6.2.2	77.8	73.0	4.80
3.4.1	63.3	61.1	1.04	6.3.1	6.0	875.0	0.01
3.4.2	25.1	27.6	0.91	6.3.2	10.2	16.4	-6.21
3.4.3	28.0	24.0	1.16	6.4.1	3.7	4.9	0.77
3.4.4	11.8	11.1	1.06	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.0	52.2	1.00	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.5	62.0	1.01	7.1.1	19060.0	163682.0	-
3.6.1	17.0	11.2	1.51	7.1.2	13.9	11.7	2.17
3.6.2 (a)	100.0	100.0	1.00	7.1.3	13.0	18.8	-5.82
3.7.1	-	-	-	7.3.1	8.9	3.0	5.90
3.8.1 (a)	16.1	18.4	-2.30	7.4.1 (a)	46.7	55.2	0.84
3.9.1 (a)	4.6	29.3	-24.70	8.1.1	93.4	90.2	3.20
4.1.1 (a)	85.2	78.5	6.70	8.1.2	12.3	13.7	-1.44
4.2.1	54.0	55.0	-1.00	8.1.3	29.2	19.2	10.03
4.3.1	1.0	7.6	-6.60	8.1.4 (a)	0.0	0.7	-0.68
4.4.1 (a)	245.7	321.0	0.77	8.2.1 (a)	22.8	33.1	-10.33
4.4.1-1	41.8	55.2	-13.40	8.2.2 (a)	72.2	121.0	0.60
4.4.2 (a)	0.4	0.7	0.64	8.2.3 (a)	88.5	43.7	44.73
4.5.1 (a)	318.2	374.7	0.85	8.3.1 (a)	58.5	56.7	1.85
4.5.2	28.9	48.9	-20.00	8.4.1	20.1	12.8	7.35
4.6.1	18.0	15.3	2.70	8.5.1 (a)	42.2	25.9	1.63
4.7.1	100.0	81.0	19.01	8.5.2	100.0	100.0	0.00
4.7.2	100.0	60.1	39.90	8.5.3	12.8	12.7	0.10
4.7.3	10.3	9.4	0.90	8.6.1 (a)	15.8	25.4	-9.64
5.1.1	1.0	-	-	8.6.2 (a)	80.8	60.2	20.57
5.2.1 (a)	0.0	0.1	-0.04	8.6.3 (a)	2.7	7.6	-4.90

(continuation)

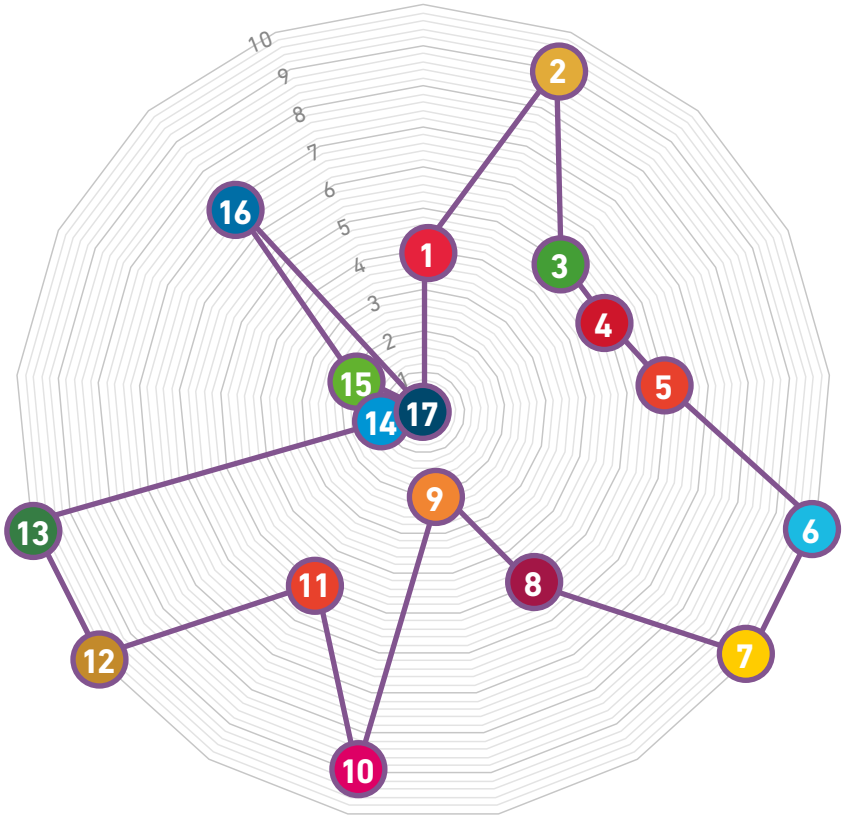
Table of values of indicators which measure the SDG in Rivne oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	52.0	10.7	41.26	12.4.2	20.8	30.0	-9.20
9.1.2	10.9	1474.0	0.01	13.1.1 (a)	0.5	4.7	0.11
9.1.3 (a)	1.2	1.4	0.85	14.1.1 (a)	-	17.8	-
9.2.1 (a)	24.2	35.3	-11.03	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.0	2.4	-2.39	15.1.1	52.5	1769.1	0.03
9.4.2 (a)	18.3	10.0	8.32	15.1.2	2.6	2.9	-0.30
9.4.3	13.3	21.0	-7.74	15.1.3	94.0	22.4	71.60
9.5.1	0.0	0.6	-0.58	15.2.1	40.2	17.6	22.60
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	6.0	3.5	1.73
9.6.1	28.1	39.0	0.72	15.3.1 (a)	1.2	25.5	0.05
9.7.1 (a)	47.5	37.4	10.10	15.3.2	614.5	31131.0	0.02
10.1.1 (a)	3.7	4.5	-0.80	15.3.3	30.6	51.6	-21.00
10.1.2	-	15.0	-	15.3.4 (a)	14.7	441.8	0.03
10.2.1	-	9.0	-	15.3.5	254.2	7840.5	0.03
10.3.1 (a)	28.7	27.0	1.73	15.3.6	12.7	13.0	-0.31
10.3.2 (a)	8.5	8.3	0.17	15.4.1	-	669.0	-
10.3.3 (a)	4.7	11.2	-6.53	15.4.2	-	1.1	-
10.4.1	2.4	2.7	0.89	16.1.1 (a)	3.0	5.0	0.60
10.5.1	39.5	37.7	1.79	16.1.2 (a)	7.0	10.0	0.70
11.1.1 (a)	37.3	37.8	-0.55	16.1.3 (a)	0.9	1.8	0.47
11.1.2 (a)	22.0	22.9	0.96	16.2.1 (a)	0.9	0.5	1.76
11.2.1	-	0.0	-	16.2.2 (a)	158.8	199.3	0.80
11.3.1	-	6.0	-	16.2.3 (a)	5.2	5.3	0.97
11.3.2 (a)	0.8	1.4	0.62	16.3.1 (a)	2.0	9.0	-7.00
11.3.2-1	0.4	12.6	0.03	16.3.2 (a)	8.0	11.0	0.73
11.3.3	2.6	2.9	-0.30	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	9.0	8.4	1.06
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	327.0	556.5	0.59
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	11.8	15.0	0.79
11.5.4 (a)	2.6	7.8	0.33	16.6.1 (a)	44.0	50.0	-6.00
11.5.4-1	52.1	4521.3	0.01	16.7.1	36.0	38.0	-2.00
11.6.1 (a)	1.1	4.9	0.22	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.8	2.1	0.68	16.8.3	-	-	-
12.2.2 (a)	13.9	17.1	-3.23	16.9.1	6.5	6.7	-0.20
12.3.1 (a)	42.1	501.9	0.08	17.1.1	0.2	0.4	-0.17
12.3.1-1	6.0	220.0	0.03	17.1.2 (a)	4.8	102.5	0.05
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	148.3	993.7	0.15				

4.17. Sumy oblast

Sumy oblast is a mid-ranking region in terms of economic development; it ranked 12th by GRP per capita in 2015. In the event of a deep industrial recession in Ukraine, industrial production in Sumy oblast declined by only 1.7%. At the same time, the food industry, which formed 18% of industrial production, decreased by 23.2%. The decline in commodity exports constituted 17.9%, primarily for machine building products. The active growth was registered in the chemical and metallurgical industry and in pharmaceuticals. Agricultural production decreased by 4.3%. The growth of capital investment constituted 3.3%, more than one third of which allocated for the agrarian sector; yet oblast's attractiveness for foreign investors remained critically low ($2.32 per foreign direct investment per capita).

SDG baseline for Sumy oblast in 2015



In terms of sustainable development, Rivne oblast has the following features[38].

1. The oblast has a low income rate. The average wage amounted to 82.2% of the national average (ranks 11th, the city of Kyiv exclusive), which naturally affected both the social well-being of the population, 82.4% of which reported themselves poor (1.3.1. (a)), and rates of consumption (2.1.1-2.1.3), where the consumption of fruits was 1.3 less than the average, due to the climatic conditions of this northern region.
2. The labor productivity in agribusiness (2.2.1) was 1.3 times higher than the average across Ukraine, due to which the growth rate of wages in the sector (35%) made up almost twice the regional average, however, this did not prevent a significant reduction in agricultural production in 2015.
3. The negative situation is observed in the health care sector; the availability of services rate is almost twice lower than the national average (3.9.1. (a)), in particular due to the greater remoteness from health care institutions

[38] Detailed data of indicators of region are available by link

(10.3.2. (a)), which correlates with higher maternal mortality (40.8 per 100,000 live births (3.1.1) and mortality from cerebrovascular diseases (3.4.1, 3.4.2). Along with this, this oblast has a sound environment (12.3.1, 12.4.1, 13.1.1).

4. The share of attendants of higher education institutions is relatively large (92% of the average Ukrainian indicator) (4.4.1. (a)), although the number of such institutions per 100 thousand population (4.4.2. (a)) constitutes only 80% of the national average. The high level (89.5%) of provision of schools with the access to the Internet (4.7.1) contributes to the quality of rural education.
5. The oblast belongs to regions with a high rate of domestic violence (12.9 crimes per 100 thousand population, which is five times more than the national average) (5.2.2. (a)), which negatively affected the demographic situation in the region: the birth rate was among the lowest in Ukraine (next to Chernihiv oblast) and amounted to 8.8 per 1,000 of population.
6. The number of abortions (5.5.1. (a)) is one and half times smaller than the national average, which may somewhat mitigate the demographic situation. At the same time, the employment rate of women aged 25-49 (5.6.3. (a)) is 1.4 times lower than the national average, which creates the potential for increasing fertility in case of favorable economic situation.
7. The rural population is considerably better provided with centralized water supply (6.1.5) and drain (6.2.1. (a)), whereas centralized water supply in the cities (6.1.6) covers only 80% of households. Against this background, the three times larger share of discharges of wastewater (6.3.2) creates increased environmental risks in urban settlements.
8. The labor productivity in the oblast is 1.4 times lower than the national average (8.2.2. (a)). This speaks for the insufficiently productive structure of the oblast's economy and poor development of small and medium-sized enterprises; the share of employed population in this sphere was only 19.3% (8.6.1. (a)), SMEs produced 53.2% of sold products (8.6.2. (a)), although 64% of the questioned entrepreneurs reported the absence of hindrance on behalf of public authorities (16.6.1. (a)).
9. The geographical location of this oblast determines availability of vast forested area (15.2.1), a significant share of the environmental network lands (15.1.3) and somewhat smaller than the average area of arable land (15.3.3), which creates significant potential for the development of the touristic and recreational industries, which is yet not registered officially (11.6.1. (a)).
10. The oblast demonstrates relatively moderate crime rate (16.1.1-16.2.1), which, incidentally, does not apply to crimes related to sexual exploitation (16.2.3. (a)), probably, due to the impact of trans-border crime.

Table of values of indicators which measure the SDG in Sumy oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	72.3	62.6	9.70	5.2.2 (a)	12.9	2.7	4.70
1.2.1 (a)	90.4	56.3	34.10	5.3.1	-	-	-
1.3.1 (a)	82.4	70.7	11.70	5.4.2	20.3	-	-
1.3.2	48.5	53.1	-4.60	5.4.3 (a)	76.8	77.1	-0.30
2.1.1 (a)	48.6	50.9	0.95	5.5.1 (a)	29.2	44.5	0.66
2.1.2 (a)	203.5	209.9	0.97	5.5.2	25.0	27.3	0.92
2.1.3 (a)	38.6	50.9	0.76	5.6.1	75.0	74.9	0.10
2.2.1	298.9	223.3	1.34	5.6.2 (a)	56.4	56.2	0.20
2.2.2	95.4	95.2	0.20	5.6.3 (a)	50.9	71.9	-21.00
2.3.1	76.8	89.3	-12.50	6.1.1 (a)	11.9	7.6	4.30
2.3.2	37.0	38.2	-1.20	6.1.2 (a)	26.4	29.6	0.89
2.3.3 (a)	1.5	2.5	-1.00	6.1.3 (a)	6.5	4.6	1.90
2.4.1	140.6	141.5	-0.90	6.1.4	-	90.0	-
3.1.1	40.8	15.3	2.67	6.1.5	34.4	24.2	10.20
3.2.1	9.2	9.7	0.95	6.1.6	80.0	89.4	-9.40
3.3.1	20.1	37.2	0.54	6.2.1 (a)	7.4	4.1	3.30
3.3.2	55.8	56.0	1.00	6.2.2	69.0	73.0	-4.00
3.4.1	72.6	61.1	1.19	6.3.1	22.0	875.0	0.03
3.4.2	37.6	27.6	1.36	6.3.2	47.8	16.4	31.45
3.4.3	25.4	24.0	1.06	6.4.1	2.2	4.9	0.46
3.4.4	11.8	11.1	1.06	6.4.2	100.0	100.0	0.00
3.5.1 (a)	51.8	52.2	0.99	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.2	62.0	1.00	7.1.1	276.0	163682.0	-
3.6.1	10.6	11.2	0.95	7.1.2	10.5	11.7	-1.21
3.6.2 (a)	100.0	100.0	1.00	7.1.3	18.0	18.8	-0.82
3.7.1	-	-	-	7.3.1	5.0	3.0	2.00
3.8.1 (a)	15.1	18.4	-3.30	7.4.1 (a)	38.0	55.2	0.69
3.9.1 (a)	54.0	29.3	24.70	8.1.1	96.7	90.2	6.50
4.1.1 (a)	82.0	78.5	3.50	8.1.2	8.8	13.7	-4.92
4.2.1	73.0	55.0	18.00	8.1.3	40.9	19.2	21.70
4.3.1	10.7	7.6	3.10	8.1.4 (a)	0.4	0.7	-0.30
4.4.1 (a)	296.0	321.0	0.92	8.2.1 (a)	43.5	33.1	10.41
4.4.1-1	50.2	55.2	-4.98	8.2.2 (a)	88.3	121.0	0.73
4.4.2 (a)	0.5	0.7	0.80	8.2.3 (a)	71.3	43.7	27.58
4.5.1 (a)	337.8	374.7	0.90	8.3.1 (a)	55.6	56.7	-1.10
4.5.2	51.4	48.9	2.50	8.4.1	16.0	12.8	3.19
4.6.1	16.0	15.3	0.70	8.5.1 (a)	19.1	25.9	0.74
4.7.1	89.5	81.0	8.51	8.5.2	100.0	100.0	0.00
4.7.2	45.6	60.1	-14.50	8.5.3	13.7	12.7	0.98
4.7.3	4.5	9.4	-4.88	8.6.1 (a)	19.3	25.4	-6.16
5.1.1	0.0	-	-	8.6.2 (a)	53.2	60.2	-7.05
5.2.1 (a)	0.1	0.1	-0.01	8.6.3 (a)	8.2	7.6	0.60

(continuation)

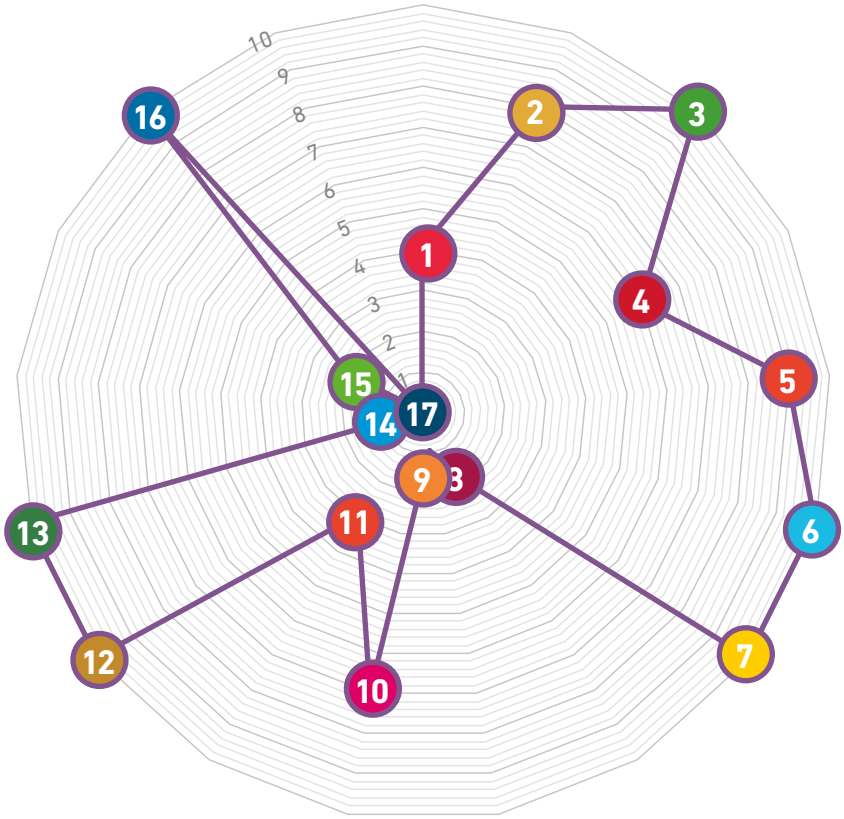
Table of values of indicators which measure the SDG in Sumy oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	5.4	10.7	-5.36	12.4.2	24.3	30.0	-5.70
9.1.2	15.2	1474.0	0.01	13.1.1 (a)	0.7	4.7	0.16
9.1.3 (a)	1.0	1.4	0.68	14.1.1 (a)	-	17.8	-
9.2.1 (a)	27.1	35.3	-8.19	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	93.1	97.8	-4.74	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.6	2.4	-1.80	15.1.1	40.4	1769.1	0.02
9.4.2 (a)	9.0	10.0	-0.99	15.1.2	1.7	2.9	-1.20
9.4.3	47.9	21.0	26.90	15.1.3	64.0	22.4	41.60
9.5.1	0.3	0.6	-0.36	15.2.1	19.3	17.6	1.70
9.5.2	3.4	0.4	3.00	15.2.2 (a)	3.8	3.5	1.08
9.6.1	25.2	39.0	0.65	15.3.1 (a)	0.7	25.5	0.03
9.7.1 (a)	44.4	37.4	7.00	15.3.2	1159.7	31131.0	0.04
10.1.1 (a)	3.0	4.5	-1.50	15.3.3	48.7	51.6	-2.90
10.1.2	-	15.0	-	15.3.4 (a)	14.0	441.8	0.03
10.2.1	-	9.0	-	15.3.5	447.2	7840.5	0.06
10.3.1 (a)	26.0	27.0	-1.01	15.3.6	18.8	13.0	5.77
10.3.2 (a)	14.5	8.3	6.20	15.4.1	-	669.0	-
10.3.3 (a)	24.4	11.2	13.19	15.4.2	-	1.1	-
10.4.1	2.5	2.7	0.93	16.1.1 (a)	4.0	5.0	0.80
10.5.1	42.2	37.7	4.51	16.1.2 (a)	10.0	10.0	1.00
11.1.1 (a)	33.2	37.8	-4.66	16.1.3 (a)	1.6	1.8	0.88
11.1.2 (a)	28.2	22.9	1.23	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	190.9	199.3	0.96
11.3.1	-	6.0	-	16.2.3 (a)	21.5	5.3	4.04
11.3.2 (a)	1.6	1.4	1.14	16.3.1 (a)	10.0	9.0	1.00
11.3.2-1	7.9	12.6	0.63	16.3.2 (a)	10.0	11.0	0.91
11.3.3	1.7	2.9	-1.20	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	8.0	8.4	0.95
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1770.5	556.5	3.18
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	16.0	15.0	1.07
11.5.4 (a)	2.4	7.8	0.31	16.6.1 (a)	64.0	50.0	14.00
11.5.4-1	57.9	4521.3	0.01	16.7.1	42.0	38.0	4.00
11.6.1 (a)	1.1	4.9	0.22	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.1	2.1	-0.04	16.8.3	-	-	-
12.2.2 (a)	16.8	17.1	-0.26	16.9.1	6.8	6.7	0.10
12.3.1 (a)	35.2	501.9	0.07	17.1.1	0.4	0.4	0.03
12.3.1-1	3.0	220.0	0.01	17.1.2 (a)	2.3	102.5	0.02
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	139.6	993.7	0.14				

4.18. Ternopil oblast

Ternopil oblast belongs to the group of western oblasts of Ukraine, but has no border with the EU. The oblast's economy is based on agriculture making more than 20% share in gross value added. Food, chemical and mechanical engineering branches are the leading industries here. By the indicator of GRP per capita in the baseline 2015, the oblast ranked 21st (the city of Kyiv exclusive). By volume of sold industrial products per capita it ranked 22nd. Yet this oblast ranked 9th by the indicator of agricultural production per 100 ha of land. Such structure of the economy is largely determined by the initial reference point in the SDGs achievement in oblast in the baseline year. Indicators of the Goals 2, 3, 4, 7 and 13 associated with access to food, health care, education and healthy environment show more progress. Goals 1, 8, 9 and 17 are more comprehensive and require additional efforts to be put, as they are associated with industrial development, income of the population, investment attraction.

SDG baseline for Ternopil oblast in 2015



As for sustainable development, Ternopil oblast has the following features[39].

1. The oblast had a relatively high labor performance index in agricultural enterprises in the baseline year (2.2.1.), which outperformed the average Ukrainian by 16%. Accordingly, indicators of consumption of the main food products by the oblast's population (2.1.1.-2.1.3.) were registered as average or above average. At the same time, the share of food expenditure in total household spending (1.3.2.) outperformed the national average and amounted to 55.6%, therefore speaking for the relative poverty of the population.
2. The fact that the share of the population whose average per capita equivalent money income is lower than the actual minimum subsistence level (1.1.1.) is 72,7%, while generally in Ukraine it is 62,6%, speaks for poverty. However, the share of oblast's residents who consider themselves

[39] Detailed data of indicators of region are available by link

poor (1.3.1.) is significantly smaller than the national average (60.6% against 70.7%). To a certain extent, this is explained by the fact that the ratio of the amount of monetary assistance from relatives, other persons and other cash returns to GRP (17.1.1.) in Ternopil oblast more than twice exceeds the average Ukrainian. This might speak for significant number of labor migrants among the oblast's population and the existence of officially unaccounted incomes.

3. Another reason for oblast's population to remain optimistic over their material wealth is a comparatively high degree of social equality. Thus, the Indicator 10.1.1 'Income ratio of most affluent 10 percent and least well-off 10 percent', ranged according to index of per capita parity income was almost one third better in this oblast than in general across the country in 2015. Other indicators that illustrate access to social care services, health care inclusive, also demonstrate positive readings.
4. According to indicators of the health condition of the residents, this oblast is better off among many other oblasts. This applies to mortality (3.1.1., 3.2.1., 3.4.1.-3.4.3.) and morbidity (3.3.1., 3.3.2.) rates. These indicators together with satisfactory nutrition and a relatively healthy environmental situation in the oblast contribute to longer than average life expectancy, both for men and women.
5. As of 2015, the oblast demonstrated positive achievements in terms of secondary and higher education development. In particular, the share of attendants of secondary education institutions in total permanent population aged 6-17 (4.1.1.) exceeded 80%, and the number of persons who attended educational institutions (I-IV accreditation grade) per 10 thousand of population (4.5.1.) was 7 persons more than the national average. Similarly, the oblast had best figures in the Indicators 4.4.2. 'Number of higher education institutions (III-IV accreditation grade) per 100,000 persons of population', and 4.4.1. 'Share of teaching and academic staff of higher education institutions (III-IV accreditation grade) having scientific degree'. This is due to the high concentration of higher education institutions in oblast's capital, that provide high-quality education for residents of the entire western region, as well as for the young people from all over Ukraine.

   At the same time, pre-schooling education coverage for children (4.2.1.) is insufficient and constitutes only 54%.
6. This oblast can boast with a peculiarity in energy industry. Its share of energy produced from renewable sources in total final energy consumption (7.3.1.) constitutes 32.7% against the national average of 3%, outperforming the latter by more then by 10 times. This figure is mostly achieved owing the abundance of small hydroelectric power stations in the territory of the oblast.
7. Special attention should be paid to the weak industrial development resulting to poor GRP, which in turn defines the budget for addressing many problems and, therefore, for achieving the SDGs. GRP per one employed person (8.2.2.) is only 54% against average across Ukraine, and the employment rate of the population aged 15-70 (8.3.1.) constitutes only 51%. This creates a negative tendency in the field of young people employment amidst high birth rate and relatively high-quality education. The share of youth not in employment, education or professional training in the total number of population aged 15–24 (8.4.1) constitutes 23.6%, which is almost twice higher than the national rate. Such situation favors the expansion of the migratory moods of the oblast's population and the negative population growth.
8. As already mentioned, the oblast has a sound environmental status. Volume of emissions of air pollutants from stationary sources, tones per sq.km. of the oblast's area (13.1.1.) constitutes only 0.61 against 4.73 across Ukraine. However, efforts should be made to unlock touristic potential of the oblast as a significant source of services industry development leading to the GRP increase.

Table of values of indicators which measure the SDG in Ternopil oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	72.7	62.6	10.10	5.2.2 (a)	3.6	2.7	1.30
1.2.1 (a)	88.7	56.3	32.40	5.3.1	-	-	-
1.3.1 (a)	60.6	70.7	-10.10	5.4.2	10.9	-	-
1.3.2	55.6	53.1	2.50	5.4.3 (a)	70.2	77.1	-6.90
2.1.1 (a)	47.9	50.9	0.94	5.5.1 (a)	22.0	44.5	0.49
2.1.2 (a)	235.1	209.9	1.12	5.5.2	25.1	27.3	0.92
2.1.3 (a)	41.7	50.9	0.82	5.6.1	85.9	74.9	11.00
2.2.1	258.1	223.3	1.16	5.6.2 (a)	58.5	56.2	2.30
2.2.2	88.8	95.2	-6.40	5.6.3 (a)	36.7	71.9	-35.20
2.3.1	89.6	89.3	0.30	6.1.1 (a)	15.2	7.6	7.60
2.3.2	38.2	38.2	0.00	6.1.2 (a)	16.4	29.6	0.55
2.3.3 (a)	2.3	2.5	-0.20	6.1.3 (a)	11.4	4.6	6.80
2.4.1	140.3	141.5	-1.20	6.1.4	-	90.0	-
3.1.1	9.3	15.3	0.61	6.1.5	0.0	24.2	-24.20
3.2.1	8.8	9.7	0.91	6.1.6	100.0	89.4	10.60
3.3.1	10.9	37.2	0.29	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	38.4	56.0	0.69	6.2.2	100.0	73.0	27.00
3.4.1	40.6	61.1	0.66	6.3.1	2.0	875.0	0.00
3.4.2	14.0	27.6	0.51	6.3.2	6.7	16.4	-9.71
3.4.3	22.4	24.0	0.93	6.4.1	1.9	4.9	0.38
3.4.4	13.5	11.1	1.22	6.4.2	100.0	100.0	0.00
3.5.1 (a)	54.2	52.2	1.04	6.5.1	0.0	0.0	0.00
3.5.2 (a)	63.9	62.0	1.03	7.1.1	42.0	163682.0	-
3.6.1	10.2	11.2	0.91	7.1.2	16.6	11.7	4.89
3.6.2 (a)	100.0	100.0	1.00	7.1.3	11.5	18.8	-7.32
3.7.1	-	-	-	7.3.1	32.7	3.0	29.65
3.8.1 (a)	13.3	18.4	-5.10	7.4.1 (a)	37.3	55.2	0.67
3.9.1 (a)	14.7	29.3	-14.60	8.1.1	93.7	90.2	3.50
4.1.1 (a)	80.2	78.5	1.70	8.1.2	14.4	13.7	0.63
4.2.1	54.0	55.0	-1.00	8.1.3	50.5	19.2	31.29
4.3.1	7.5	7.6	-0.10	8.1.4 (a)	0.1	0.7	-0.64
4.4.1 (a)	307.7	321.0	0.96	8.2.1 (a)	27.5	33.1	-5.63
4.4.1-1	67.0	55.2	11.78	8.2.2 (a)	65.7	121.0	0.54
4.4.2 (a)	0.7	0.7	1.11	8.2.3 (a)	40.3	43.7	-3.41
4.5.1 (a)	381.1	374.7	1.02	8.3.1 (a)	51.6	56.7	-5.10
4.5.2	46.6	48.9	-2.30	8.4.1	23.6	12.8	10.77
4.6.1	16.8	15.3	1.50	8.5.1 (a)	28.8	25.9	1.11
4.7.1	91.1	81.0	10.11	8.5.2	100.0	100.0	0.00
4.7.2	77.1	60.1	17.00	8.5.3	8.5	12.7	-4.16
4.7.3	8.0	9.4	-1.40	8.6.1 (a)	-	25.4	-
5.1.1	1.0	-	-	8.6.2 (a)	26.8	60.2	-33.36
5.2.1 (a)	0.0	0.1	-0.05	8.6.3 (a)	3.5	7.6	-4.10

(continuation)

Table of values of indicators which measure the SDG in Ternopil oblast

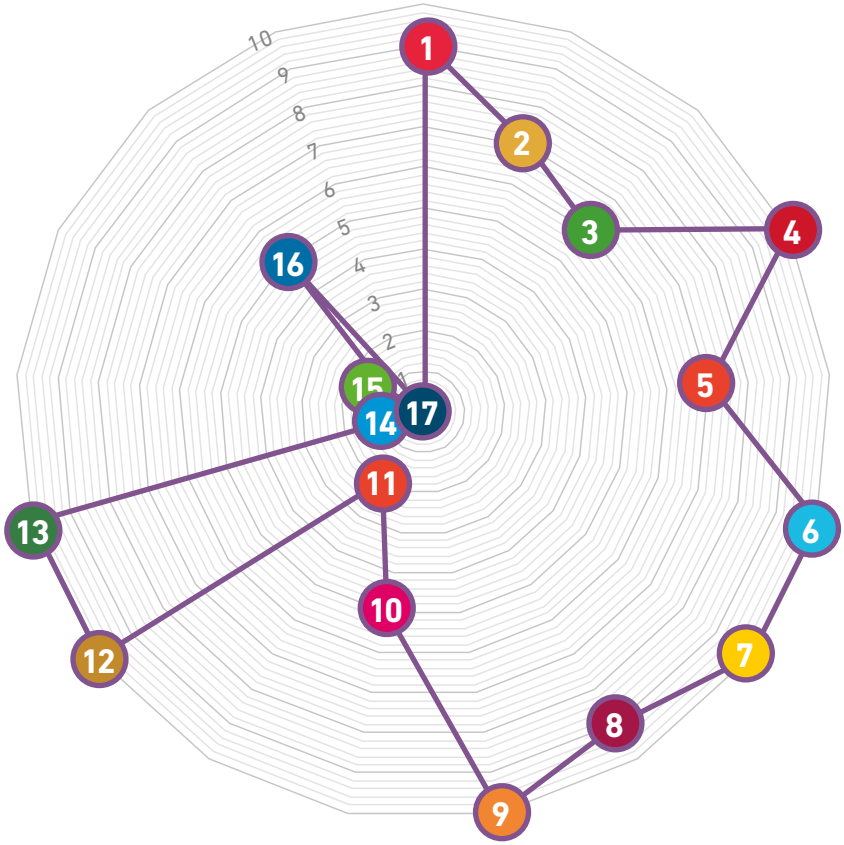
Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	8.6	10.7	-2.12	12.4.2	17.6	30.0	-12.40
9.1.2	7.6	1474.0	0.01	13.1.1 (a)	0.6	4.7	0.13
9.1.3 (a)	0.9	1.4	0.63	14.1.1 (a)	-	17.8	-
9.2.1 (a)	26.9	35.3	-8.37	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	1.7	2.4	-0.70	15.1.1	27.3	1769.1	0.02
9.4.2 (a)	13.8	10.0	3.81	15.1.2	2.0	2.9	-0.90
9.4.3	25.8	21.0	4.81	15.1.3	30.1	22.4	7.70
9.5.1	0.0	0.6	-0.57	15.2.1	14.6	17.6	-3.00
9.5.2	0.6	0.4	0.20	15.2.2 (a)	2.3	3.5	0.67
9.6.1	24.3	39.0	0.62	15.3.1 (a)	1.4	25.5	0.05
9.7.1 (a)	44.3	37.4	6.90	15.3.2	831.0	31131.0	0.03
10.1.1 (a)	3.5	4.5	-1.00	15.3.3	60.1	51.6	8.50
10.1.2	-	15.0	-	15.3.4 (a)	12.1	441.8	0.03
10.2.1	-	9.0	-	15.3.5	170.7	7840.5	0.02
10.3.1 (a)	11.3	27.0	-15.66	15.3.6	12.3	13.0	-0.64
10.3.2 (a)	6.3	8.3	-2.09	15.4.1	-	669.0	-
10.3.3 (a)	9.6	11.2	-1.65	15.4.2	-	1.1	-
10.4.1	2.2	2.7	0.81	16.1.1 (a)	2.0	5.0	0.40
10.5.1	43.5	37.7	5.85	16.1.2 (a)	5.0	10.0	0.50
11.1.1 (a)	33.8	37.8	-4.02	16.1.3 (a)	0.7	1.8	0.41
11.1.2 (a)	25.5	22.9	1.11	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	102.2	199.3	0.51
11.3.1	-	6.0	-	16.2.3 (a)	0.9	5.3	0.18
11.3.2 (a)	0.4	1.4	0.27	16.3.1 (a)	14.0	9.0	5.00
11.3.2-1	17.1	12.6	1.36	16.3.2 (a)	8.0	11.0	0.73
11.3.3	2.0	2.9	-0.90	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	2.7	8.4	0.32
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	194.2	556.5	0.35
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	6.7	15.0	0.45
11.5.4 (a)	3.4	7.8	0.44	16.6.1 (a)	54.0	50.0	4.00
11.5.4-1	46.4	4521.3	0.01	16.7.1	46.0	38.0	8.00
11.6.1 (a)	1.1	4.9	0.22	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.2	2.1	0.10	16.8.3	-	-	-
12.2.2 (a)	36.6	17.1	19.55	16.9.1	7.1	6.7	0.40
12.3.1 (a)	58.5	501.9	0.12	17.1.1	0.9	0.4	0.52
12.3.1-1	7.0	220.0	0.03	17.1.2 (a)	0.1	102.5	0.00
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	188.5	993.7	0.19				

4.19. Kharkiv oblast

In 2015 Kharkiv oblast ranked 5th by GRP per capita (the city of Kyiv exclusive). Considered all, this oblast is a leader in terms of social and economic development among other oblasts of the country.

Kharkiv oblast is an industrial center with significant scientific and technical and production capacity. The aggregate share of the processing industry is over 50%. Almost half of the natural gas in Ukraine is being extracted here. Relatively high baseline indicators for the oblast are registered within Goals 1,2, 3, 4, 5, 8, 9, 10, 12 and 13. Goals 6, 7, 10, 11, 15, 16 and 17 require additional attention to be paid and relevant measures to be taken, due to the lower sustainable development indicators in the baseline period, contrary to other oblasts.

SDG baseline for Kharkiv oblast in 2015



As for the sustainable development, Kharkiv oblast has the following features[40].

1. This oblast is an average income region. Thus, by the rate of money income below the real subsistence minimum (1.1.1. (a)), the oblast in the baseline year performed slightly better than the national average (54.4%, compared to 62.6% of the population with income below the subsistence minimum). At the same time, 82.8% of households report themselves poor while self-evaluating their material well-being.
2. The oblast has a comparatively high rate of labor productivity in agricultural enterprises (2.2.1) constituting 249.01 against 223.3 thousand UAH per 1 employed in agricultural production on average across Ukraine, similar to other indicators within Goal 2. At the same time, attention should be paid to the small area under organic amendment (2.3.3 and 15.3.4). Despite the low production capacity of the food industry and the processing of agricultural raw materials in export (2.3.2), which is 8.6% lower than the national average, and low post-harvest losses (12.2.1 and 12.2.2), there is a high potential of production with higher added value, including organic production, provided the allocation of appropriate investment in these areas.

[40] Detailed data of indicators of region are available by link

3. Despite the relatively moderate readings of public health indicators, special attention is paid to both high rate of mortality of children under 5 (3.2.1) and men from cerebrovascular diseases (3.4.1), which is 1.2% higher than the national average in Ukraine. There is a noticeable demand in establishing health care institutions in rural areas as well (10.3.1. (a)).
4. Oblast's educational system is mostly well off by many indicators of Goal 4. At the same time, attention should be paid to gender equality among teachers (4.6.1), as well as to the inclusive education challenges (4.7.3) and to encouraging young scientists to teaching in the oblast's universities (9.7.1. (a)).
5. This oblast is noteworthy for addressing gender challenges, due to rather high rates of baseline indicators within Goal 5. At the same time, a high rate of female victims of sexual violence (5.2.1. (a)) is registered in the oblast. Oblast's authorities should particularly focus the development of women's employment and entrepreneurship, which has a high development capacity under proper employment policies. Thus, the ratio of wages of women and men in the oblast (5.6.1) is 2.7% higher than the national average, while the employment rate of women is 21.9% lower (5.6.2. (a)), and the level of economic activity (5.6.2. (a)) is 9.6% lower than the national average.
6. The quality of water is relatively high in the oblast (6.1.1-6.1.3, 6.3.2), while the rate of water supply is low. Thus, the oblast has the lowest rates of provision of urban population with centralized water supply (6.1.6), which is 71% against 89.4%; even worse is the rate for drain systems accessibility (6.2.2) constituting 41% against 73% on average across Ukraine. Rural regions of the oblast perform relatively better, however they showed low rates in the baseline period as well (6.1.5 and 6.2.1).
7. Despite the industrial profile of the oblast, the latter reports relatively satisfactory environmental condition due to low emission of atmospheric pollutants (11.5.4, 13.1.1). Simultaneously, more financing resources are required to ensure the protection and rehabilitation of soil, underground and surface waters (15.3.1. (a)). Currently financial resources are allocated in the amount which is almost 3 times less than the national average per 1 hectare. The oblast also has one of the lowest rates of incinerated and recycled waste in the total volume of generated waste (12.4.2), which is only 19.8% against national average constituting 30%. The issue of increasing the area of territories and objects of the natural reserve fund (15.1.2), which in the baseline period dropped 2.2% below the national average, as well as the increase of the area of nature reserves and national parks (11.3.3) should be considered as promising.
8. Amidst the relatively low rates of electricity generation (7.1.1) and higher than the national average rate of electric power distribution losses (7.1.2), this oblast does not address the challenges of renewable energy generation (7.3. 1), which makes this rate 1.56% lower than the national average rate.
9. The oblast shows low readings of the ratio of innovative expenditures to GRP, which is 0.53% (8.1.4. (a)) against the best indicators of expenditures for scientific and technical work in GRP being 1.54% (9.5.1). Similar situation is found with the products new in the market (9.5.2), its rate constituting 1.9% of the total volume and being 1.5% higher than the national average. At the same time, by the share of production of high and medium-high-tech sectors (9.4.1 and 9.4.2) the oblast is below the national average level.
10. Kharkiv oblast lags in attracting investments with the ratio of capital investment to GRP being only 9% (8.1.2), the share of FDI per capita (5.8 dollars (17.1.2. (a)) being 18 times less than the national average (17.1.2. (a)). In order to boost investment, the local authorities should focus on the road improvement (9.3.2. (a)), promotion of local authorities' interaction with business (16.7.1, 16.6.1. and 16.3.1), as well as on fostering the public-private partnerships in the region (17.3.1).

Table of values of indicators which measure the SDG in Kharkiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	54.4	62.6	-8.20	5.2.2 (a)	2.1	2.7	0.76
1.2.1 (a)	98.6	56.3	42.30	5.3.1	-	-	-
1.3.1 (a)	82.8	70.7	12.10	5.4.2	20.0	-	-
1.3.2	50.0	53.1	-3.10	5.4.3 (a)	80.5	77.1	3.40
2.1.1 (a)	52.8	50.9	1.04	5.5.1 (a)	39.7	44.5	0.89
2.1.2 (a)	228.3	209.9	1.09	5.5.2	20.8	27.3	0.76
2.1.3 (a)	52.2	50.9	1.03	5.6.1	77.6	74.9	2.70
2.2.1	249.0	223.3	1.12	5.6.2 (a)	46.6	56.2	-9.60
2.2.2	97.2	95.2	2.00	5.6.3 (a)	50.0	71.9	-21.90
2.3.1	100.5	89.3	11.20	6.1.1 (a)	7.5	7.6	-0.10
2.3.2	29.6	38.2	-8.60	6.1.2 (a)	45.6	29.6	1.54
2.3.3 (a)	1.4	2.5	-1.10	6.1.3 (a)	3.6	4.6	-1.00
2.4.1	139.2	141.5	-2.30	6.1.4	-	90.0	-
3.1.1	12.0	15.3	0.79	6.1.5	33.0	24.2	8.80
3.2.1	11.7	9.7	1.21	6.1.6	71.0	89.4	-18.40
3.3.1	19.5	37.2	0.52	6.2.1 (a)	6.0	4.1	1.90
3.3.2	43.6	56.0	0.78	6.2.2	41.0	73.0	-32.00
3.4.1	73.1	61.1	1.20	6.3.1	10.0	875.0	0.01
3.4.2	35.2	27.6	1.28	6.3.2	3.5	16.4	-12.91
3.4.3	27.7	24.0	1.15	6.4.1	2.3	4.9	0.48
3.4.4	10.8	11.1	0.97	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.4	52.2	1.00	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.5	62.0	0.99	7.1.1	2925.0	163682.0	-
3.6.1	10.5	11.2	0.93	7.1.2	12.2	11.7	0.41
3.6.2 (a)	100.0	100.0	1.00	7.1.3	15.2	18.8	-3.62
3.7.1	-	-	-	7.3.1	1.4	3.0	-1.56
3.8.1 (a)	17.5	18.4	-0.90	7.4.1 (a)	40.8	55.2	0.74
3.9.1 (a)	33.5	29.3	4.20	8.1.1	90.9	90.2	0.70
4.1.1 (a)	86.2	78.5	7.70	8.1.2	9.0	13.7	-4.73
4.2.1	62.0	55.0	7.00	8.1.3	37.9	19.2	18.73
4.3.1	4.3	7.6	-3.30	8.1.4 (a)	0.5	0.7	-0.16
4.4.1 (a)	595.5	321.0	1.86	8.2.1 (a)	39.2	33.1	6.15
4.4.1-1	61.4	55.2	6.15	8.2.2 (a)	101.4	121.0	0.84
4.4.2 (a)	1.4	0.7	2.02	8.2.3 (a)	58.6	43.7	14.88
4.5.1 (a)	666.7	374.7	1.78	8.3.1 (a)	59.3	56.7	2.60
4.5.2	54.5	48.9	5.60	8.4.1	5.0	12.8	-7.75
4.6.1	14.0	15.3	-1.30	8.5.1 (a)	4.8	25.9	0.19
4.7.1	100.0	81.0	19.01	8.5.2	100.0	100.0	0.00
4.7.2	100.0	60.1	39.90	8.5.3	10.9	12.7	-1.76
4.7.3	8.0	9.4	-1.40	8.6.1 (a)	32.5	25.4	7.08
5.1.1	1.0	-	-	8.6.2 (a)	80.4	60.2	20.18
5.2.1 (a)	0.1	0.1	0.03	8.6.3 (a)	4.6	7.6	-3.00

(continuation)

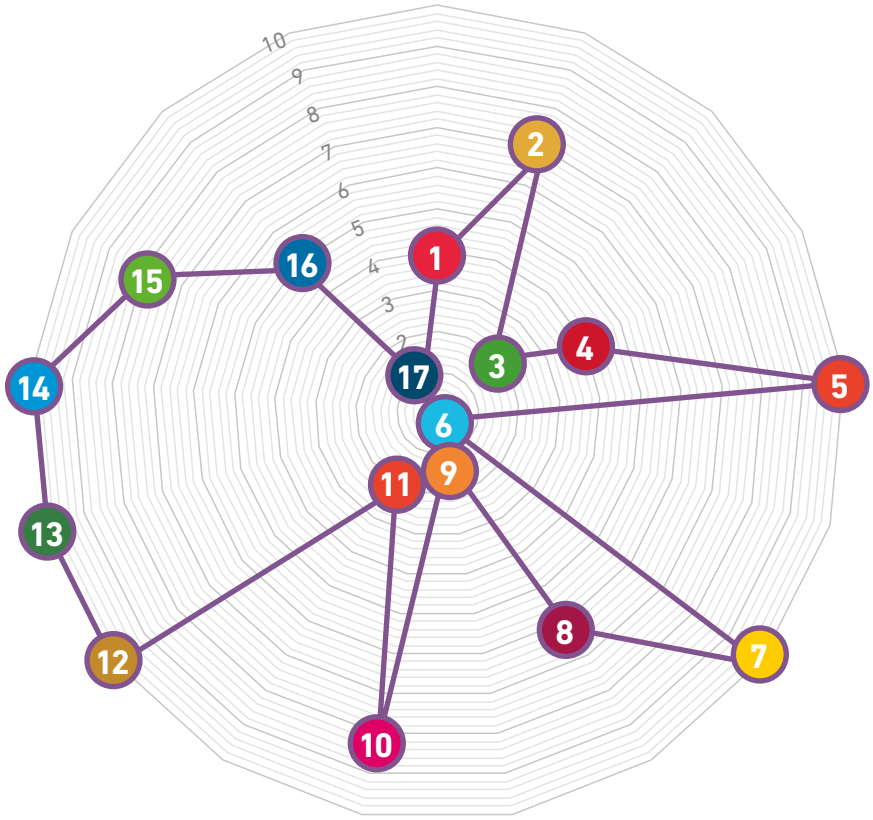
Table of values of indicators which measure the SDG in Kharkiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	25.2	10.7	14.47	12.4.2	19.8	30.0	-10.20
9.1.2	40.9	1474.0	0.03	13.1.1 (a)	1.7	4.7	0.36
9.1.3 (a)	2.4	1.4	1.69	14.1.1 (a)	-	17.8	-
9.2.1 (a)	39.3	35.3	4.00	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	97.9	97.8	0.13	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	1.2	2.4	-1.21	15.1.1	22.7	1769.1	0.01
9.4.2 (a)	6.2	10.0	-3.76	15.1.2	0.7	2.9	-2.20
9.4.3	35.8	21.0	14.75	15.1.3	7.0	22.4	-15.40
9.5.1	1.5	0.6	0.92	15.2.1	13.3	17.6	-4.30
9.5.2	1.9	0.4	1.50	15.2.2 (a)	2.6	3.5	0.74
9.6.1	35.0	39.0	0.90	15.3.1 (a)	7.6	25.5	0.30
9.7.1 (a)	33.8	37.4	-3.60	15.3.2	1851.1	31131.0	0.06
10.1.1 (a)	4.0	4.5	-0.50	15.3.3	58.9	51.6	7.30
10.1.2	-	15.0	-	15.3.4 (a)	17.0	441.8	0.04
10.2.1	-	9.0	-	15.3.5	421.9	7840.5	0.05
10.3.1 (a)	36.4	27.0	9.43	15.3.6	13.4	13.0	0.44
10.3.2 (a)	4.9	8.3	-3.39	15.4.1	-	669.0	-
10.3.3 (a)	10.0	11.2	-1.21	15.4.2	-	1.1	-
10.4.1	2.6	2.7	0.96	16.1.1 (a)	5.0	5.0	1.00
10.5.1	43.7	37.7	5.99	16.1.2 (a)	12.0	10.0	1.20
11.1.1 (a)	37.6	37.8	-0.27	16.1.3 (a)	1.1	1.8	0.62
11.1.2 (a)	24.1	22.9	1.05	16.2.1 (a)	0.4	0.5	0.75
11.2.1	-	0.0	-	16.2.2 (a)	161.2	199.3	0.81
11.3.1	-	6.0	-	16.2.3 (a)	3.7	5.3	0.69
11.3.2 (a)	1.1	1.4	0.80	16.3.1 (a)	6.0	9.0	-3.00
11.3.2-1	29.8	12.6	2.37	16.3.2 (a)	11.0	11.0	1.00
11.3.3	0.7	2.9	-2.20	16.4.1 (a)	33.3	12.0	21.33
11.5.1	100.0	100.0	0.00	16.5.1 (a)	4.7	8.4	0.56
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	567.7	556.5	1.02
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	11.1	15.0	0.74
11.5.4 (a)	4.7	7.8	0.60	16.6.1 (a)	51.0	50.0	1.00
11.5.4-1	148.7	4521.3	0.03	16.7.1	49.0	38.0	11.00
11.6.1 (a)	2.4	4.9	0.48	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.0	2.1	-0.15	16.8.3	-	-	-
12.2.2 (a)	13.6	17.1	-3.49	16.9.1	7.1	6.7	0.40
12.3.1 (a)	30.7	501.9	0.06	17.1.1	0.3	0.4	-0.14
12.3.1-1	11.0	220.0	0.05	17.1.2 (a)	5.8	102.5	0.06
12.3.2	-	-	-	17.3.1	-	97.0	-
12.4.1 (a)	89.5	993.7	0.09				

4.20. Kherson oblast

As of 2015, Kherson oblast had one of the worst rates of GRP per 1 employed person (8.2.2. (a)) constituting 72.23 thousand UAH amidst the least significant fall of GRP among all oblasts of Ukraine (8.1.1) (98.7% against 90.2% of the national average). It belongs to agricultural regions; agrarian production accounts for about 40% of the oblast's GRP, and the share of arable land (15.3.3) constitutes 58.8% of the oblast. By the rate of direct foreign investments per capita (17.1.2. (a)) the oblast enters top ten ($31.45). The local production has low value added, the share of intermediate consumption in sales (8.2.3. (a)) is almost twice as national average (72.21% against 43.73%). Relatively high baseline indicators for the oblast are registered within Goals 6, 10, 11, 12 and 13. Goals 1,3, 5, 6, 9, 15, 16 and 17 require additional attention to be paid and appropriate measures to be taken due to the lower sustainable development indicators in the base period, compared to other oblasts.

SDG baseline for Kherson oblast in 2015



As for the sustainable development, Kherson oblast has the following features[41].

1. The oblast is one of the poorest in Ukraine. The share of residents with money incomes below the subsistence actual minimum (1.1.1. (a)) constitutes 71.4% against 62.6% on average across Ukraine. The perception of the quality of life by the population (1.3.1. (a)) is even worse: as much as 94.5% of households report themselves poor compared to 70.7% on average across Ukraine. The share of population reporting themselves distressed (1.2.1. (a)) is much bigger than the national average (84.4% against 56.3%). Poverty rate is reflected in the structure of aggregate expenditures, where food expenditures are higher than the national average (1.3.2) (59.1% against 53.1%).
2. Almost all forms of morbidity and mortality rates are much higher than the national average. The rate of HIV (3.3.1) and tuberculosis morbid events (3.3.2) per 100 thousand population are 1.5 times higher than the national average

[41] Detailed data of indicators of region are available by link

(48.98 against 37.2, and 82.3 against 56, respectively). A similar situation is found with the mortality of men (3.4.1) and women (3.4.2) from cerebrovascular diseases (93.12 against 61.07, and 49 against 27.58, respectively). There are problems with women's health, still no cases of maternal mortality registered (3.1.1). The number of abortions per 10,000 women (5.5.1. (a)) is much higher than the national average (61.03 against 44.53). The average expected lifespan (3.5.1, 3.5.2) is 1 year shorter than the national average.

3. Offer of educational services by the higher education institutions of III-IV accreditation grades is insufficient. The number of students per 10,000 population (4.5.1. (a)) is twice less than the national average (192.57 against 320.96), while the number of universities per 100,000 population (4.4.2. (a)) is bigger than the national average (0.75 against 0.67). This correlates with more than twice as the national average share of households suffering from any kind of inability of any member of the household to receive education (4.3.1) (18.6% against 7.6%).
4. Kherson oblast is located in the south of the country; hence it shows high demand in water for agricultural purposes. Water intensity of GRP (6.4.1) is the highest across the country (45.51 cubic meters of used water per 1 million GRP against 4.88 on average across Ukraine). The oblast reports zero problems with centralized water supply and drain in cities (6.1.6, 6.2.2), while rural areas are almost deprived of centralized drain systems (6.2.1. (a)).
5. The energy intensity of GRP (7.4.1. (a)) is twice lower than the national average (26.89 tons of oil equivalent per UAH million by GRP against 55.23), moreover, a share of renewable sources in total energy generation is predominant (7.3.1) (89.93% against 3% of national average).
6. The oblast faces significant infrastructure challenges, namely as follows: the rural population living farther than 3 km from the paved road (9.1.1) constitutes one third of the total population and is almost three times bigger than the national average (29.95% against 10.74%), and the number of transported passengers per 100 people in the region (9.1.3. (a)) is almost twice lower than the national average (0.82 against 1.41). The rate of coverage of population with broadband Internet services is low (9.6.1) (26.62 subscribers per 100 inhabitants against 39.03 across Ukraine).
7. The oblast pays much attention to the reduction of losses in agricultural products, thus the share of lost grain (12.2.1. (a)) and vegetables (12.2.2. (a)) is smaller than the national average here (1.78% against 2.14%, and 15.63% against 17.09%, respectively).
8. The local environmental condition is much better compared to most oblasts of Ukraine. Volume of emissions of atmospheric pollutants from stationary sources, tones per sq.km. of the region's area (11.5.4. (a)) is 15 times lower than the national average, and the amount of generated waste (12.3.1. (a)) is more than ten times less.

Table of values of indicators which measure the SDG in Kherson oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	71.4	62.6	8.80	5.2.2 (a)	1.5	2.7	0.55
1.2.1 (a)	84.4	56.3	28.10	5.3.1	-	-	-
1.3.1 (a)	94.5	70.7	23.80	5.4.2	15.6	-	-
1.3.2	59.1	53.1	6.00	5.4.3 (a)	77.9	77.1	0.80
2.1.1 (a)	50.9	50.9	1.00	5.5.1 (a)	61.0	44.5	1.37
2.1.2 (a)	195.6	209.9	0.93	5.5.2	34.4	27.3	1.26
2.1.3 (a)	47.2	50.9	0.93	5.6.1	87.0	74.9	12.10
2.2.1	240.6	223.3	1.08	5.6.2 (a)	55.7	56.2	-0.50
2.2.2	105.0	95.2	9.80	5.6.3 (a)	71.7	71.9	-0.20
2.3.1	97.6	89.3	8.30	6.1.1 (a)	2.8	7.6	-4.80
2.3.2	53.7	38.2	15.50	6.1.2 (a)	36.4	29.6	1.23
2.3.3 (a)	0.3	2.5	-2.20	6.1.3 (a)	2.8	4.6	-1.80
2.4.1	144.8	141.5	3.30	6.1.4	-	90.0	-
3.1.1	0.0	15.3	0.00	6.1.5	85.0	24.2	60.80
3.2.1	9.6	9.7	1.00	6.1.6	100.0	89.4	10.60
3.3.1	49.0	37.2	1.32	6.2.1 (a)	1.0	4.1	-3.10
3.3.2	82.3	56.0	1.47	6.2.2	100.0	73.0	27.00
3.4.1	93.1	61.1	1.52	6.3.1	0.0	875.0	0.00
3.4.2	49.0	27.6	1.78	6.3.2	0.0	16.4	-16.38
3.4.3	28.8	24.0	1.20	6.4.1	45.5	4.9	9.33
3.4.4	14.0	11.1	1.26	6.4.2	100.0	100.0	0.00
3.5.1 (a)	50.6	52.2	0.97	6.5.1	0.0	0.0	0.00
3.5.2 (a)	61.1	62.0	0.98	7.1.1	880.0	163682.0	-
3.6.1	11.7	11.2	1.05	7.1.2	15.8	11.7	4.10
3.6.2 (a)	100.0	100.0	1.00	7.1.3	19.4	18.8	0.56
3.7.1	-	-	-	7.3.1	89.9	3.0	86.93
3.8.1 (a)	19.9	18.4	1.50	7.4.1 (a)	26.9	55.2	0.49
3.9.1 (a)	29.6	29.3	0.30	8.1.1	98.7	90.2	8.50
4.1.1 (a)	84.2	78.5	5.70	8.1.2	9.6	13.7	-4.09
4.2.1	67.0	55.0	12.00	8.1.3	11.5	19.2	-7.66
4.3.1	18.6	7.6	11.00	8.1.4 (a)	0.2	0.7	-0.48
4.4.1 (a)	192.6	321.0	0.60	8.2.1 (a)	45.6	33.1	12.55
4.4.1-1	52.6	55.2	-2.61	8.2.2 (a)	72.2	121.0	0.60
4.4.2 (a)	0.8	0.7	1.12	8.2.3 (a)	72.2	43.7	28.48
4.5.1 (a)	255.3	374.7	0.68	8.3.1 (a)	56.1	56.7	-0.60
4.5.2	45.5	48.9	-3.40	8.4.1	46.6	12.8	33.80
4.6.1	17.4	15.3	2.10	8.5.1 (a)	32.1	25.9	1.24
4.7.1	92.1	81.0	11.11	8.5.2	100.0	100.0	0.00
4.7.2	85.2	60.1	25.10	8.5.3	4.8	12.7	-7.84
4.7.3	11.3	9.4	1.90	8.6.1 (a)	17.5	25.4	-7.92
5.1.1	2.0	-	-	8.6.2 (a)	87.7	60.2	27.45
5.2.1 (a)	0.1	0.1	0.01	8.6.3 (a)	4.9	7.6	-2.70

(continuation)

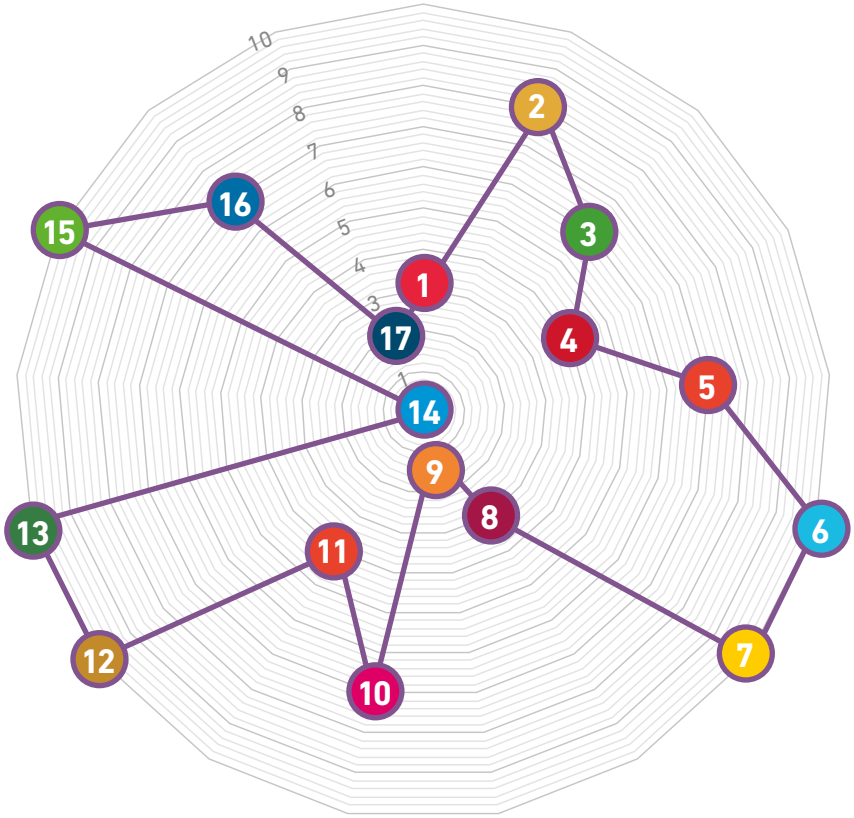
Table of values of indicators which measure the SDG in Kherson oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	29.9	10.7	19.20	12.4.2	21.2	30.0	-8.80
9.1.2	9.0	1474.0	0.01	13.1.1 (a)	0.3	4.7	0.07
9.1.3 (a)	0.8	1.4	0.59	14.1.1 (a)	0.2	17.8	-17.60
9.2.1 (a)	23.0	35.3	-12.22	14.2.1	0.0	0.0	0.00
9.3.1	-	0.0	-	14.2.2	10.2	4.3	5.94
9.3.2 (a)	100.0	97.8	2.21	14.2.3	244.1	585.6	0.42
9.3.3	-	15.0	-	14.3.1 (a)	1.6	4.1	0.39
9.4.1 (a)	0.1	2.4	-2.31	15.1.1	290.6	1769.1	0.16
9.4.2 (a)	2.8	10.0	-7.18	15.1.2	10.2	2.9	7.30
9.4.3	20.4	21.0	-0.59	15.1.3	20.2	22.4	-2.20
9.5.1	0.1	0.6	-0.50	15.2.1	5.3	17.6	-12.30
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	0.4	3.5	0.12
9.6.1	26.6	39.0	0.68	15.3.1 (a)	0.5	25.5	0.02
9.7.1 (a)	41.4	37.4	4.00	15.3.2	1672.6	31131.0	0.05
10.1.1 (a)	3.3	4.5	-1.20	15.3.3	58.8	51.6	7.20
10.1.2	-	15.0	-	15.3.4 (a)	2.2	441.8	0.00
10.2.1	-	9.0	-	15.3.5	165.6	7840.5	0.02
10.3.1 (a)	25.1	27.0	-1.92	15.3.6	5.8	13.0	-7.17
10.3.2 (a)	4.9	8.3	-3.48	15.4.1	-	669.0	-
10.3.3 (a)	5.8	11.2	-5.46	15.4.2	-	1.1	-
10.4.1	2.4	2.7	0.89	16.1.1 (a)	5.0	5.0	1.00
10.5.1	48.6	37.7	10.94	16.1.2 (a)	13.0	10.0	1.30
11.1.1 (a)	36.6	37.8	-1.22	16.1.3 (a)	3.2	1.8	1.74
11.1.2 (a)	24.0	22.9	1.05	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	276.9	199.3	1.39
11.3.1	-	6.0	-	16.2.3 (a)	10.3	5.3	1.94
11.3.2 (a)	1.2	1.4	0.88	16.3.1 (a)	9.0	9.0	0.00
11.3.2-1	0.6	12.6	0.04	16.3.2 (a)	12.0	11.0	1.09
11.3.3	10.2	2.9	7.30	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	10.8	8.4	1.28
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	401.8	556.5	0.72
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	23.5	15.0	1.57
11.5.4 (a)	2.0	7.8	0.26	16.6.1 (a)	53.0	50.0	3.00
11.5.4-1	57.1	4521.3	0.01	16.7.1	27.0	38.0	-11.00
11.6.1 (a)	0.8	4.9	0.16	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.8	2.1	-0.35	16.8.3	-	-	-
12.2.2 (a)	15.6	17.1	-1.46	16.9.1	6.6	6.7	-0.10
12.3.1 (a)	14.7	501.9	0.03	17.1.1	0.7	0.4	0.27
12.3.1-1	8.0	220.0	0.04	17.1.2 (a)	31.5	102.5	0.31
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	90.6	993.7	0.09				

4.21. Khmelnytskyi oblast

Khmelnytskyi oblast belongs to regions with medium level of economic development. As for the GRP per capita, it ranked 17th among all regions of Ukraine in the baseline 2015 (the city of Kyiv exclusive). By volume of industrial products sold per capita it ranked 15th. Although the oblast hosts many high-tech engineering enterprises and Khmelnitsky nuclear power plant, its economy is mostly built on agricultural industry and agricultural processing industries. The latter do not make any significant share of its GRP and do not result in the increase of income of the population, yet they also bear minimal threats to the environmental status of the oblast and health of the population. As for the SDGs achievement, based on the indicators of the baseline year 2015, this oblast reported its biggest progress within Goals 2, 3, 12, 13, 15 and 16. At the same time, Goals 1, 9 and 11 require additional efforts to be made for their successful achievement. Other Goals show both high and low levels of the implementation of indicators within goal, which brings in general to the average level of SDGs achievement.

SDG baseline for Khmelnytskyi oblast in 2015



As for the sustainable development, Khmelnytskyi oblast has the following features[42].

1. The oblast has a relatively high level of agricultural development. Labor productivity in agricultural companies (2.2.1.) exceeded the average productivity in the country almost by 20%. The share of agricultural land under organic amendment (2.3.3.) is twice as high as the average in the country, which means the prospects for the development of organic production here. The rate of consumption of main food products is high as well. Meat consumption (2.1.1.) is at average level, while milk and dairy products consumption (2.1.2.) and fruit and berry products consumption (2.1.3.) are significantly higher than the average consumption across the country.
2. As for the industrial development, the indicators are much poorer in comparison with agricultural industry. The share of sold products

[42] Detailed data of indicators of region are available by link

(goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry in total volume of sold products (9.4.1.) is twice lsmaller than average Ukrainian, and the share of sold products (goods, services) according to economic activity type that belong to the medium high-tech sector of processing industry in total volume of sold products (9.4.2.) is three times smaller. The oblast has low indicators for the production of innovative products (9.5.2.) and for the share of expenditure on scientific and technical work in GRP (9.5.1). In general, GRP per one employed person (8.2.2. (a)) in the baseline year constituted only 68% of the national average.

3. That state of oblast's economy formed its population income rates. The share of the population whose average per capita equivalent money income is lower than the actual minimum subsistence level (1.1.1.) was 76,4%, which is 13,4% higher than the national average. Again, the share of food expenditure in total household spending (1.3.2.) is bigger than the average, which speaks for the poverty of the population. At the same time, the share of households which report themselves as poor while assessing their material well-being (1.3.1.) is 65% smaller than the national one and is significantly smaller than in many oblasts with incomes which considerably exceed the incomes of the population of Khmelnytskyi oblast.
4. This can be partially explained by the fact that almost all population of the oblast, who is in destressed conditions, is covered by social care services (1.2.1. (a)), as well as by a relatively satisfactory level of achievement of equality (Goal 10). Thus, the indicator 10.1.1. 'Income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income' in the region is 3.4% against the average of 4.5%. Similar situation is with the ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population (10.4.1.), and Indicator (17.1.1.) 'Ratio of volume of private remittance from relatives, other persons and other cash returns to GRP', which show higher than average readings. This means that a substantial part of the residents' income is generated at the expense of relatives working beyond the territory of the oblast and the country.
5. In order to boost the SDGs achievement, the oblasts shall immediately address a challenge of investment attraction, especially into industries that form the GRP and hence influence both the income of the population and consumer demand for the development of industry and agribusiness. In 2015 foreign direct investment constituted less than $1 US per oblas's resident.

Table of values of indicators which measure the SDG in Khmelnytskyi oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	76.4	62.6	13.80	5.2.2 (a)	2.9	2.7	1.04
1.2.1 (a)	97.4	56.3	41.10	5.3.1	-	-	-
1.3.1 (a)	65.0	70.7	-5.70	5.4.2	19.0	-	-
1.3.2	57.8	53.1	4.70	5.4.3 (a)	73.5	77.1	-3.60
2.1.1 (a)	48.6	50.9	0.95	5.5.1 (a)	43.9	44.5	0.99
2.1.2 (a)	233.0	209.9	1.11	5.5.2	34.1	27.3	1.25
2.1.3 (a)	55.6	50.9	1.09	5.6.1	77.5	74.9	2.60
2.2.1	264.0	223.3	1.18	5.6.2 (a)	53.4	56.2	-2.80
2.2.2	87.3	95.2	-7.90	5.6.3 (a)	48.3	71.9	-23.60
2.3.1	69.0	89.3	-20.30	6.1.1 (a)	17.5	7.6	9.90
2.3.2	53.9	38.2	15.70	6.1.2 (a)	19.2	29.6	0.65
2.3.3 (a)	5.7	2.5	3.20	6.1.3 (a)	9.5	4.6	4.90
2.4.1	138.0	141.5	-3.50	6.1.4	-	90.0	-
3.1.1	7.2	15.3	0.47	6.1.5	0.0	24.2	-24.20
3.2.1	9.7	9.7	1.00	6.1.6	78.0	89.4	-11.40
3.3.1	15.0	37.2	0.40	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	55.9	56.0	1.00	6.2.2	75.0	73.0	2.00
3.4.1	62.5	61.1	1.02	6.3.1	1.0	875.0	0.00
3.4.2	22.3	27.6	0.81	6.3.2	2.5	16.4	-13.88
3.4.3	27.5	24.0	1.15	6.4.1	2.5	4.9	0.51
3.4.4	14.3	11.1	1.28	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.4	52.2	1.00	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.7	62.0	1.01	7.1.1	13552.0	163682.0	-
3.6.1	12.7	11.2	1.13	7.1.2	15.3	11.7	3.58
3.6.2 (a)	100.0	100.0	1.00	7.1.3	12.0	18.8	-6.82
3.7.1	-	-	-	7.3.1	0.3	3.0	-2.73
3.8.1 (a)	17.5	18.4	-0.90	7.4.1 (a)	41.1	55.2	0.74
3.9.1 (a)	9.5	29.3	-19.80	8.1.1	92.2	90.2	2.00
4.1.1 (a)	83.9	78.5	5.40	8.1.2	16.6	13.7	2.84
4.2.1	65.0	55.0	10.00	8.1.3	21.9	19.2	2.73
4.3.1	9.5	7.6	1.90	8.1.4 (a)	0.2	0.7	-0.53
4.4.1 (a)	217.6	321.0	0.68	8.2.1 (a)	26.7	33.1	-6.38
4.4.1-1	53.5	55.2	-1.76	8.2.2 (a)	82.2	121.0	0.68
4.4.2 (a)	0.7	0.7	1.03	8.2.3 (a)	78.0	43.7	34.30
4.5.1 (a)	257.6	374.7	0.69	8.3.1 (a)	52.6	56.7	-4.10
4.5.2	45.7	48.9	-3.20	8.4.1	12.8	12.8	-0.05
4.6.1	14.8	15.3	-0.50	8.5.1 (a)	14.6	25.9	0.56
4.7.1	92.1	81.0	11.11	8.5.2	100.0	100.0	0.00
4.7.2	62.5	60.1	2.40	8.5.3	11.7	12.7	-0.95
4.7.3	7.3	9.4	-2.12	8.6.1 (a)	19.4	25.4	-5.98
5.1.1	1.0	-	-	8.6.2 (a)	78.7	60.2	18.52
5.2.1 (a)	0.0	0.1	-0.03	8.6.3 (a)	3.2	7.6	-4.40

(continuation)

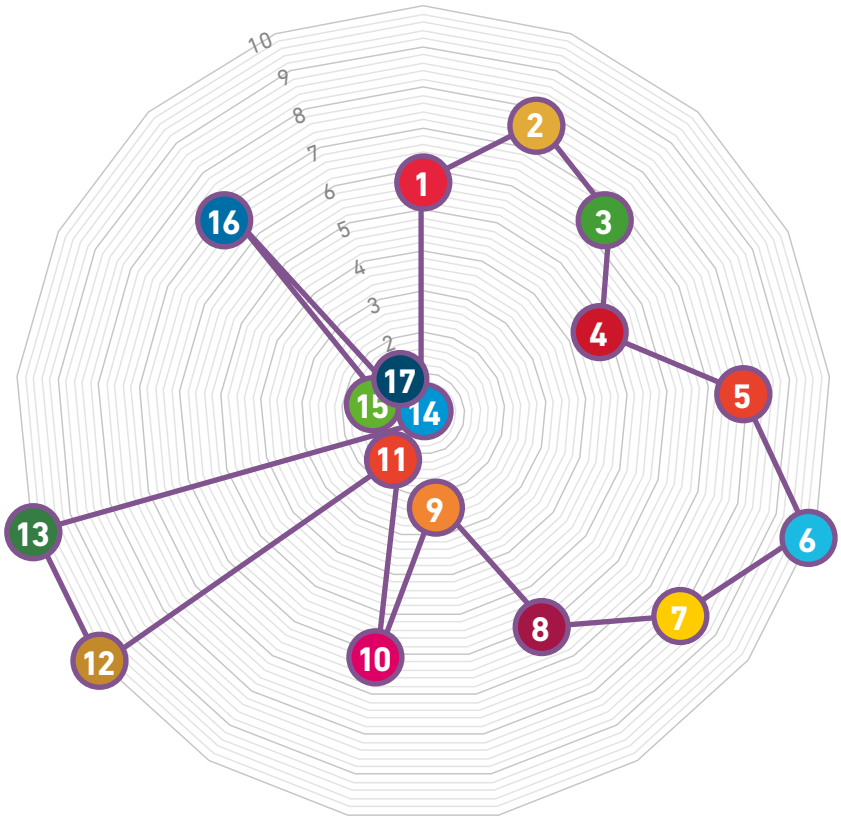
Table of values of indicators which measure the SDG in Khmelnytskyi oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	-	10.7	-	12.4.2	36.2	30.0	6.20
9.1.2	7.8	1474.0	0.01	13.1.1 (a)	0.9	4.7	0.19
9.1.3 (a)	0.9	1.4	0.62	14.1.1 (a)	-	17.8	-
9.2.1 (a)	30.8	35.3	-4.49	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	98.6	97.8	0.82	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	1.0	2.4	-1.44	15.1.1	270.1	1769.1	0.15
9.4.2 (a)	3.3	10.0	-6.69	15.1.2	13.1	2.9	10.20
9.4.3	19.6	21.0	-1.46	15.1.3	-	22.4	-
9.5.1	0.0	0.6	-0.58	15.2.1	13.9	17.6	-3.70
9.5.2	0.0	0.4	-0.40	15.2.2 (a)	2.3	3.5	0.66
9.6.1	27.1	39.0	0.69	15.3.1 (a)	1.9	25.5	0.07
9.7.1 (a)	50.0	37.4	12.60	15.3.2	1217.6	31131.0	0.04
10.1.1 (a)	3.4	4.5	-1.10	15.3.3	59.0	51.6	7.40
10.1.2	-	15.0	-	15.3.4 (a)	48.5	441.8	0.11
10.2.1	-	9.0	-	15.3.5	270.7	7840.5	0.03
10.3.1 (a)	20.5	27.0	-6.49	15.3.6	13.1	13.0	0.13
10.3.2 (a)	4.4	8.3	-3.96	15.4.1	-	669.0	-
10.3.3 (a)	-	11.2	-	15.4.2	-	1.1	-
10.4.1	2.6	2.7	0.96	16.1.1 (a)	3.0	5.0	0.60
10.5.1	41.3	37.7	3.56	16.1.2 (a)	9.0	10.0	0.90
11.1.1 (a)	30.3	37.8	-7.54	16.1.3 (a)	2.2	1.8	1.17
11.1.2 (a)	26.3	22.9	1.15	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	159.6	199.3	0.80
11.3.1	1.0	6.0	-	16.2.3 (a)	0.8	5.3	0.15
11.3.2 (a)	1.1	1.4	0.78	16.3.1 (a)	9.0	9.0	0.00
11.3.2-1	8.2	12.6	0.66	16.3.2 (a)	8.0	11.0	0.73
11.3.3	13.1	2.9	10.20	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	4.2	8.4	0.50
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	97.9	556.5	0.18
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	7.4	15.0	0.49
11.5.4 (a)	3.7	7.8	0.47	16.6.1 (a)	52.0	50.0	2.00
11.5.4-1	75.5	4521.3	0.02	16.7.1	42.0	38.0	4.00
11.6.1 (a)	1.7	4.9	0.35	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.9	2.1	-0.22	16.8.3	-	-	-
12.2.2 (a)	24.9	17.1	7.80	16.9.1	6.3	6.7	-0.40
12.3.1 (a)	46.6	501.9	0.09	17.1.1	0.5	0.4	0.13
12.3.1-1	3.0	220.0	0.01	17.1.2 (a)	0.8	102.5	0.01
12.3.2	-	-	-	17.3.1	2.0	97.0	0.02
12.4.1 (a)	150.9	993.7	0.15				

4.22. Cherkasy oblast

In 2015 Cherkasy oblast ranked 8th by GRP per capita (the city of Kyiv exclusive). Oblast's structure of the economy is based on industrial and agrarian sectors. The oblast hosts 1.6 ha of agricultural land and 1.1 ha of arable land per capita, which is 64% more than the national average; consequently, Cherkasy oblast is the leader in per capita production of agricultural products across Ukraine. The oblast's industry is composed of the production of food stuff, beverages and tobacco products, chemicals and chemical products, electricity supply and machine building. The oblast demonstrates relatively medium to high baseline indicators within Goals 2, 3, 4, 5, 6, 7, 12, 13 and 16. Goals 1, 8, 9, 11, 15 and 17 require additional attention to be paid and relevant measures to be taken due to the lower sustainable development indicators in the baseline period, compared to other oblasts.

SDG baseline for Cherkasy oblast in 2015



As for the sustainable development, Cherkasy oblast has the following features[43].

1. The objective rates of poverty (Goal 1) and inequality (Goal 10) in this oblast are close to the national average, while the population predominantly reports itself poor, as much as 98% of respondents share this opinion (1.3.1. (a)). Such self-perception is mostly based on non-monetary factors, which are not supported by indicators of the accessibility of education and health care for the population of the region. Thus, 11.4% of households report that they are suffering from lack of funds for vocational education (4.3.1), while the share of households any member of which failed to get medical care, buy medicines and medical devices constituted 29.6% (3.9.1. (a)).
2. The agrarian sector is crucial for the oblast's economic growth. All oblast's indicators within Goal 2 outperform the national average. At the same time, there is a significant capacity for increasing the volume of organic production, as the share of agricultural land under organic amendment constitutes only 4.6% (2.3.3 and

[43] Detailed data of indicators of region are available by link

15.3.4), amidst high rates of agricultural production (2.2.2) and food products (2.3.1), big share of food products and processing of agricultural raw materials in export (2.3.2) which constitutes 51.5% against 38.2% of national average, and low rate of post-harvest losses of grain crops (12.2.1. (a)). A significant increase is achievable in the production of vegetable and melon crops given both the reduction in post-harvest losses (12.2.2. (a)) and the increase in the volumes of organic amendment (2.3.3 and 15.3.4).

3. The oblast's health care indicators within Goal 3 outperform the national average as well. Attention should be paid to the high rate of smoking population (3.8.1. (a)) which is 20.7% against 18.4% on average across Ukraine.
4. According to many indicators within Goal 4, the oblast's educational system is moderately developed. The best results are as follows: rate of net pre-primary education institutions coverage (4.2.1) constitutes 70% against 55% national average, and the rate of secondary schools coverage (4.1.1. (a)) constitutes 83.4 against 78.5%, respectively, including a high level of inclusive education (4.7.3) which is arranged in 22% of secondary schools. At the same time, there are certain challenges in higher education system, in particular, a smaller number of universities (4.4.2. (a)) and students (4.4.1. (a)) in the oblast, respectively, as well as the fact that more than half of the teaching staff of higher education institutions has no academic degree (4.4.1-1).
5. The oblast's gender indicators within Goal 5 outperform the national average. The ratio of wages of women and men in the oblast (5.6.1) is 7.8% higher than the national average and constitutes 82.7%, while the employment rate of women aged 25-49 (5.6.3. (a)) is 25.8% lower than the national average, which speaks for the capacity of women's employment and entrepreneurship.
6. The oblast is relatively sound environmentally for the purposes of Goals 6, 11, 12, 13, in particular regarding atmospheric emissions (11.5.4, 13.1.1), drinking water quality (6.1.1, 6.1.3), waste incineration (12.4.2). At the same time, local authorities should address the issues of almost complete deprivation of rural areas of centralized drain systems (6.2.1. (a)) and low rate of this utility availability for its urban population (6.2.2) which is 55% against 73% of national average. The nature reserve fund of the oblast accounts for 527 territories and objects, while the shares of forested area (15.2.1), the area of territories and objects of the nature reserve fund (15.1.2) and the number of monuments of local importance (11.3.2-1) are smaller than in many other regions. Insufficient funding is allocated for the protection and rehabilitation of soil, underground and surface water (15.3.1. (a)), namely only 67 kopecks per 1 ha were invested in the baseline year, which is 38 times less than the national average per 1 ha.
7. Energy intensity of GRP of the oblast (7.4.1. (a)) is 1.15 times higher than the national average, however, the oblast shows high rates of renewable energy generation (7.3.1) constituting 52.6% more than the national average.
8. The oblast shows relatively low figures for the following indicators: the ratio of innovative expenditures to GRP constitutes 0.11% (8.1.4. (a)), expenditures for scientific and technical work in GRP constitute 0.3% (9.5.1), the share of products new in the market (9.5.2) makes 0.1% of the total volume, and production of the medium-tech sector (9.4.2. (a)) constitutes 7.5%, together with low rates of capital investment (8.1.2), accounting for only 8.8% of GRP in the baseline year. Accordingly, the oblast exports a small share of goods produced with high and medium-high technology (8.1.3), that is 14.2%. Industrial production with high added value has a significant capacity for the oblast's development as well as for the increase of the employment rate of the population, including women and youth (8.4.1), provided the increase in the share of bank lending in the structure of financing of capital investment (which was registered as quite low in the baseline year (8.6.3. (a)) constituting 3.1% against 7.6% on average across Ukraine).
9. The oblast sidesteps the issue of attracting investment; the share of FDI per capita ($5.7) is 18 times less than the national average (17.1.2. (a)). In order to boost investment, the local authorities should address the issues of Internet coverage (9.6.1, 4.5.2), roads improvement (9.3.2. (a)), public transport accessibility for rural settlements (10.3.3), promotion of cooperation between local authorities and business (16.7.1, 16.6.1. and 16.3.1), as well as fostering public-private partnerships in the oblast (17.3.1).

Table of values of indicators which measure the SDG in Cherkasy oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	67.4	62.6	4.80	5.2.2 (a)	2.1	2.7	0.76
1.2.1 (a)	47.0	56.3	-9.28	5.3.1	-	-	-
1.3.1 (a)	98.0	70.7	27.30	5.4.2	11.9	-	-
1.3.2	56.4	53.1	3.30	5.4.3 (a)	75.9	77.1	-1.20
2.1.1 (a)	53.0	50.9	1.04	5.5.1 (a)	42.7	44.5	0.96
2.1.2 (a)	226.9	209.9	1.08	5.5.2	29.9	27.3	1.10
2.1.3 (a)	48.9	50.9	0.96	5.6.1	82.7	74.9	7.80
2.2.1	277.2	223.3	1.24	5.6.2 (a)	72.9	56.2	16.70
2.2.2	99.4	95.2	4.20	5.6.3 (a)	46.1	71.9	-25.80
2.3.1	91.5	89.3	2.20	6.1.1 (a)	5.4	7.6	-2.20
2.3.2	51.5	38.2	13.30	6.1.2 (a)	21.7	29.6	0.73
2.3.3 (a)	4.6	2.5	2.10	6.1.3 (a)	4.6	4.6	0.00
2.4.1	140.2	141.5	-1.30	6.1.4	-	90.0	-
3.1.1	17.4	15.3	1.14	6.1.5	26.9	24.2	2.70
3.2.1	9.4	9.7	0.97	6.1.6	100.0	89.4	10.60
3.3.1	43.6	37.2	1.17	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	57.6	56.0	1.03	6.2.2	55.0	73.0	-18.00
3.4.1	68.3	61.1	1.12	6.3.1	5.0	875.0	0.01
3.4.2	30.0	27.6	1.09	6.3.2	4.7	16.4	-11.66
3.4.3	24.0	24.0	1.00	6.4.1	3.4	4.9	0.70
3.4.4	9.2	11.1	0.83	6.4.2	100.0	100.0	0.00
3.5.1 (a)	52.8	52.2	1.01	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.6	62.0	1.01	7.1.1	1433.0	163682.0	-
3.6.1	13.7	11.2	1.22	7.1.2	12.4	11.7	0.65
3.6.2 (a)	100.0	100.0	1.00	7.1.3	37.9	18.8	19.08
3.7.1	-	-	-	7.3.1	55.6	3.0	52.60
3.8.1 (a)	20.7	18.4	2.30	7.4.1 (a)	63.4	55.2	1.15
3.9.1 (a)	29.6	29.3	0.30	8.1.1	95.0	90.2	4.80
4.1.1 (a)	83.4	78.5	4.90	8.1.2	8.8	13.7	-4.91
4.2.1	70.0	55.0	15.00	8.1.3	14.2	19.2	-5.02
4.3.1	11.4	7.6	3.80	8.1.4 (a)	0.1	0.7	-0.59
4.4.1 (a)	245.2	321.0	0.76	8.2.1 (a)	42.0	33.1	8.89
4.4.1-1	49.4	55.2	-5.87	8.2.2 (a)	97.0	121.0	0.80
4.4.2 (a)	0.4	0.7	0.60	8.2.3 (a)	62.0	43.7	18.29
4.5.1 (a)	313.9	374.7	0.84	8.3.1 (a)	56.5	56.7	-0.20
4.5.2	37.9	48.9	-11.00	8.4.1	33.3	12.8	20.53
4.6.1	20.1	15.3	4.80	8.5.1 (a)	19.1	25.9	0.74
4.7.1	89.6	81.0	8.61	8.5.2	100.0	100.0	0.00
4.7.2	70.9	60.1	10.80	8.5.3	15.4	12.7	2.72
4.7.3	22.0	9.4	12.60	8.6.1 (a)	21.4	25.4	-4.03
5.1.1	0.0	-	-	8.6.2 (a)	73.7	60.2	13.53
5.2.1 (a)	0.1	0.1	0.03	8.6.3 (a)	3.1	7.6	-4.50

(continuation)

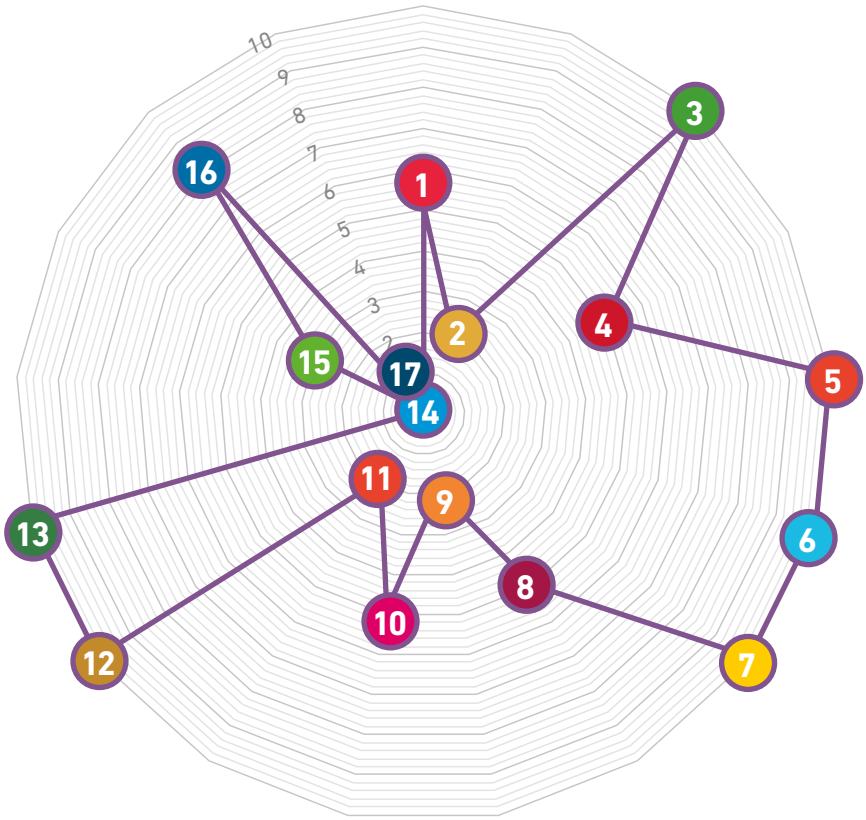
Table of values of indicators which measure the SDG in Cherkasy oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	4.0	10.7	-6.76	12.4.2	61.4	30.0	31.40
9.1.2	31.1	1474.0	0.02	13.1.1 (a)	2.7	4.7	0.58
9.1.3 (a)	1.3	1.4	0.95	14.1.1 (a)	-	17.8	-
9.2.1 (a)	64.9	35.3	29.62	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	96.7	97.8	-1.07	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	5.4	2.4	3.01	15.1.1	19.9	1769.1	0.01
9.4.2 (a)	7.5	10.0	-2.48	15.1.2	1.0	2.9	-1.90
9.4.3	25.8	21.0	4.72	15.1.3	37.1	22.4	14.70
9.5.1	0.3	0.6	-0.32	15.2.1	16.2	17.6	-1.40
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	6.2	3.5	1.78
9.6.1	38.3	39.0	0.98	15.3.1 (a)	0.7	25.5	0.03
9.7.1 (a)	37.1	37.4	-0.30	15.3.2	1242.0	31131.0	0.04
10.1.1 (a)	3.8	4.5	-0.70	15.3.3	59.4	51.6	7.80
10.1.2	-	15.0	-	15.3.4 (a)	42.2	441.8	0.10
10.2.1	-	9.0	-	15.3.5	143.2	7840.5	0.02
10.3.1 (a)	4.2	27.0	-22.79	15.3.6	6.8	13.0	-6.14
10.3.2 (a)	4.2	8.3	-4.13	15.4.1	-	669.0	-
10.3.3 (a)	6.7	11.2	-4.54	15.4.2	-	1.1	-
10.4.1	2.6	2.7	0.96	16.1.1 (a)	5.0	5.0	1.00
10.5.1	35.4	37.7	-2.34	16.1.2 (a)	9.0	10.0	0.90
11.1.1 (a)	31.5	37.8	-6.32	16.1.3 (a)	2.6	1.8	1.44
11.1.2 (a)	22.7	22.9	0.99	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	180.0	199.3	0.90
11.3.1	-	6.0	-	16.2.3 (a)	0.0	5.3	0.00
11.3.2 (a)	1.9	1.4	1.41	16.3.1 (a)	9.0	9.0	0.00
11.3.2-1	2.5	12.6	0.20	16.3.2 (a)	9.0	11.0	0.82
11.3.3	1.0	2.9	-1.90	16.4.1 (a)	-	12.0	-
11.5.1	100.0	100.0	0.00	16.5.1 (a)	9.1	8.4	1.09
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	1.3	556.5	0.00
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	15.6	15.0	1.04
11.5.4 (a)	5.8	7.8	0.74	16.6.1 (a)	50.0	50.0	0.00
11.5.4-1	120.3	4521.3	0.03	16.7.1	31.0	38.0	-7.00
11.6.1 (a)	1.2	4.9	0.24	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.9	2.1	-0.27	16.8.3	-	-	-
12.2.2 (a)	24.3	17.1	7.21	16.9.1	6.8	6.7	0.10
12.3.1 (a)	56.4	501.9	0.11	17.1.1	0.4	0.4	-0.02
12.3.1-1	15.0	220.0	0.07	17.1.2 (a)	5.7	102.5	0.06
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	154.8	993.7	0.16				

4.23. Chernivtsi oblast

Due to the small scale of the economy and the geographical features, this region shows one of the lowest development rates in many areas. In particular, it ranks 23rd by GRP per capita. In 2015 its industry was relatively stable (with decline rate of 1.7%), which is mostly explained with the increase of a significant share of electricity, gas, steam supply and air-conditioning in the structure of industrial sector (42%), while the processing industry declined by 8.6%, and the decrease in commodity exports constituted 16.2%. Agricultural production decreased by 5.6%. The oblast is one of the least attractive for foreign investors, thus the direct investment amounted to $6.1 per capita.

SDG baseline for Chernivtsi oblast in 2015



As of the sustainable development, Chernivtsi oblast has the following features[44].

1. In terms of its economic power, the oblast is next-to-last in Ukraine by the rate of incomes of employed population, namely the average wage in 2015 amounted to 72.6% of the national average, rate of labor productivity in agricultural enterprises (2.2.1) constituted 60.6%, rate of labor productivity in general in the oblast's economy (8.2.2. (a)) made up 41.7%. However, the share of population with money income lower than actual subsistence minimum (1.1.1. (a)) is not as big as could be expected. Also, 79.4% of households reported themselves poor (1.3.1. (a)). Such moderate rates can be attributed to the tangible replenishment of household incomes due to labor migration, thus cash returns from the abroad relatives amounted to 1% of GRP (17.1.1). Meanwhile, the low rate of income has affected the rate of consumption of meat (2.1.1. (a)), which is 20% lower than the national average, while milk (2.1.2. (a)) and fruit consumption rates (2.1.3. (a)) remain higher than the national average, which might speak for the development of household economy.
2. According to the questionnaire survey data, only 3.1% of the population had difficulties in

[44] Detailed data of indicators of region are available by link

accessing health care system (3.9.1. (a)), largely due to the branching of the network of medical institutions (10.3.1, 10.3.2). However, this failed to scale down the high rates of maternal (3.1.1) and infant (3.2.1) mortality. By contrast, there is a considerably better situation with mortality from cerebrovascular diseases (3.4.1-3.4.2) and tumors of the cervix, together with an improved average expected lifespan (3.5.1, 3.5.2), which might have resulted from the favorable environmental conditions in the region.

3. Rural education is noticeably beneficial, as 92.7% of schools have access to the Internet (4.7.1), 15.1% of schools practice inclusive education (4.7.3).
4. The oblast demonstrates a low employment rate of women aged 25-49 (5.6.3. (a)), which might result from the general overload of the labor market, as well as significant rate of informal employment in the household.
5. There is low rate of centralized water supply accessibility for both rural (3.7%) (6.1.5) and urban population (77.8%) (6.1.6). This reduces rate of fresh water accessibility (6.1.2. (a)) and might increase morbidity caused by poor sanitary conditions.
6. According to the regional statistical data, 100% of the energy in the region is produced from renewable sources. Meanwhile, the oblast generates only 1.1% of the total Ukrainian electricity.
7. Small and medium-sized enterprises totally make up 100% of production here (8.6.2. (a)). However, the share of employment in SMEs was only 13.3 % (8.6.1. (a)), which illustrates the ineffectiveness of the regional economy structure, bringing the smallest part of the labor force to be employed in productive sectors.
8. The region-specific share of the touristic sector (11.6.1. (a)) is significantly higher compared to most oblasts (while being lower than the national average). This reflects the great touristic and recreational attractiveness of the oblast. Unlocking of touristic potential is impeded by the low density of monuments of local importance (11.3.2-1), whereas recreational capacity is ensured with significant areas of reserves (11.3.3), especially in mountainous terrain (15.4.2), significant forested area (15.2.1) and its low cultivation rate (15.3.3).
9. A low level of crime (16.1.1, 16.2.3, 16.5.3) contributes to the attractiveness of the region, but for the rate of crimes against sexual freedom and integrity (16.1.3. (a)), which outperform the national average by 5.9 time. The rate of trust in the judiciary is somewhat higher than the national average (14%) (16.3.1. (a)).

[45] The indicator needs to be verified due to a significant deviation

Table of values of indicators which measure the SDG in Chernivtsi oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	71.1	62.6	8.50	5.2.2 (a)	1.9	2.7	0.68
1.2.1 (a)	88.5	56.3	32.20	5.3.1	-	-	-
1.3.1 (a)	79.4	70.7	8.70	5.4.2	15.6	-	-
1.3.2	49.1	53.1	-4.00	5.4.3 (a)	70.3	77.1	-6.80
2.1.1 (a)	41.2	50.9	0.81	5.5.1 (a)	47.2	44.5	1.06
2.1.2 (a)	243.9	209.9	1.16	5.5.2	27.3	27.3	1.00
2.1.3 (a)	58.4	50.9	1.15	5.6.1	89.1	74.9	14.20
2.2.1	135.4	223.3	0.61	5.6.2 (a)	55.0	56.2	-1.20
2.2.2	91.1	95.2	-4.10	5.6.3 (a)	58.8	71.9	-13.10
2.3.1	93.0	89.3	3.70	6.1.1 (a)	-	7.6	-
2.3.2	29.0	38.2	-9.20	6.1.2 (a)	22.2	29.6	0.75
2.3.3 (a)	1.6	2.5	-0.90	6.1.3 (a)	0.8	4.6	-3.80
2.4.1	140.1	141.5	-1.40	6.1.4	-	90.0	-
3.1.1	18.7	15.3	1.22	6.1.5	3.7	24.2	-20.50
3.2.1	10.4	9.7	1.07	6.1.6	77.8	89.4	-11.60
3.3.1	10.8	37.2	0.29	6.2.1 (a)	0.0	4.1	-4.10
3.3.2	40.1	56.0	0.72	6.2.2	71.5	73.0	-1.50
3.4.1	33.9	61.1	0.56	6.3.1	2.0	875.0	0.00
3.4.2	14.6	27.6	0.53	6.3.2	5.1	16.4	-11.25
3.4.3	23.6	24.0	0.98	6.4.1	3.2	4.9	0.65
3.4.4	7.5	11.1	0.68	6.4.2	100.0	100.0	0.00
3.5.1 (a)	54.3	52.2	1.04	6.5.1	0.0	0.0	0.00
3.5.2 (a)	63.2	62.0	1.02	7.1.1	1856.0	163682.0	-
3.6.1	11.9	11.2	1.06	7.1.2	17.7	11.7	5.93
3.6.2 (a)	100.0	100.0	1.00	7.1.3	13.0	18.8	-5.82
3.7.1	-	-	-	7.3.1	100.0	3.0	97.00
3.8.1 (a)	16.8	18.4	-1.60	7.4.1 (a)	38.9	55.2	0.70
3.9.1 (a)	3.1	29.3	-26.20	8.1.1	94.7	90.2	4.50
4.1.1 (a)	82.8	78.5	4.30	8.1.2	15.1	13.7	1.34
4.2.1	57.0	55.0	2.00	8.1.3	12.3	19.2	-6.89
4.3.1	3.3	7.6	-4.30	8.1.4 (a)	0.1	0.7	-0.59
4.4.1 (a)	244.7	321.0	0.76	8.2.1 (a)	13.2	33.1	-19.87
4.4.1-1	64.3	55.2	9.07	8.2.2 (a)	50.4	121.0	0.42
4.4.2 (a)	0.4	0.7	0.65	8.2.3 (a)	76.6	43.7	32.88
4.5.1 (a)	343.2	374.7	0.92	8.3.1 (a)	54.9	56.7	-1.80
4.5.2	45.7	48.9	-3.20	8.4.1	12.8	12.8	-0.01
4.6.1	18.4	15.3	3.05	8.5.1 (a)	31.6	25.9	1.22
4.7.1	92.7	81.0	11.71	8.5.2	100.0	100.0	0.00
4.7.2	64.1	60.1	4.00	8.5.3	7.3	12.7	-5.41
4.7.3	15.1	9.4	5.71	8.6.1 (a)	13.3	25.4	-12.12
5.1.1	1.0	-	-	8.6.2 (a)	100.0	60.2	39.80
5.2.1 (a)	0.0	0.1	-0.04	8.6.3 (a)	1.1	7.6	-6.50

(continuation)

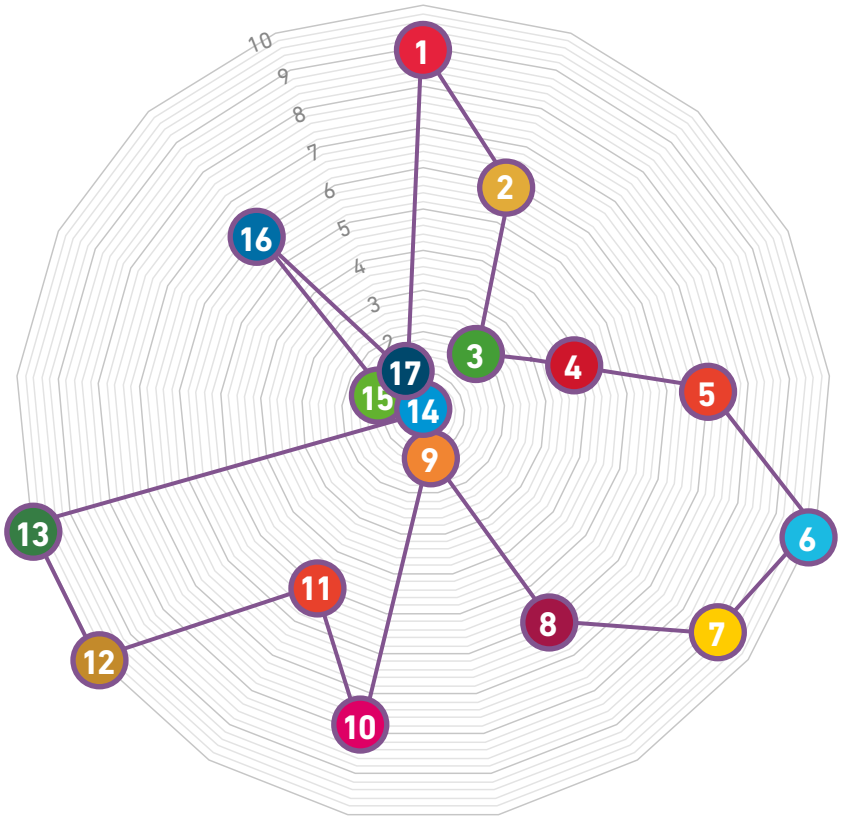
Table of values of indicators which measure the SDG in Chernivtsi oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	13.4	10.7	2.67	12.4.2	22.7	30.0	-7.30
9.1.2	4.7	1474.0	0.00	13.1.1 (a)	0.4	4.7	0.08
9.1.3 (a)	0.8	1.4	0.54	14.1.1 (a)	-	17.8	-
9.2.1 (a)	-	35.3	-	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	100.0	97.8	2.21	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	1.2	2.4	-1.18	15.1.1	27.8	1769.1	0.02
9.4.2 (a)	1.5	10.0	-8.45	15.1.2	3.4	2.9	0.50
9.4.3	9.6	21.0	-11.48	15.1.3	12.8	22.4	-9.60
9.5.1	0.2	0.6	-0.37	15.2.1	31.9	17.6	14.30
9.5.2	–	0.4	-	15.2.2 (a)	7.7	3.5	2.20
9.6.1	22.5	39.0	0.58	15.3.1 (a)	19.1	25.5	0.75
9.7.1 (a)	46.8	37.4	9.40	15.3.2	322.1	31131.0	0.01
10.1.1 (a)	4.1	4.5	-0.40	15.3.3	39.8	51.6	-11.80
10.1.2	-	15.0	-	15.3.4 (a)	1.9	441.8	0.00
10.2.1	-	9.0	-	15.3.5	108.7	7840.5	0.01
10.3.1 (a)	11.6	27.0	-15.44	15.3.6	13.4	13.0	0.44
10.3.2 (a)	3.3	8.3	-5.08	15.4.1	110.6	669.0	0.17
10.3.3 (a)	4.3	11.2	-6.96	15.4.2	13.7	1.1	12.56
10.4.1	2.7	2.7	1.00	16.1.1 (a)	3.0	5.0	0.60
10.5.1	48.0	37.7	10.27	16.1.2 (a)	8.0	10.0	0.80
11.1.1 (a)	32.7	37.8	-5.09	16.1.3 (a)	10.8	1.8	5.86
11.1.2 (a)	24.4	22.9	1.07	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	121.0	199.3	0.61
11.3.1	1.0	6.0	-	16.2.3 (a)	2.2	5.3	0.41
11.3.2 (a)	2.2	1.4	1.63	16.3.1 (a)	14.0	9.0	5.00
11.3.2-1	4.9	12.6	0.39	16.3.2 (a)	5.0	11.0	0.45
11.3.3	3.4	2.9	0.50	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	0.2	8.4	0.03
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	23.7	556.5	0.04
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	0.0	15.0	0.00
11.5.4 (a)	4.2	7.8	0.54	16.6.1 (a)	55.0	50.0	5.00
11.5.4-1	34.1	4521.3	0.01	16.7.1	32.0	38.0	-6.00
11.6.1 (a)	3.7	4.9	0.75	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	2.3	2.1	0.16	16.8.3	-	-	-
12.2.2 (a)	11.9	17.1	-5.21	16.9.1	7.2	6.7	0.50
12.3.1 (a)	49.2	501.9	0.10	17.1.1	1.0	0.4	0.60
12.3.1-1	3.0	220.0	0.01	17.1.2 (a)	6.1	102.5	0.06
12.3.2	-	-	-	17.3.1	0.0	97.0	0.00
12.4.1 (a)	133.6	993.7	0.13				

4.24. Chernihiv oblast

By the majority of social and economic development indicators Chernihiv oblast sits in the middle of the list of Ukrainian regions. Owing to a well-diversified structure of its economy, this oblast dodged that deep fall in GRP (8.1.1) which affected many oblasts and the country in whole (93.4% against 90.2%). Investment attractiveness of the oblast is very low, rate of direct foreign investment per 1 employed person (17.1.2. (a)) is among the lowest in Ukraine ($3.71). The share of bank lending in the structure of capital investments (8.6.3. (a)) is almost 2 times lower than the national average (4% against 7.6%). The domestic products have a low value added, and the share of intermediate consumption in sales (8.2.3. (a)) outperforms the national average by 1.5 times (62.42% against 43.73%). Relatively high baseline indicators for the oblast are registered within Goals 1, 2, 5, 10, 11, 12 and 13. Goals 3, 7, 8 and 9 require additional attention to be paid and appropriate measures to be taken due to the lower indicators of sustainable development in the baseline period, compared to other oblasts.

SDG baseline for Chernihiv oblast in 2015



As for the sustainable development, Chernihiv oblast has the following features[46].

1. The share of population with money incomes below the subsistence actual minimum (1.1.1. (a)) is one of the smallest in Ukraine and amounts to 55% against 62.6% on national average. At the same time, the perception of the quality of life by the population (1.3.1. (a)) is better than the national average, namely only 63.8% of households report themselves poor compared to 70.7% across Ukraine. The share of population reporting themselves distressed (1.2.1. (a)) significantly outperforms the national average (82.3% against 56.3%). Poverty is reflected in the structure of food expenditures, id est the rates of meat consumption (2.1.1. (a)), fruits and berries consumption (2.1.3. (a)) per capita are lower than the national average (45.8 kg against 50.5 kg, and 43.2 kg against 50.9 kg, respectively).

[46] Detailed data of indicators of region are available by link

2. Almost all forms of morbidity and mortality rates are much higher than the national average. The number of HIV (3.3.1) and tuberculosis diagnosed cases (3.3.2) per 100 thousand population is higher than the national average (47.8 against 37.2, and 65 against 56, respectively). A similar situation is found with the rates of mortality of men (3.4.1) and women (3.4.2) from cerebrovascular diseases (89.93 against 61.07, and 32,92 against 27.58, respectively). There are problems with women's health, maternal (3.1.1) and infant (3.2.1) mortality. Access to health care services is hindered, and the share of households any member of which failed to get medical aid (3.9.1. (a)) is more than two times bigger than the national average. The average expected lifespan (3.5.1. (a)) is 1 year shorter than the national average.
3. Offer of educational services by the higher education institutions of III-IV accreditation grades is insufficient: the number of students per 10,000 population (4.5.1. (a)) is more than twice below the national average (203.97 against 320.96); the situation is reported worse with the number of universities per 100 thousand population (4.4.2. (a)) (0.29 against 0.67). Consequently, the oblast's share of youth not in employment or education (8.4.1) is twice as national average (21.07% against 12.8%). The situation with secondary schooling is much better, whereas even rural schools are almost 100% covered with the Internet services and training software (4.7.1, 4.7.2).
4. The situation with water supply and drain system in rural areas is complicated. Only 6.72% of the rural population (24.2% across Ukraine) have access to centralized water supply (6.1.5), and only 0.7% (against 4.1%) is covered with water supply utility services. The oblast has practically no discharges of wastewater (6.3.1), however, the rate of drinking water compliance with health and safety regulations (6.1.1, 6.1.3) is extremely low, more than 2.5 times lower than the national average (in rural areas it constitutes 3.4% against 7.6%, in communal sources it makes up 1.7% against 4.6%).
5. The oblast hosts many monuments of national and local importance (11.3.1, 11.3.2, 11.3.2-1), however its share of the area of the territories and objects of the nature reserve fund (11.3.3) is twice smaller than national average; number of jobs in touristic industry is five times less than the national average (11.6.1. (a)).
6. The local environmental condition is much more beneficial than in most oblasts of Ukraine. Volume of emissions of atmospheric pollutants from stationary sources, tones per sq.km. of the region's area (11.5.4. (a)) is more than 3 times below the national average, while the amount of generated waste (12.3.1. (a)) is 20 times less.
7. Forested territory of the region (15.2.1) and wood stock (15.2.2. (a)) are larger than the national average (23.2% against 17.6%, and 5.5 against 3.48, respectively).

Table of values of indicators which measure the SDG in Chernihiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
1.1.1 (a)	55.0	62.6	-7.60	5.2.2 (a)	1.3	2.7	0.49
1.2.1 (a)	82.3	56.3	26.00	5.3.1	-	-	-
1.3.1 (a)	63.8	70.7	-6.90	5.4.2	20.3	-	-
1.3.2	52.6	53.1	-0.50	5.4.3 (a)	75.8	77.1	-1.30
2.1.1 (a)	45.8	50.9	0.90	5.5.1 (a)	46.5	44.5	1.04
2.1.2 (a)	239.2	209.9	1.14	5.5.2	25.6	27.3	0.94
2.1.3 (a)	43.2	50.9	0.85	5.6.1	77.1	74.9	2.20
2.2.1	226.2	223.3	1.01	5.6.2 (a)	57.3	56.2	1.10
2.2.2	98.1	95.2	2.90	5.6.3 (a)	73.6	71.9	1.70
2.3.1	104.1	89.3	14.80	6.1.1 (a)	3.4	7.6	-4.20
2.3.2	56.9	38.2	18.70	6.1.2 (a)	24.5	29.6	0.83
2.3.3 (a)	2.6	2.5	0.10	6.1.3 (a)	1.7	4.6	-2.90
2.4.1	143.2	141.5	1.70	6.1.4	-	90.0	-
3.1.1	22.0	15.3	1.44	6.1.5	6.7	24.2	-17.48
3.2.1	10.5	9.7	1.09	6.1.6	78.0	89.4	-11.40
3.3.1	47.8	37.2	1.29	6.2.1 (a)	0.7	4.1	-3.40
3.3.2	65.0	56.0	1.16	6.2.2	93.8	73.0	20.80
3.4.1	89.9	61.1	1.47	6.3.1	0.0	875.0	0.00
3.4.2	32.9	27.6	1.19	6.3.2	0.0	16.4	-16.38
3.4.3	26.1	24.0	1.09	6.4.1	3.2	4.9	0.66
3.4.4	9.0	11.1	0.81	6.4.2	100.0	100.0	0.00
3.5.1 (a)	50.3	52.2	0.96	6.5.1	0.0	0.0	0.00
3.5.2 (a)	62.0	62.0	1.00	7.1.1	820.0	163682.0	-
3.6.1	14.1	11.2	1.26	7.1.2	13.2	11.7	1.44
3.6.2 (a)	100.0	100.0	1.00	7.1.3	22.1	18.8	3.28
3.7.1	-	-	-	7.3.1	0.0	3.0	-3.00
3.8.1 (a)	19.0	18.4	0.60	7.4.1 (a)	44.5	55.2	0.81
3.9.1 (a)	67.5	29.3	38.20	8.1.1	93.4	90.2	3.20
4.1.1 (a)	86.3	78.5	7.80	8.1.2	9.6	13.7	-4.13
4.2.1	65.0	55.0	10.00	8.1.3	4.4	19.2	-14.82
4.3.1	4.0	7.6	-3.60	8.1.4 (a)	0.1	0.7	-0.60
4.4.1 (a)	145.9	321.0	0.45	8.2.1 (a)	41.5	33.1	8.39
4.4.1-1	60.0	55.2	4.81	8.2.2 (a)	85.6	121.0	0.71
4.4.2 (a)	0.3	0.7	0.42	8.2.3 (a)	62.4	43.7	18.69
4.5.1 (a)	204.0	374.7	0.54	8.3.1 (a)	56.2	56.7	-0.50
4.5.2	42.3	48.9	-6.60	8.4.1	21.1	12.8	8.27
4.6.1	16.8	15.3	1.50	8.5.1 (a)	6.9	25.9	0.27
4.7.1	98.4	81.0	17.41	8.5.2	100.0	100.0	0.00
4.7.2	99.1	60.1	39.00	8.5.3	9.0	12.7	-3.69
4.7.3	8.3	9.4	-1.10	8.6.1 (a)	20.6	25.4	-4.83
5.1.1	0.0	-	-	8.6.2 (a)	75.5	60.2	15.25
5.2.1 (a)	0.1	0.1	-0.01	8.6.3 (a)	4.0	7.6	-3.60

(continuation)

Table of values of indicators which measure the SDG in Chernihiv oblast

Indicator	Regional	National	Deviation	Indicator	Regional	National	Deviation
9.1.1	12.5	10.7	1.72	12.4.2	16.7	30.0	-13.30
9.1.2	1.1	1474.0	0.00	13.1.1 (a)	1.1	4.7	0.22
9.1.3 (a)	0.8	1.4	0.59	14.1.1 (a)	-	17.8	-
9.2.1 (a)	44.5	35.3	9.22	14.2.1	-	0.0	-
9.3.1	-	0.0	-	14.2.2	-	4.3	-
9.3.2 (a)	93.5	97.8	-4.28	14.2.3	-	585.6	-
9.3.3	-	15.0	-	14.3.1 (a)	-	4.1	-
9.4.1 (a)	0.7	2.4	-1.69	15.1.1	42.0	1769.1	0.02
9.4.2 (a)	5.6	10.0	-4.36	15.1.2	1.3	2.9	-1.60
9.4.3	11.3	21.0	-9.71	15.1.3	7.0	22.4	-15.40
9.5.1	0.1	0.6	-0.47	15.2.1	23.2	17.6	5.60
9.5.2	0.1	0.4	-0.30	15.2.2 (a)	5.5	3.5	1.58
9.6.1	41.7	39.0	1.07	15.3.1 (a)	0.2	25.5	0.01
9.7.1 (a)	34.7	37.4	-2.70	15.3.2	1319.1	31131.0	0.04
10.1.1 (a)	3.3	4.5	-1.20	15.3.3	41.3	51.6	-10.30
10.1.2	-	15.0	-	15.3.4 (a)	24.8	441.8	0.06
10.2.1	-	9.0	-	15.3.5	589.0	7840.5	0.08
10.3.1 (a)	48.8	27.0	21.84	15.3.6	18.5	13.0	5.47
10.3.2 (a)	3.5	8.3	-4.80	15.4.1	-	669.0	-
10.3.3 (a)	11.8	11.2	0.57	15.4.2	-	1.1	-
10.4.1	2.4	2.7	0.89	16.1.1 (a)	6.0	5.0	1.20
10.5.1	44.0	37.7	6.34	16.1.2 (a)	11.0	10.0	1.10
11.1.1 (a)	27.9	37.8	-9.98	16.1.3 (a)	2.7	1.8	1.45
11.1.2 (a)	28.8	22.9	1.26	16.2.1 (a)	0.0	0.5	0.00
11.2.1	-	0.0	-	16.2.2 (a)	207.3	199.3	1.04
11.3.1	-	6.0	-	16.2.3 (a)	1.9	5.3	0.36
11.3.2 (a)	2.5	1.4	1.87	16.3.1 (a)	12.0	9.0	3.00
11.3.2-1	14.4	12.6	1.14	16.3.2 (a)	10.0	11.0	0.91
11.3.3	1.3	2.9	-1.60	16.4.1 (a)	0.0	12.0	-12.00
11.5.1	100.0	100.0	0.00	16.5.1 (a)	11.4	8.4	1.36
11.5.2 (a)	100.0	100.0	0.00	16.5.2 (a)	652.7	556.5	1.17
11.5.3 (a)	100.0	100.0	0.00	16.5.3 (a)	20.4	15.0	1.36
11.5.4 (a)	2.3	7.8	0.29	16.6.1 (a)	54.0	50.0	4.00
11.5.4-1	73.3	4521.3	0.02	16.7.1	33.0	38.0	-5.00
11.6.1 (a)	1.0	4.9	0.20	16.8.1	-	-	-
12.1.1	100.0	100.0	0.00	16.8.2 (a)	-	-	-
12.2.1 (a)	1.7	2.1	-0.41	16.8.3	-	-	-
12.2.2 (a)	11.7	17.1	-5.39	16.9.1	6.1	6.7	-0.60
12.3.1 (a)	27.2	501.9	0.05	17.1.1	0.5	0.4	0.14
12.3.1-1	2.0	220.0	0.01	17.1.2 (a)	3.7	102.5	0.04
12.3.2	-	-	-	17.3.1	1.0	97.0	0.01
12.4.1 (a)	155.6	993.7	0.16				

5

CHAPTER

CONCLUSIONS


SUSTAINABLE DEVELOPMENT GOALS

5.1. The SDG regional dimension: general conclusion

Based on statistical data analyzed and expert discussion held, the system of the SDG indicators was formed. These indicators are regionally disaggregated in official Ukrainian statistics and are as close as possible to officially set national indicators for Ukraine.

The analysis of basic indicators of sustainable development goals revealed their essential differentiation in the dimension of regions. Some regions emerged to have mostly better or worse starting points compared to other regions, while most common is the situation when the regions keep certain leading positions but keep lagging by other positions. Likewise, various SDGs may imply bigger or lesser variety of indicators for different regions.

In particular, it is possible to define the most aligned goals in Ukraine (meaning such goals that demonstrate positive readings in the majority of regions) as follows: reaching environmentally sustainable development (Goals 12 and 13), lowering energy intensity (7) and water intensity (6) of production. This breaks the pattern of totally high resources intensity of Ukrainian economy and proves that such production is strictly limited within particular territories.

Otherwise, the SGDs 17 and 9 which are associated with foreign direct investment attraction and implementation of innovative technologies are mostly troubled with only some regions having high ratings here. The received estimates exactly allow to evaluate the level and geographical dimension of basic level differentiation for each of the goals. Thus, it allows to define strategic development priorities of specific regions of Ukraine aimed at strengthening its sustainability and reaching necessary progress at national level.

Along with that, one should be aware that difference between regional levels of indicators might have various causes, like:

- better/worse achievements in region in this direction compared to national average index;
- lower/higher indices due to initial factors of economic, demographic, natural resources and other potentials of region;
- peculiarities of unified statistical approaches' application in this region;
- errors and omissions of statistical measurement.

Also should be considered the impact of extremum indices in a range of indicators for the highly urbanized city of Kyiv and, for obvious reasons, for Donetsk and Luhansk regions.

Therefore, the in-depth analysis of regional deviations from national indicators shall precede the approval of management decisions (in particular, strategic planning of SDGs achievement). Such analysis shall lay the ground for defining specific target values of the SDG indicators for each particular region which will differ from national ones.

Summarization of conducted analysis of regional background measurement of the SDGs permits to identify a range of challenges and preconditions of the regional-scaled SDGs achievement.

1. Most regions have non-inclusive development approach: self-assessments of material welfare mostly do not correspond to the economic development and income rates. Actual social well-being of population (self-identification of households as poor ones) is largely formed with other reasons, like the diversification of economics of region, level of income difference, resource of cash inflow from abroad (mostly in Western Ukraine). Non-monetary features of poverty are of great significance, like the quality of life environment (accessibility of basic services, utilities infrastructure), demonstration effect of neighboring regions (in particular, foreign bordering countries and the capital), local mentality and other. These peculiarities influence the achievement of the goals associated with eradicating poverty.
2. There is a big difference in maternal mortality rates, which is dramatically important for ensuring sustainable development. This difference is more than 6 times (calculations without the city of Kyiv data). Certain impact of medical aid accessibility and sanitary and hygienic conditions (like access to centralized water supply) on the rates of this indicator can be observed. There is a general picture of longer lifespan of the inhabitants of central and western regions of the country. Supposedly it is concerned with negative impact of environmental indices of territories.
3. There is a defined number of regions with simultaneously higher risks of violence against women, bigger number of abortions and higher percentage of giving birth at the age under 20. Therefore, it is important that these regions concentrate generally on encouraging family planning abilities and sexual education.
4. Complicated access to professional education in a number of regions potentially lays the ground for labor market rigidity and for structural unemployment concentration.

5. There is a significant discrepancy in the rates of accessibility of the Internet and educational software in schools (scoring less than 50% in two oblasts), which bears negative impact on the quality of education.
6. The distribution of economic activity and employment of women is disproportionate. Essential unemployment rate, especially in women of prime working years is in many cases has been explained by high level of unregistered employment of women in agriculture and in the form of labor migration. Still in some regions low economic activity of women can be related to peculiarities of their economies' structure providing insufficient appropriate jobs.
7. Rates of water and energy intensity in GRP and polluting emissions rates are highly differentiated. Therefore, the lowering of general Ukrainian indicator is sensitive to active implementation of resources' saving in target regions.
8. Much more higher labor efficiency rates are registered in industrially developed regions. Lower rates of labor efficiency are conditioned with low rates of agricultural productivity and abundancy of sectors with low performance (like public sector) or officially unregistered entrepreneurial activity (for example, in touristic and recreational areas).
9. Attention is to be paid to a big number of young people not in employment, education and professional training, as in some oblast this number is more than one third of total population of this age. This fact demonstrates the drawbacks in education and professional training in institutions of tertiary education, lack of occupational retraining.
10. Rate of small and medium enterprises development (by volume of product sold) in most regions is quite high. However, the share of employed population by SME (which indicate the actual occurrence of this type of entrepreneurship) is distributed differently: the biggest number of employed persons is found in industrially developed regions, while in 10 regions SME hires less than 20% of all employed population. This proves mostly the non-inclusivity of SME in Ukraine.
11. Highly uneven distribution of the cultural heritage sites, both national and local, is noticeable. Irregular distribution directly affects the touristic potential of regions which might be one of the cornerstones of local development. At the same time, according to statistical data tourism is severely shadowed sector in Ukraine, which is illustrated with analytics on recreationally focused regions.
12. Extremely irregular distribution of territories and sites of nature reserve fund. Five leading regions keep 54% of total natural reserve fund area in Ukraine. This fact demonstrates the crucial role of actual availability of certain natural resources on the territory. Meanwhile, local authorities put insufficient efforts into purposeful establishment and enlargement of protected areas with the view of strengthening touristic and recreational potential of regions.
13. Higher crime rates are officially registered in several regions, foremost in those most urbanized. Rate of crime against human freedom is definitely sensitive to transboundary factors. In some regions there are noticeably higher rates of sex crimes and human trafficking, which can also relate to the improved mechanism of such crimes registration, established within national police reform.
14. Controversial attitudes of entrepreneurs towards judiciary, difference in evaluation of public policy friendliness for business together with uneven shares of population satisfied with local authorities' services are most obviously caused by intrinsic factors like public awareness, efficiency and inclusiveness of local authorities who are the 'interface' of public authorities.

Based on further development of specific regional conditions, the received data might become a take-off for setting regional development priorities. There are high chances that the SDGs implementation will be essentially enhanced by virtue of the following:

- Development of agribusiness logistics and foodstuff markets;
- Increase of agribusiness production;
- Making regions more attractive for foreign investment;
- Lowering maternal mortality;
- Fostering employment, in particular, in women and youth, as well as professional training, professional further training;
- Development of utility services, central water supply and centralized sewage systems utmost.
- Implementation of target energy saving projects, lowering atmospheric pollution emission, household solid waste recycling;
- Development of tourism and recreation;
- Encouraging the small and medium business;
- Encouraging inclusiveness of local authorities and awareness of hromadas.

5.2. Sustainable Development Goals in the regional strategic documents: recommendations

The introduction and implementation of the SDGs at local, in particular, regional level, is an essential condition for achieving not only national but also global goals around the world. In this process Ukraine, like most other countries, only begins its path. Lack of a standard approach to localization of the SDGs on the one hand, makes an assignment more complicated, and on the other hand, allows for the independent development and implementation of own methods and innovative approaches.

The regional localization of the SDGs is not a simple local replication of global or national goals, but rather the establishment of a closer link between programs of local and regional authorities and global goals, central government's policy papers, on the one hand, and plans of local self-government, on the other hand. Localization leads to systemic changes in the elaboration of the development policy, which should facilitate further convergence and consensus between territorial processes and national plans. Local authorities should become the catalyst for change that will best help to create closer links of the global goals with the targets of local communities.

The achievement of the SDGs, set at the regional level, should help to ensure a high quality and sustainable life-style for citizens and encourage them to understand the consequences of their actions and their own responsibilities as community members. This is achievable only on condition of reducing the distance between citizens and authorities, building trust in each other. Citizens should also be aware that their territories are not isolated but affected by global phenomena, especially environmental challenges. Local authorities should also understand that nobody is to left aside.

The SDGs shall be of great help for local authorities in their strategic planning, in improving the quality and complexity of strategic plans and their implementation. Engagement of civil society in addressing comprehensive local challenges can have rather promoting, motivating and uniting effect.

The SDGs' localization creates new frontiers for regional policy in terms of involving all stakeholders in the process of reviewing and updating of existing regional strategies. This applies to local authorities, non-governmental organizations, international donors, and private entrepreneurs in the framework of public and private partnerships.

At the same time, the overwhelming majority of available regional strategic documents was approved before the development of global and national SDGs, therefore they clearly do not contain the goals and indicators of the SDGs. However, a range of goals that regions have inbuilt into their programs either partially or fully coincides with the SDGs. Unfortunately, most programs are of declarative nature. They neither envisage specific targets and strict indicators for their implementation, nor get relevant funding for their implementation.

Improvement of regional infrastructure, access to basic services, reduction of deprivation, support of local economy, and development of culture and tourism require considerable public and private investment. This also includes the access of local authorities to new funding mechanisms, including partnership with the private sector and local communities. However, public funding will continue to play a key role.

It should be noted that UNDP has already arranged a series of events in ten regions of the country aimed at discussion of strategic goals for the regions and comparing them with the national ones. Moreover, with the support of UNDP, regional reports have been created for two pilot regions of the country, namely Dnipropetrovsk and Volyn oblasts. However, a huge amount of work is still to be done to implement regional SDGs into existing strategies or to create new target strategies and an appropriate monitoring system.

Obviously not all 17 global and national SDGs will be equally relevant at regional level. The specific priorities of the sustainable development of regions and territorial hromadas need to be determined based on the analysis of actual challenges within the framework of four components of sustainable development - economic, social, environmental and institutional, which are typical for each relevant administrative-territorial unit.

Localization of the SDGs and their implementation into regional development programs could ensure the performance of the following:

- carry out a comprehensive analysis of all existing local and regional strategic and program documents in terms of their compliance with the SDGs. This will allow to assess the state of the local authorities' and local self-government' policies, compliance of the latter with the SDGs and progress made by local authorities in promotion of the sustainable development of the region or community in the context of global trends;

- ensure compatibility with national goals. Of course, the region can and must have its own specific goals and targets, but a system of indicators should be created to compare regional and national indicators within certain range of rates;
- check the availability of powers of local executive authorities to achieve the goals set. The traditional mistake of many programs is incurrence of liabilities the authorities have only indirect influence on;
- ensure consensus on goals and indicators between local authorities, the public and entrepreneurs. This will require a series of joint discussions with the participation of all stakeholders;
- establish coordination centers for the further development of the partnership in the SDGs implementation;
- develop appropriate recommendations and techniques for further localization of SDGs at the community level;
- search for sources of funding for the goals' achievement, with a clear indication of these sources and funding amounts for each of the planned activities. It is necessary to indicate a clear link between local budgets expenditures and the SDG measures to be implemented;
- avoid duplication of goals and implementation measures in different development programs;
- ensure the availability of information sources to monitor the goals set. Both statistical and administrative sources of information should be considered. It is also possible to use 'big data', given its consistency. In the absence of sources, it is possible to implement appropriate administrative reporting.

Subject to the recommendations of the United Cities and Local Governments[48], the potential areas of influence of local authorities and recommendations for accounting regional indicators of the SDGs in strategic planning are as follows:

Goal 1 – Local authorities have all the possibilities to identify poor people and allocate target resources and appropriate services that will help them avoid poverty.

Goal 2 – A system of natural resources management shall support food safety. Local governments can support agricultural production and local economic growth by improving transport infrastructure and markets to promote local producers. In cities local self-governments should ensure the opportunity for people to purchase and cook safe, affordable and nutritious food. Urban planning can play an important role in reducing waste and in food safety, promoting efficient transportation and storage of food, access to clean drinking water and sanitation. Rural local authorities can manage collective resources and land tenure in a way that protects the rights of poor population.

Goal 3 – Local authorities can influence the network and equipment of paramedic and obstetric stations, contribute to reducing water and soil pollution through effective natural resource management and environmental protection, which will be important for reducing child and maternal mortality. Cities are often a connecting link for the spread of HIV and tuberculosis due to their high population density, transport nodes, and the spreading of vulnerable groups. Local authorities can play an important role in coordinating prevention and response activities, educational activities and services on HIV and tuberculosis prevention. Local authorities can better plan urban development and public transport services to reduce air pollution and prevent road accidents. It is also important to promote a healthy lifestyle and ensure timely and quality immunization of the population.

Goal 4 – Primary and professional education is a direct responsibility of local self-government bodies. Local authorities can integrate technical and vocational training programs into local economic development strategies. It is also their immediate responsibility to ensure access to relevant educational and training services for all citizens, without exception and including vulnerable and marginalized individuals.

Goal 5 – Local self-government bodies can empower women through non-discriminatory provision of services to citizens and fair employment. Urban planning is one of the key factors in reducing violence against women. Local authorities also play a significant role in providing services to female victims of violence. Local women's leaders can give examples to young girls. Local authorities can integrate gender equality into all areas of their work to overcome numerous existing barriers for women and empower the latter.

Goal 6 – Ensuring access to clean water and sanitation is a direct responsibility of local authorities and local self-government bodies. It should be based on efficient natural resource management and urban development, environmental protection measures and control over pollution of air, water, and over municipal solid waste generation. In rural areas, access to water may be easier, but its source may be located far away from the settlement and water may be contaminated. The authorities should also monitor the quality of bottled water of private sellers.

Goal 7 – Local authorities have all opportunities to identify gaps in access to energy for vulnerable groups. Local governments can contribute to energy efficiency directly by investing in energy efficient buildings and green energy sources in public institutions (public institutions, schools, etc.). Such initiatives may have an additional advantage in reducing energy expenditure by budgetary institutions. Proper transport and urban policy in the cities, as well as new 'smart city' technologies can have a significant impact on energy efficiency and carbon emissions. Land allocation for the construction of renewable power generation facilities also falls within the powers of local self-government bodies.

Goal 8 – Local authorities can gain economic growth and employment through the formation of local economic development strategies that should use the unique resources and capacities of the region. Local authorities can identify children who are forced to work instead of attending school. Local authorities should serve as an example in ensuring a safe living and working environment, as well as equal pay for equal work. Local authorities have the best opportunities to involve communities into assessment of the benefits and costs of tourism. All administrative procedures should be fast and transparent. The mechanism of public-private partnership must work.

Goal 9 – Local authorities should take care of the development and maintenance of infrastructure, the promotion of small business and startups, by foreseeing this in their local economic development strategies, taking into account local resources, needs and markets. It is necessary to identify gaps in access to ICTs and the Internet among citizens and take measures to overcome them, in particular through provision of these services in public spaces such as libraries.

Goal 10 – Local self-government matters for reducing inequality within the country. It is extremely important to direct resources for poverty alleviation, support for socially vulnerable groups of the population, and overcoming the deprivation. Participation of minorities and traditionally unrepresented groups in the process of public consultation should be encouraged. Local authorities can implement best practices in terms of equality and non-discrimination in budgetary institutions.

Goal 11 – Local self-government bodies should regulate land and housing markets in order to guarantee the right to housing for the poorest residents. Local authorities are responsible for determining, identifying and protecting material and non-material cultural heritage for future generations and for the tourism development. The municipal authorities are responsible for efficient planning of the territories development, promotion of the use of public transport in cities to improve road safety and reduce emissions, provision of settlements with safe, green public spaces (parks, squares, gardens). In the context of rapid global urbanization, municipal authorities have to cooperate with rural communities to ensure the harmony of cities with rural areas they depend on in terms of the availability of food and natural resources.

Goal 12 – Local authorities should take care of reducing emissions from transport and waste generation through the proper policy of land management, infrastructure and urban development. Efficient energy and water consumption and production should be supported, with a wide range of tools, from proper urban planning to energy saving. It is necessary to raise the community's awareness on the importance of environmentally friendly production and to encourage equipment of the facilities with the appropriate measuring and treatment devices.

Goal 13 – Local authorities should encourage entrepreneurs to reduce the emissions in production. It is highly important for the authorities and local governments, when developing long-term development strategies, to take into account the need to adapt to climate change and increase resilience to environmental shocks.

Goal 14 – Coastal cities should develop, implement and carefully plan construction in coastal areas. Local authorities should monitor the pollution of marine and coastal areas, plan and control the quality of treatment facilities, and prevent the uncontrolled fishing.

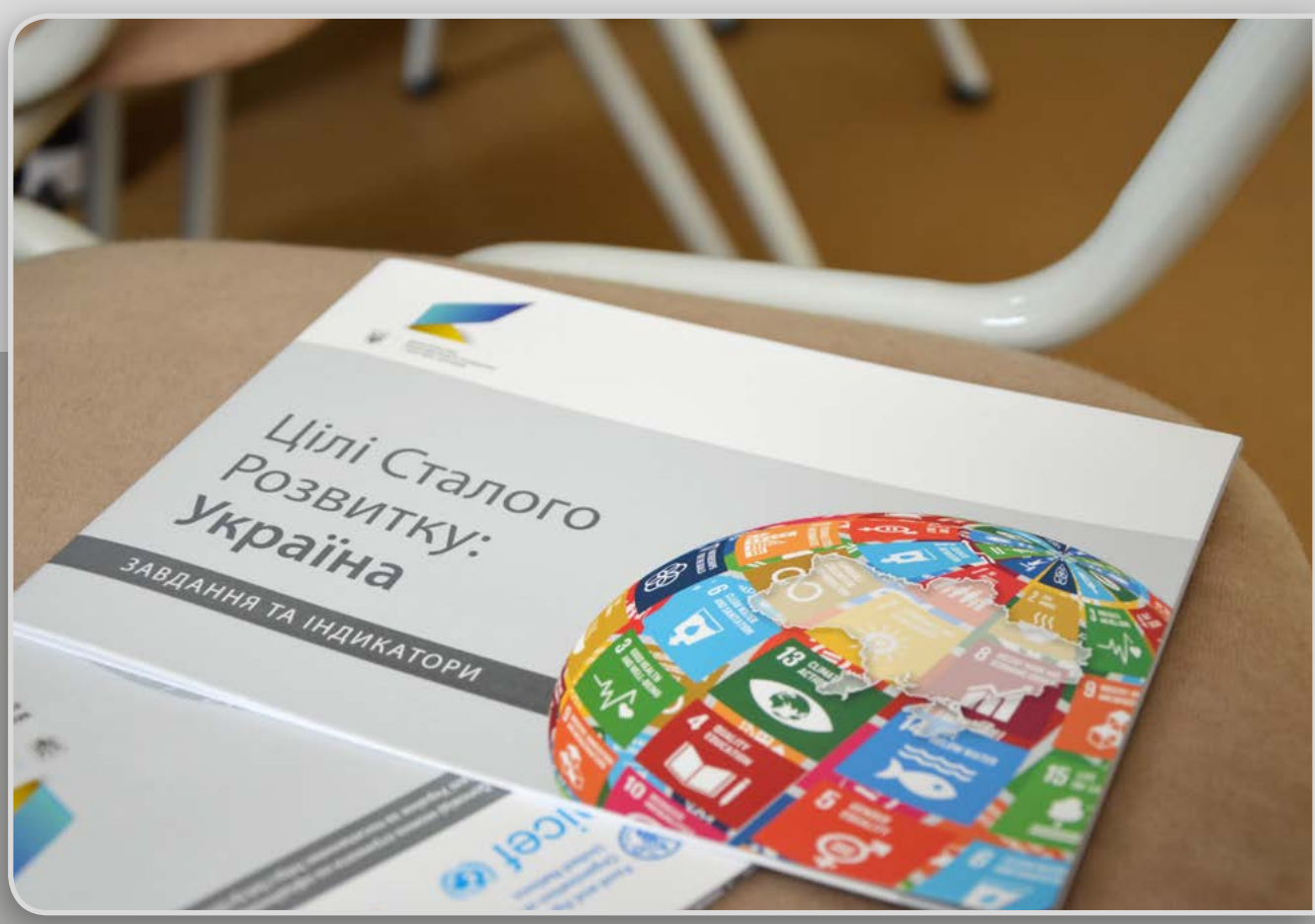
Goal 15 – The role of local authorities and self-government as service providers (especially water, sanitation and solid waste management), combined with the ability to stimulate behavioral change in the regions, provides all opportunities for the protection of natural resources and habitats. Local authorities have a unique opportunity to coordinate partnerships with the public and the private sector to develop integrated land ecosystem management plans. Biodiversity conservation should be an integral part of urban and regional development strategies. Biodiversity conservation often requires the cooperation of local authorities with the border regions of other countries, for example, in the establishment of transboundary biodiversity strategies and wildlife corridors.

Goal 16 – This objective calls the authorities for becoming more effective and subordinate to citizens. This requires local authorities to strengthen their fight against corruption, increase transparency of their own activities, and create an effective system of public procurement at the local level. Citizens need to be well aware of their rights to social benefits. It is necessary to improve the efficiency and quality of services provided by local authorities. The public needs to be more actively involved in budgeting and planning, monitoring the implementation of programs and strategies. It is necessary to give more attention to the leisure of youth through financing sports, culture, additional education, and promoting healthy lifestyles.

Goal 17 – Local budget expenditures should play a major role in financing sustainable development goals. At the local level, it is possible to develop a consistent policy of sustainable development and addressing a range of poverty associated problems. Local authorities have the perfect opportunity to coordinate and establish a genuine partnership between public authorities, private sector and civil society. The trust of society and investors will improve the image of the region and enhance the inflow of investment in development, both domestic and external.

Each measure intended for the implementation of the SDGs and incorporation into existing or new programs is recommended to be supported with the following:

- Description of the measure, sphere of impact, necessary regulatory changes, corresponding programs or projects;
- Grounding of the necessity of implementation of this measure;
- Roles and tasks of the performers at each stage of the implementation (including their interrelations and coordination);
- Period of the measure implementation;
- Expected results;
- Any supportive measures, such as training or capacity building;
- Resources required for implementation and the description of funding mechanisms;
- Description of the process of monitoring and assessment (including sources of information).



ANNEX


SUSTAINABLE
DEVELOPMENT
GOALS

RECONCILIATION OF NATIONAL SDGs INDICATORS WITH THE REGIONAL ONES

National SDG indicators	Regional SDG indicators	Source
Goal 1. No Poverty		
1.1.1. Share of the population whose average per capita equivalent total expenditure is lower than the actual (estimated) subsistence minimum, %	1.1.1. (a) Share of the population whose average per capita equivalent money income per month is lower than the actual minimum subsistence level in the total number of population, %	SSS, SR 'Expenditure and resources of households of Ukraine'
1.2.1. Share of the poor population covered by state social support in the total number of poor people, %	1.2.1. (a) Share of social service coverage for people finding themselves in difficult life circumstances in total number of such people, %	Department of Social Protection RSA, reporting form №12-soc (annual)
1.3.1. Ratio of poverty levels of households with children and households without children, times	1.3.1. (a) Share of households which report themselves as poor while assessing their material well-being, %	SSS, SR 'Self-assesment by households of their revenues'
1.3.2. Share of food expenditure in total household spending, %	1.3.2. Share of food expenditure in total household spending, %	MSR, table 'Structure of total expenditures'
Goal 2. Zero Hunger		
2.1.1. Consumption of meat per capita, kg/year	2.1.1. (a) Consumption of meat and processed meat per capita, kg/year	SSS, SR 'Balances and consumption of basic food products in Ukraine'
2.1.2. Consumption of milk per capita, kg/year	2.1.2. (a) Consumption of milk and processed milk per capita, kg/year	SSS, SR 'Balances and consumption of basic food products in Ukraine'
2.1.3. Consumption of fruit per capita, kg/year	2.1.3. (a) Consumption of fruit, berries and grapes per capita, kg/year	SSS, SR 'Balances and consumption of basic food products in Ukraine'
2.2.1. Labor productivity in agriculture, USD 1.000s per employee	2.2.1. Labor productivity in agricultural companies measured with prices fixed in 2010, UAH 1.000 per one employee	SSS, SR 'Agriculture of Ukraine'
2.2.2. The index of agricultural production, %	2.2.2. The index of agricultural production, %	SSS, SR 'Agriculture of Ukraine'
2.3.1. The index of food production, %	2.3.1. The index of food production, %	SSS, SR 'Industry of Ukraine'
2.3.2. Share of food industry and agricultural raw materials processing production in exports of Ukrainian Classifier of Goods for Foreign Economic Activity groups 1–24, %	2.3.2. Share of food industry and agricultural raw materials processing production (groups 15-24) in exports of Ukrainian Classifier of Goods for Foreign Economic Activity groups 1–24, %	MSR, table 'Trade structure of foreign trade'

National SDG indicators	Regional SDG indicators	Source
2.3.3. Share of agricultural land under organic production in the total area of agricultural land, %	2.3.3. (a) Share of agricultural land under organic amendment, %	SSS, SB 'The using of mineral and organic fertilizers for the agricultural crops'
2.4.1. The consumer price index for food (annual average), %	2.4.1. The consumer price index for food and non-alcoholic beverage (up to December of current year), %	SSS, table 'Consumer price indices for goods and services by region (to December of the previous year)
Goal 3. Good Health and Well-Being		
3.1.1. Number of cases of maternal mortality, per 100.000 live births	3.1.1. Number of cases of maternal mortality, per 100.000 live births	MoH, form №20
3.2.1. Mortality of children under 5, cases per 1.000 live births	3.2.1. Mortality of children under 5, cases per 1.000 live births	SSS, Demographic yearbook 'Population of Ukraine'
3.3.1. Number of patients diagnosed with HIV for the first time, per 100.000 persons	3.3.1. Number of patients diagnosed with HIV for the first time, per 100.000 persons	SSS, SR 'Health care institutions and morbidity of the population of Ukraine'
3.3.2. Number of patients diagnosed with active tuberculosis for the first time, per 100.000 persons	3.3.2. Number of patients diagnosed with active tuberculosis for the first time, per 100.000 persons	SSS, SR 'Health care institutions and morbidity of the population of Ukraine'
3.4.1. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 men of corresponding age	3.4.1. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 men of corresponding age	SSS, 'Population of Ukraine'
3.4.2. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 women of corresponding age	3.4.2. Number of deaths from cerebrovascular disease at the age of 30–59, per 100.000 women of corresponding age	SSS, 'Population of Ukraine'
3.4.3. Number of deaths from malignant breast tumors at the age of 30–59, per 100.000 women of appropriate age	3.4.3. Number of deaths from malignant breast tumors at the age of 30–59, per 100.000 women of appropriate age	SSS, 'Population of Ukraine'
3.4.4. Number of deaths from malignant cervical tumors at the age of 30–59, per 100.000 women of appropriate age	3.4.4. Number of deaths from malignant cervical tumors at the age of 30–59, per 100.000 women of appropriate age	SSS, 'Population of Ukraine'
3.5.1. Probability of dying at the age of 20–64, men, per mille	3.5.1. (a) Average expected lifespan for men upon reaching age of 15	SSS, SB 'Birth rate tables, mortality and average life expectancy'
3.5.2. Probability of dying at the age of 20–64, women, per mille	3.5.2. (a) Average expected lifespan for women upon reaching age of 15	SSS, SB 'Birth rate tables, mortality and average life expectancy'
3.6.1. Number of deaths from road traffic accidents, per 100.000 persons	3.6.1. Number of deaths from road traffic accidents, per 100.000 persons	SSS, 'Population of Ukraine'

National SDG indicators	Regional SDG indicators	Source
3.6.2. Number of serious injuries from transport accidents/road traffic accidents per 100.000 persons, % of 2015 level	3.6.2. (a) Number of injuries from transport accidents/road traffic accidents per 100.000 persons, % of 2015 level	SSS, SR 'Transport and communication in Ukraine'
3.7.1. Immunization coverage under the national immunization programme (as prescribed), %	3.7.1. Immunization coverage under the National immunization programme (as prescribed), %	SSS, table 'Number of population'
3.8.1. Share of women who smoke at the age of 16–29, %	3.8.1. (a) Share of persons aged over 12 who smoke in total population aged 12 and over, %	SSS, SR 'Self-assessment by the population of the state of health and the availability of certain types of medical care'
3.9.1. Share of expenditures of the population in general spending on health, %	3.9.1. (a) Share of households any member of which failed to get medical care, buy medicines and medical devices in the last 12 months in total number of households in which any member requested such medical care, medicines and medical devices, %	SSS, SR 'Self-assessment by the population of the state of health and the availability of certain types of medical care'
	Goal 4. Quality Education	
4.1.1. Share of the population satisfied with the access to and quality of schooling services, %	4.1.1. (a) Share of attendants of secondary education institutions in total permanent population aged 6-17, %	SSS, SB 'Ukrainian secondary education institutions'
4.2.1. Net pre-primary enrolment rate for children aged, %	4.2.1. Net pre-primary education institutions coverage for number of children of relevant age, %	SSS, SB 'Preschool education of Ukraine'
4.3.1. Share of households whose members suffer from a lack of money to enable any member of the household to receive vocational training, %	4.3.1. Share of households suffering from any kind of inability of any member of the household to receive vocational training, %	SSS, SB 'Self-assessment by housholds of the availability of certain goods and services'
4.4.1. Ukraine's position in the Global Competitiveness Report rating by the quality of higher education	4.4.1. (a) Number attendants of higher education institutions (III-IV accreditation grade) per 10.000 persons of population	SSS, SB 'Basic indicators of activity of higher educational institutions of Ukraine', table 'Number of population'
	4.4.1-1. Share of teaching and academic staff of higher education institutions (III-IV accreditation grade) having scientific degree, %	SSS, SB 'Basic indicators of activity of higher educational institutions of Ukraine'
4.4.2. Number of university towns, units	4.4.2. (a) Number of higher education institutions (III-IV accreditation grade) per 100.000 persons of population	SSS, SB 'Basic indicators of activity of higher educational institutions of Ukraine', table 'Number of population'
4.5.1. Enrolment rate of adults and youth in formal and informal forms of education and professional training in the last 4 weeks, % of population aged 15–70	4.5.1. (a) Number of persons who attended educational institutions (I-IV accreditation grade), per 10.000 persons of population	SSS, SB 'Basic indicators of activity of higher educational institutions of Ukraine', table 'Number of population'

National SDG indicators	Regional SDG indicators	Source
4.5.2. Share of the population who reported using the Internet over the past 12 months, %	4.5.2. Share of the population who reported using the Internet over the past 12 months	SSS, SR 'Regions of Ukraine'
4.6.1. Share of men among school teachers, %	4.6.1. Share of men among school teachers, %	Regional Education Departments
4.7.1. Share of rural full-time secondary schools with Internet access, %	4.7.1. Share of rural full-time secondary schools with Internet access, %	Regional Education Departments
4.7.2. Share of rural full-time secondary schools with computer software training, %	4.7.2. Share of rural full-time secondary schools with computer software training, %	Regional Education Departments
4.7.3. Share of full-time secondary schools with inclusive education, %	4.7.3. Share of full-time secondary schools with inclusive education, %	Regional Education Departments
5.1.1. Number of normative acts which were revised or adopted to provide men and women with equal rights and opportunities and to prevent discrimination against women and girls	5.1.1. Number of local normative acts (issued by oblast council and oblast state administration) which were revised or adopted to provide men and women with equal rights and opportunities and to prevent discrimination against women and girls, units	Regional Councels, RSAs
	Goal 5. Gender Equality	
5.2.1. Share of women aged 15–49 who have experienced at least one form of physical or sexual violence, %	5.2.1. (a) Share of women who have been victims to criminal offences and crimes connected with physical or sexual abuse (willful murder, sexual assault and attempt, willful serious bodily injury, robbery, plundering, human trafficking, domestic violence), %	Regional Prosecutor's Offices "Unified report on criminal offenses"
5.2.2. Number of complaints regarding domestic violence, thousands	5.2.2. (a) Number of victims of criminal crimes involving domestic violence, persons per 100.000 thousand of population	Regional Prosecutor's Offices "Unified report on criminal offenses"
5.3.1. Ratio of duration of unpaid domestic work (housekeeping, care for children and other family members etc.) between men and women, %	5.3.1. Ratio of duration of unpaid domestic work (housekeeping, care for children and other family members etc.) between men and women, %	
5.4.2. Share of women among the members of oblast councils and local councils of oblast significance, %	5.4.2. Share of women among the members of oblast councils, %	Regional Councels
5.4.3. Share of women in senior positions of public service (Category A positions), %	5.4.3. (a) Share of women in positions of local self-government officials in registered number of officials, %	SSS, SR 'Labour in Ukraine'
5.5.1. Level of current use of modern contraception by married and unmarried sexually active women aged 15–49, %	5.5.1. (a) Number of abortions per 10.000 women	MoH, form №13, SSS table 'Permanent population by gender by region (by rating)'

National SDG indicators	Regional SDG indicators	Source
5.5.2. Fertility rate among women aged under 20, per 1.000 women aged 15–19	5.5.2. Fertility rate among women aged under 20, per 1.000 women aged 15–19	SSS, 'Population of Ukraine'
5.6.1. Ratio of average wages for men and women, %	5.6.1. Ratio of average wages for men and women, %	SSS, SR 'Labour in Ukraine'
5.6.2. Average weighted entrepreneurship index for women (SME policy index), points	5.6.2. (a) Level of economic activity of women aged 15-70, %	MSR, table 'Economic activity of the population by sex and place of residence'
5.6.3. Employment rate of women aged 25–44 with children aged 3–5, %	5.6.3. (a) Employment rate of women aged 25–49, %	MSR, ER 'Economic activity of the population of the region'
Goal 6. Clean Water and Sanitation		
6.1.1. Share of the rural population with access to safe drinking water, %	6.1.1. (a) Rate of rural drinking water sources compliance with health and safety regulations, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.1.2. Share of the rural population with access to affordable drinking water of assured quality, %	6.1.2. (a) Use of fresh water for drinking and health and sanitary purposes, m^3 per person	SSS, SR 'Environment of Ukraine'
6.1.3. Share of the urban population with access to safe drinking water, %	6.1.3. (a) Rate of communal drinking water sources compliance with health and safety regulations, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.1.4. Share of the urban population with access to affordable drinking water of assured quality, %	6.1.4. Share of the urban population with access to affordable drinking water of assured quality, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.1.5. Share of the rural population with access to centralized water supply, %	6.1.5. Share of the rural population with access to centralized water supply utilities, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.1.6. Share of the urban population with access to centralized water supply, %	6.1.6. Share of the urban population with access to centralized water supply utilities, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.2.1. Share of the rural population with access to improved sanitation, %	6.2.1. (a) Share of the rural population with access to centralized water drain, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'
6.2.2. Share of the urban population with access to a centralized water drain, %	6.2.2. Share of the urban population with access to centralized water drain, %	MRD, 'The National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine'

National SDG indicators	Regional SDG indicators	Source
6.3.1. Volume of discharge of polluted (polluted without treatment or insufficiently treated) wastewater into water bodies, millions of cubic meters	6.3.1. Volume of discharge of polluted (polluted without treatment or insufficiently treated) wastewater into water bodies, millions of cubic meters	SSS, SR 'Environment of Ukraine'
6.3.2. Share of discharge of polluted (polluted without treatment or insufficiently treated) wastewater into water bodies in total discharges, %	6.3.2. Share of discharge of polluted (polluted without treatment or insufficiently treated) wastewater into water bodies in total discharges, %	SSS, SR 'Environment of Ukraine'
6.4.1. Water content of GDP, cubic meters of water used per UAH1.000 of GDP (actual prices)	6.4.1. Water content of GRP, cubic meters of water used per UAH 1.000 of GRP (actual prices)	SSS, SR 'Environment of Ukraine', SR 'Gross regional product'
6.4.2. Current water content of GDP to 2015 level, %	6.4.2. Current water content of GRP to 2015 level, %	SSS, SR 'Environment of Ukraine', SR 'Gross regional product'
6.5.1. Number of river basins with approved river basin management plans	6.5.1. Number of river basins with approved river basin management plans, units	
Goal 7. Affordable and Clean Energy		
7.1.1. Generation of power, billions of KWh	7.1.1. Generation of electricity, millions of KWh	SSS, SR 'Environment of Ukraine'
7.1.2. Electric power distribution losses, %	7.1.2. Electric power distribution losses, %	MECI, table 'Technological expenses of electric power for transmission by electric networks 0.38-800 kV'
7.1.3. Heat losses in heat networks, %	7.1.3. Heat losses in heat networks, %	RSA, Department of Housing and Communal Services
7.3.1. Share of energy produced from renewable sources in total final energy consumption, %	7.3.1. Share of energy produced from renewable sources in total final energy consumption, %	MSR, table 'Supply and use of energy'
7.4.1. Energy intensity of GDP (primary energy consumption per unit of GDP), kg of oil equivalent per USD1 by PPP 2011	7.4.1. (a) Energy intensity of GRP (losses of energy-yielding materials and petro-chemical products) tones of oil equivalent per UAH million by GRP	SSS, SB 'Use of energy materials and products of oil refining'

National SDG indicators	Regional SDG indicators	Source
Goal 8. Decent Work and Economic Growth		
8.1.1. GDP volume index (annual average), %	8.1.1. GRP actual volume index, %	SSS, SR 'Gross regional product'
8.1.2. Share of gross fixed capital to GDP, %	8.1.2. Share of capital investment to GRP, %	SSS, SR 'Regions of Ukraine', SR 'Gross regional product'
8.1.3. Share of exports of goods whose production uses technologies of high and medium high level in total exports of goods, % (groups 'Products of chemical and related industries', 'Polymers, plastics and articles thereof', 'Machinery, equipment and mechanisms, electrical equipment', 'Ground transportation, aircraft, floating craft', 90th subgroup of the group 'Optical and photographic devices and appliances' (UCGFEA))	8.1.3. Share of exports of goods whose production uses technologies of high and medium high level in total exports of goods, % (groups 'Products of chemical and related industries', 'Polymers, plastics and articles thereof', 'Machinery, equipment and mechanisms, electrical equipment', 'Ground transportation, aircraft, floating craft', 90th subgroup of the group 'Optical and photographic devices and appliances' (UCGFEA))	MSR, table 'Trade structure of foreigh trade'
8.1.4. Ukraine's position as rated by the Global Innovation Index	8.1.4. (a) Share on innovation costs in GRP, %	SSS, SR 'Regions of Ukraine', SR 'Gross regional product'
8.2.1. The return on assets	8.2.1. (a) Share of investment into machinery, equipment and inventory in the structure of asset investment, %	MSR, table 'Capital investments by the kind of assets'
8.2.2. Productivity growth rate, %	8.2.2. (a) GRP per one employed person, UAH thousand	SSS, SR 'Regions of Ukraine', SR 'Gross regional product'
8.2.3. Material content of GDP (ratio of intermediate costs from the tables 'input–output' of activities that produce material products to total GDP)	8.2.3. (a) Share of intermediate consumption in sold region's product, %	SSS, SR 'Regions of Ukraine', SR 'Gross regional product'
8.3.1. Employment rate among those aged 20–64, %	8.3.1. (a) Employment rate among those aged 15-70, %	MSR, table 'Economic activity of the population of region'
8.4.1. Share of youth not inemployment, education or professional training in the total number of those aged 15–24, %	8.4.1. Share of youth not in employment, education or professional training in the total number of population aged 15–24, %	MSR, table 'Economic activity of the population of region'
8.5.1. Number of victims of accidents at work that led to disability of 1 day or more, % of 2015 level	8.5.1. (a) Number of victims of accidents at work per 100.000 of employed population aged 15-70	State Employment Service
8.5.2. Number of workers killed in accidents at work, % of 2015 level	8.5.2. Number of workers killed in accidents at work, % of 2015 level	State Employment Service

National SDG indicators	Regional SDG indicators	Source
8.5.3. Share of workers employed in jobs with hazardous working conditions in the total full-time payroll, %	8.5.3. Share of workers employed in jobs with hazardous working conditions in the total full-time payroll, %	SSS, SR 'Labour in Ukraine'
8.6.1. Number of persons employed by SMEs, millions of persons	8.6.1. (a) Share of persons employed by SMEs in total employed population aged 15-70, %	MSR, table 'The number of employed persons on enterprises by size by type of economic activity'
8.6.2. Share of value added against production costs of SMEs, % of total value added against production costs	8.6.2. (a) Share of sold products (goods, services) of SMEs, % of total volume of sold products	MSR, table 'Volumes of sold products (goods. services) of enterprises by their size by types of economic activity'
8.6.3. Share of SMEs with a loan or line of credit, in the total, %	8.6.3. (a) Share of loaned money in capital investment structure upon sources of funding, %	SSS, SR 'Regions of Ukraine'
Goal 9. Industry, Innovation and Infrastructure		
9.1.1. Share of the rural population living further than 3 km from paved roads, %	9.1.1. Share of the rural population living further than 3 km from paved roads, %	MSR, SR 'Economic and social situation of settlements of the region'
9.1.2. Volume of transported goods, millions of tonnes	9.1.2. Volume of transported goods, millions of tones	MSR, table 'Cargo turnover and volumes of cargo transportation'
9.1.3. Number of passengers, millions	9.1.3. (a) Number of transported passengers per 100 persons of region's population	MSR, table 'Passenger turnover and number of passengers transported'
9.2.1. Share of electric transport in domestic traffic, %	9.2.1. (a) Share of passengers transported by urban electric transport in total number of transported passengers via all types of transport, %	MSR, table 'Passenger transportation'
9.3.1. Share of public transport adapted for the needs of people with disabilities, %	9.3.1. Share of public transport adapted for the needs of people with disabilities, %	Department of Transportation of the RSA, Department of Social Protection of the RSA
9.3.2. Share of public roads of national importance with a hard surface that meets regulatory requirements, %	9.3.2. (a) Share of public roads with a hard surface, %	SSS, SR 'Transport and communication of Ukraine'
9.3.3. Share of facilities of public and civil use, improvement, transport infrastructure and road service equipped to the needs of people with disabilities, %	9.3.3. Share of facilities of public and civil use, improvement, transport infrastructure and road service equipped to the needs of people with disabilities, %	

National SDG indicators	Regional SDG indicators	Source
9.4.1. Share of value added against production costs of enterprises that belong to the high-tech sector of processing industry (in particular, manufacture of pharmaceutical products and preparations; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total value added against production cost, %	9.4.1. (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %	MSR, SR 'Activity of regional economic entities'
9.4.2. Share of value added against production costs of enterprises that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total value added against production cost, %	9.4.2 (a) Share of sold products (goods, services) of enterprises according to economic activity type that belong to the medium high-tech sector of processing industry (including production of chemical products; electrical equipment; machinery and equipment; motor vehicles, trailers and semi–trailers; other vehicles according to CTEA) in total volume of sold products, %	MSR, SR 'Activity of regional economic entities'
9.4.3. Share of workers employed by enterprises that belong to the high- and medium high-tech sectors of processing industry (including production of pharmaceutical products and preparations; chemicals; mechanical engineering; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total number of workers employed in industry, %	9.4.3. Share of workers employed by enterprises that belong to the high- and medium high-tech sectors of processing industry (including production of pharmaceutical products and preparations; chemicals; mechanical engineering; computers, electronic and optical products; aircraft and spacecraft; related equipment according to CTEA) in the total number of workers employed in industry, %	MSR, SR 'Activity of regional economic entities'
9.5.1. Share of expenditure on scientific and technical work in GDP, %	9.5.1. Share of expenditure on scientific and technical work in GRP, %	MSR, table 'Expenditures for carrying out scientific researches and developments by types of works', SSS, SR 'Gross regional product'
9.5.2. Share of sales of innovative products in total sales of industrial products, %	9.5.2. Share of sales of innovative products which is new for the market in industrial scope, %	SSS, SR 'Regions of Ukraine'
9.6.1. Population coverage with Internet services, subscribers per 100 persons	9.6.1. Population coverage with Internet services, subscribers per 100 persons	SSS, SR 'Regions of Ukraine', 'Population of Ukraine'
9.7.1. Share of persons under 40 among scientific workers and university professors with advanced degrees, %	9.7.1. (a) Share of persons under 40 among scientific workers and university professors with advanced degrees, %	SSS, SR 'Scientific and innovative activity in Ukraine'

National SDG indicators	Regional SDG indicators	Source
Goal 10. Reduced Inequalities		
10.1.1. Income ratio of most affluent 10 percent and least well off 40 percent, times	10.1.1. (a) Income ratio of most affluent 10 percent and least well-off 10 percent, ranged according to index of per capita parity income	MSR, table 'Differentiation of the living standards of the population'
10.1.2. Income ratio of least well off 40 percent and more affluent 60 percent, %	10.1.2. Income ratio of least well off 40 percent and more affluent 60 percent, %	
10.2.1. Share of people who reported that in the last 12 months they had personally faced discrimination or harassment based on discrimination in total population, %	10.2.1. Share of people who reported that in the last 12 months they had personally faced discrimination or harassment based on discrimination in total population, %	
10.3.1. Share of rural households who suffered from deprivation due to lack of access to ambulance services in the settlement, %	10.3.1. (a) Share of rural communities who suffered from deprivation due to lack of access to ambulance services and mobile medical care in the settlement in total number of communities, %	MSR, Report 'Socio-economic situation of rural settlements of the region'
10.3.2. Share of rural households who suffered from deprivation due to the lack of a medical facility near their home, %	10.3.2. (a) Share of rural communities deprived of health care institutions in 3 km area in total number of rural communities where health care institutions exist in 3 km area around them, %	MSR, Report 'Socio-economic situation of rural settlements of the region'
10.3.3. Share of rural households who suffered from deprivation due to the lack of regular daily transport to another settlement with developed infrastructure, %	10.3.3. (a) Share of rural communities located in 3 km area of proximity to nearest stop of public transport in total number of rural communities, %	MSR, Report 'Socio-economic situation of rural settlements of the region'
10.4.1. Ratio of the average wage C107:C160 (income) 20 of 10th and first decile groups of workers (decile coefficient), times	10.4.1. Ratio of minimal income of 10% of the most prosperous population to maximal income of 10% of poorest population, times	MSR, table 'Differentiation of the living standards of the population'
10.5.1. Ratio of average pension to average wage in the economy (given 35 years of contribution), %	10.5.1. Ratio of average pension to average wage, %	MSR, tables "The average size of the appointed monthly pension and the number of pensioners", "Average monthly salary of full-time employees by type of economic activity"

National SDG indicators	Regional SDG indicators	Source
Goal 11. Sustainable Cities and Communities		
11.1.1. Solvency ratio of the borrower (ratio of monthly payments of the borrower and his/her family on mortgage debt servicing to total monthly income)	11.1.1. (a) Solvency ratio of the borrowing household (except for National Bank of Ukraine loans) in the context of regions according to loan purpose (real estate purchase, construction and modernization) in total volume of loans as of the end of December 2015, %	NBU, monetary statistics
11.1.2. Share of rejected mortgage requests in the total amount of loan requests with bad solvency ratio (> 43 percent), %	11.1.2. (a) Housing per capita/ per household, sq.m	MSR, table 'Housing Fund'
11.2.1. Share of regions that have approved and implemented regional development strategies and action plans for their implementation developed with public participation, %	11.2.1. Share of cities and communities that have approved and implemented regional development strategies and action plans for their implementation developed with public participation, %	Council of cities and UTS, regional councils
11.3.1. Number of cultural and natural heritage sites included in the UNESCO World Heritage List, units	11.3.1. Number of cultural and natural heritage sites included in the UNESCO World Heritage List, located at the territory of region, units	Center for World Heritage of UNESCO
11.3.2. Number of monuments of national importance included in the State Monument List of Ukraine, units	11.3.2. (a) Number of monuments of national importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area	Ministry of Culture of Ukraine, State register of immovable monuments of Ukraine
	11.3.2.-1. Number of monuments of local importance included in the State Monument List of Ukraine, located at the territory of region, units per 100.000 hectares of region's area	Ministry of Culture of Ukraine, Register of monuments of national significance
11.3.3. Area of the nature reserve fund of national importance, % of the country area	11.3.3. Area of the nature reserve fund of national importance, % of the region's area	SSS, SR 'Regions of Ukraine'
11.5.1. Ratio of air pollution emissions to 2015 level, %	11.5.1. Ratio of air pollution emissions to 2015 level, %	MSR, table 'Emissions of pollutants and carbon dioxide into the air'
11.5.2. Total volume of air emissions of pollutants from stationary sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level	11.5.2. (a) Total volume of air emissions of pollutants from stationary sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level	SSS, SR 'Regions of Ukraine'

National SDG indicators	Regional SDG indicators	Source
11.5.3. Total volume of air emissions of pollutants from mobile sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level	11.5.3. (a) Total volume of air emissions of pollutants from mobile sources, conventionally reduced to carbon monoxide in view of the relative aggressiveness of main pollutants, % of 2015 level	MSR, table 'Emissions of pollutants and carbon dioxide into the air'
11.5.4. Number of cities in Ukraine where the average daily concentration of main air pollutants exceeds the average daily maximum permissible concentration, units	11.5.4. (a) Air emissions of pollutants from stationary and mobile sources of contamination calculated in tones per sq. km	SSS, SR 'Regions of Ukraine'
	11.5.4-1. Volume of air emissions of pollutants from stationary and mobile sources of contamination, thousand tones	SSS, SR 'Regions of Ukraine'
11.6.1. Number of jobs in the tourism industry (average payroll of collective means of accommodation and subjects of touristic activity in Ukraine), thousands	11.6.1. (a) Number of jobs in the tourism industry (average payroll of collective means of accommodation and subjects of touristic activity), persons per 10.000 employed persons aged 15-70	SSS, SB 'Tourist activity in Ukraine'
Goal 12. Responsible Production and Consumption		
12.1.1. Resource consumption in GDP (share of natural resources per unit of GDP), % of 2015 level	12.1.2. Resource consumption in GRP (share of natural resources per unit of GRP), % of 2015 level	
12.2.1. Share of post-harvest losses in the total production of cereals, %	12.2.1. (a) Share of annual grain losses during storage in total produce of agricultural enterprises and farms, %	SSS, SR 'Balance and consumption of basic food products by the population of Ukraine'
12.2.2. Share of post-harvest losses in overall production of vegetables and melons, %	12.2.2. (a) Share of annual losses of vegetables, melons, potatoes inclusive during storage in total produce of agricultural enterprises and farms, %	SSS, SR 'Balance and consumption of basic food products by the population of Ukraine'
12.3.1. Number of enterprises that use hazardous chemicals which introduced a chemical substances management system in accordance with international standards, units	12.3.1. (a) Volume of generated waste (I-IV hazard classes), tones per sq.km of the region's area	MRD, Environmental passports of regions
	12.3.1-1. Number of enterprises which introduced a hazardous substances management system at the territory of region	MRD, Environmental passports of regions
12.3.2. Share of enterprises which introduced a chemical substances management system in accordance with international standards, in total number of enterprises that use hazardous chemicals, %	12.3.2. Share of enterprises which introduced a chemical substances management system in accordance with international standards, in total number of enterprises that use hazardous chemicals, %	

National SDG indicators	Regional SDG indicators	Source
12.4.1. Volume of waste generated by all economic activities per unit of GDP, kg per USD 1.000 PPP in 2011	12.4.1 (a) Volume of waste generated per unit of GRP, kg per USD 1.000 in actual prices	SSS, SR 'Regions of Ukraine', NBU Monetary statistics
12.4.2. Share of burned and recycled waste in the total waste generated, %	12.4.2. Share of burned and recycled waste in the total waste generated, %	SSS, SR 'Regions of Ukraine'
Goal 13. Climate Action		
13.1.1. Ratio of GHG emissions to 1990 level, %	13.1.1. (a) Volume of emissions of air pollutants from stationary sources, tones per sq.km, of the region's area	SSS, SR 'Regions of Ukraine'
Goal 14. Life Below Water		
14.1.1. Share of dischargesof polluted wastewater in total discharges in the marine environment, %	14.1.1. (a) Share of discharges of polluted wastewater into surface waters of the region in total discharges of sewage water, %	MRD, Environmental passports of regions
14.2.1. Share of administrative units (districts) which introduced integrated management of coastal areas, %	14.2.1. Share of administrative units (districts) which introduced an Integrated management of coastal areas, %	
14.2.2. Area of territories and objects of the natural reserve fund of coastal regions, % of the territory of coastal areas	14.2.2. Area of territories and objects of the natural reserve fund of oblast, % of the total territory of oblast	SSS, SR 'Regions of Ukraine'
14.2.3. Area of territories and objects of the natural reserve fund in the Black and Azov Seas, thousands of hectares	14.2.3. Area of territories and objects of the natural reserve offshore sea, thousands of hectares	MRD, State inventory of the territory and objects of the nature reserve fund of Ukraine
14.3.1. Volumes of legal extraction of marine bio-resources in the exclusive maritime zone of Ukraine, thousands of tonnes	14.3.1. (a) Volumes of extraction of marine bio-resources in the exclusive maritime zone of the region, tones per thousand hectares	SSS, SR 'Regions of Ukraine'
Goal 15. Life on Land		
15.1.1. Area of territories and objects of the natural reserve fund, thousands of hectares	15.1.1. Area of territories and objects of the natural reserve fund of the region, thousands of hectares	SSS, SR 'Regions of Ukraine'
15.1.2. Share of area of territories and objects of the natural reserve fund in the total area of the country, %	15.1.2. Share of area of territories and objects of the natural reserve fund in the total area of the region, %	SSS, SR 'Regions of Ukraine'
15.1.3. Share of the area of the national environmental network in the total area of the country, %	15.1.3. Share of the area of the environmental network in the total area of the region, %	MRD, Environmental passports of regions
15.2.1. Forested territory of the country, %	15.2.1. Forested territory of the region, %	SSS, SR 'Regions of Ukraine'

National SDG indicators	Regional SDG indicators	Source
15.2.2. Wood stock in forests, millions of cubic metres	15.2.2. (a) Wood stock in forests, thousands of cubic meters per 100 hectares of the region's area	Regional Departments of forestry and hunting
15.3.1. Number of targets identified and implemented to achieve neutral land degradation level, units	15.3.1. (a) Volume of capital investment and current expenses aimed at protection and restoration of soil, ground and surface waters, UAH per 1 hectare of the region's territory	MSR, table 'Costs of protection and rational use of natural resources in the directions of environmental protection measures'
15.3.2. Amount of arable land, thousands of hectares	15.3.2. Amount of arable land, owned or rented agricultural business as of January, 1, thousands of hectares	SSS, SR 'Regions of Ukraine'
15.3.3. Share of arable land in total area of the country, %	15.3.3. Share of arable land in the total area of the region, %	SSS, SR 'Regions of Ukraine'
15.3.4. Area of organic production, thousands of hectares	15.3.4. (a) Agricultural area of organic amendment, thousands of hectares	SSS, SB 'The introduction of mineral and organic fertilizers for the agricultural crops'
15.3.5. Area of agricultural land of extensive use (hayfields, pastures), thousands of hectares	15.3.5. Area of agricultural land of extensive use (hayfields, pastures) of the region, thousands of hectares	SSS, SR 'Environment of Ukraine'
15.3.6. Share of area of agricultural land of extensive use (hayfields, pastures) in total area of the country, %	15.3.6. Share of area of agricultural land of extensive use (hayfields, pastures) in total area of the region, %	SSS, SR 'Environment of Ukraine'
15.4.1. Area of the nature reserve fund in mountainous regions, thousands of hectares	15.4.1. Area of the nature reserve fund in mountainous regions, thousands of hectares	MRD, State inventory of the territory and objects of the nature reserve fund of Ukraine
15.4.2. Share of the area of the nature reserve fund in mountainous regions in the total area of the country, %	15.4.2. Share of the area of the nature reserve fund in mountainous regions in the total area of the country (region), %	MRD, State inventory of the territory and objects of the nature reserve fund of Ukraine, SSS, SR 'Regions of Ukraine'
Goal 16. Peace, Justice and Strong Institutions		
16.1.1. Number of criminal offences under Articles 115 – 118, 121 of the Criminal Code of Ukraine (apparent deliberate murder, deliberate serious bodily harm), per 100.000 persons	16.1.1. (a) Number of revealed serious crimes and extremely serious crimes in oblasts, cases per 1.000 persons	SSS, SR 'Regions of Ukraine'
16.1.2. Number of victims of physical violence in the last 12 months (murder and assassination attempt, rape and attempted rape. serious injuries), per 100.000 persons	16.1.2. (a) Number of killed and injured victims of crimes in oblast, cases per 1.000 persons	SSS, SR 'Regions of Ukraine'

National SDG indicators	Regional SDG indicators	Source
16.1.3. Number of victims of sexual abuse in the last 12 months, persons	16.1.3. (a) Number of crimes involving sexual abuse in the last 12 months according to criminal proceedings, per 100.000 persons of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation
16.2.1. Number of victims of trafficking or other illicit agreements for human trading in criminal proceedings, persons	16.2.1. (a) Number of crimes of trafficking or other illicit agreements for human trading in criminal proceedings in the last 12 months, per 1 million of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation
16.2.2. Number of street children, thousands of persons	16.2.2. (a) Number of orphans and children deprived of parental care as of the year end, per 100.000 persons of population	MSR, table 'Number of adopted children'
16.2.3. Number of victims of sexual exploitation, thousands of persons	16.2.3. (a) Number of crimes of sexual exploitation (under Articles 302 and 303 of the Criminal Code of Ukraine) in the last 12 months, per 1 million of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation
16.3.1. Level of public confidence in the court, %	16.3.1. (a) Share of the poled entrepreneurs who trust courts, %	Analytical Report: National and Regional Dimensions Annual Assessment of the Business Climate in Ukraine USAID LEV Programs
16.3.2. Level of public awareness of the right to free legal assistance, %	16.3.2. (a) Number of issued instructions on rendering free secondary legal assistance per 1.000 oblast citizen	Legal Aid Coordination Center "Key Data on RC Activities", SSS, SR 'Regions of Ukraine'
16.4.1. Share of high-level risks in the overall national aggregate of risks in the system for preventing and counteracting the legalization of illegal incomes, the financing of terrorism and the proliferation of weapons of mass destruction, %	16.4.1. (a) Number of revealed criminal offenders committing crimes of money laundering (under Articles 209, 209-1 of the Criminal Code of Ukraine) in total number of criminal offences under mentioned articles, with pretrial investigation performed in reporting period, %	Reports of regional prosecutors on counteraction to legalization of proceeds from crime
16.5.1. Number of weapons seized from individuals, organized groups and criminal organizations, units	16.5.1. (a) Number of weapons seized from individuals, organized groups and criminal organizations, units per 100.000 persons of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation
16.5.2. Amount of ammunition seized from individuals, organized groups and criminal organizations, units	16.5.2. (a) Amount of ammunition seized from individuals, organized groups and criminal organizations, units per 100.000 persons of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation
16.5.3. Number of criminal offences under Article 263 of the Criminal Code of Ukraine (illegal handling of weapons, ammunition or explosives), units	16.5.3. (a) Number of criminal offences under Article 263 of the Criminal Code of Ukraine (illegal handling of weapons, ammunition or explosives) in the last 12 months in the criminal proceedings per 100.000 persons of population	Reports of regional prosecutor's offices on registered criminal offenses and the results of their pre-trial investigation

National SDG indicators	Regional SDG indicators	Source
16.6.1. Index of perception of corruption in the public sector by the business community and experts	16.6.1. Share of the poled entrepreneurs who report the absence of hindrance on behalf of public authorities in oblast, % of pole participants	Analytical Report: National and Regional Dimensions Annual Assessment of the Business Climate in Ukraine USAID LEV Programs
16.7.1. Share of the population satisfied with their recent experience of the use of public services, %	16.7.1. Share of the population satisfied with their recent experience of the use of local authorities' services, %	All-Ukrainian municipal polling of IRI
16.8.1. Share of the population satisfied with their experience of the use of infrastructure and the level of social services in key areas in Donetsk and Luhansk oblasts, %	16.8.1. Share of the population satisfied with their experience of the use of infrastructure and the level of social services in key areas in Donetsk and Luhansk oblasts, %	
16.8.2. Share of the population satisfied with the level of administrative governance services in Donetsk and Luhansk oblasts, %	16.8.2. (a) Positive or negative migration balance in Donetsk (Luhansk) oblasts, thousand persons	SSS, SR 'Regions of Ukraine'
16.8.3. Demined area in Donetsk and Luhansk oblasts, hectares	16.8.3. Demined area in Donetsk (Luhansk) oblasts, hectares	Operational data of the SES provided by the pyrotechnic units involved in the execution of tasks in the territory of Donetsk and Luhansk oblasts, according to the established forms Operational certificate of SES
16.9.1. Index of social cohesion and reconciliation (SCORE)	16.9.1. Index of social cohesion and reconciliation (SCORE)	Research results of the SCORE Social Integration and Reconciliation Index
Goal 17. Partnerships for the Goals		
17.1.1. Ratio of private remittances from abroad to GDP (GRP), %	17.1.1. Ratio of volume of private remittance from relatives, other persons and other cash returns to GRP, %	SSS, SR 'Regions of Ukraine', 'Gross regional product'
17.1.2. Net foreign direct investment (according to the balance of payments), USD billions	17.1.2. (a) Net foreign direct investment in oblast (equities and bonds), USD per person of population per year	MSR, table 'Direct investments (equity and debt instruments)'
17.3.1. Number of projects of public–private partnership, units	17.3.1. Number of projects of public–private partnership, inter alia concession and property lease in oblasts as of end of period, units	Regional Departments of Economics

SUSTAINABLE DEVELOPMENT GOALS

REGIONAL INDICATORS FOR SUSTAINABLE DEVELOPMENT GOALS: BASELINE

Analitical Study